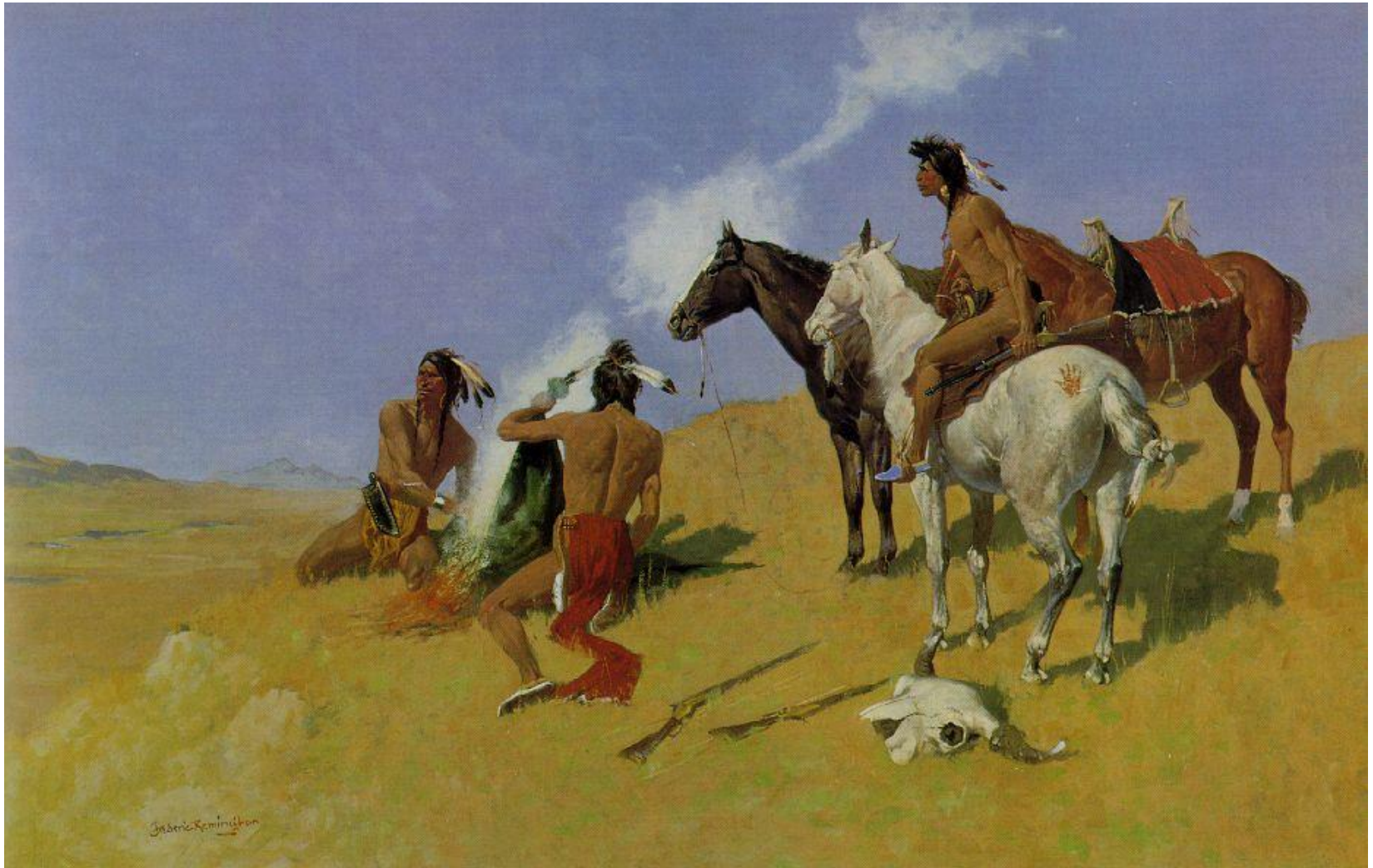




NPrinting Enablement Course

Installation

NPrinting Prototype



Hardware Requirements

NPrinting Client and Server have minimal hardware requirements

NPrinting SERVER

- 1 GB of RAM

NPrinting CLIENT

- 1 GB of RAM
- Hardware requirements are driven by standard QlikView hardware sizing requirements (See QlikView Server Reference Manual)
- System must have sufficient RAM to run the QlikView Desktop when NPrinting sends its API calls to it

Software and System Requirements

- NPrinting Client and /or Server
- NPrinting Client and /or Server
- Microsoft Windows 8, 7, Vista SP1 or later, Server 2008, Server 2008 R2, Server 2012 and Server 2012 R2
- Office 2007, 2010, or 2013
- 32 or 64 bit

Software Requirements for Developers

- QlikView Desktop 10, (SR2 or later) through Desktop 11.20
- QlikView Server Enterprise or Small Business Edition are supported
- NPrinting inherits the limitations of the QlikView license: a Named CAL is required
- .NET framework 4.5 full or higher
- Virtual Machine servers and desktops are supported
- Virtualized Applications not supported ie: Office 365
- Sending E-mail:
 - SMTP server
 - MAPI Client with NPrinting as trusted App
 - Open SSL 32bit version if you are using SMTP and SSL with the Enterprise Track or Feature Track older than 15.3.0.0

No Longer Supported/Required Software

The following software have been deprecated and **are no longer supported**.

- QlikView 9 is no longer supported
- BullZip : is no longer required from version 12.3 it's only needed to print legacy QlikView reports
- Windows XP and Server 2003 are no longer supported by us (and Microsoft as well).

NPrinting Enterprise Track

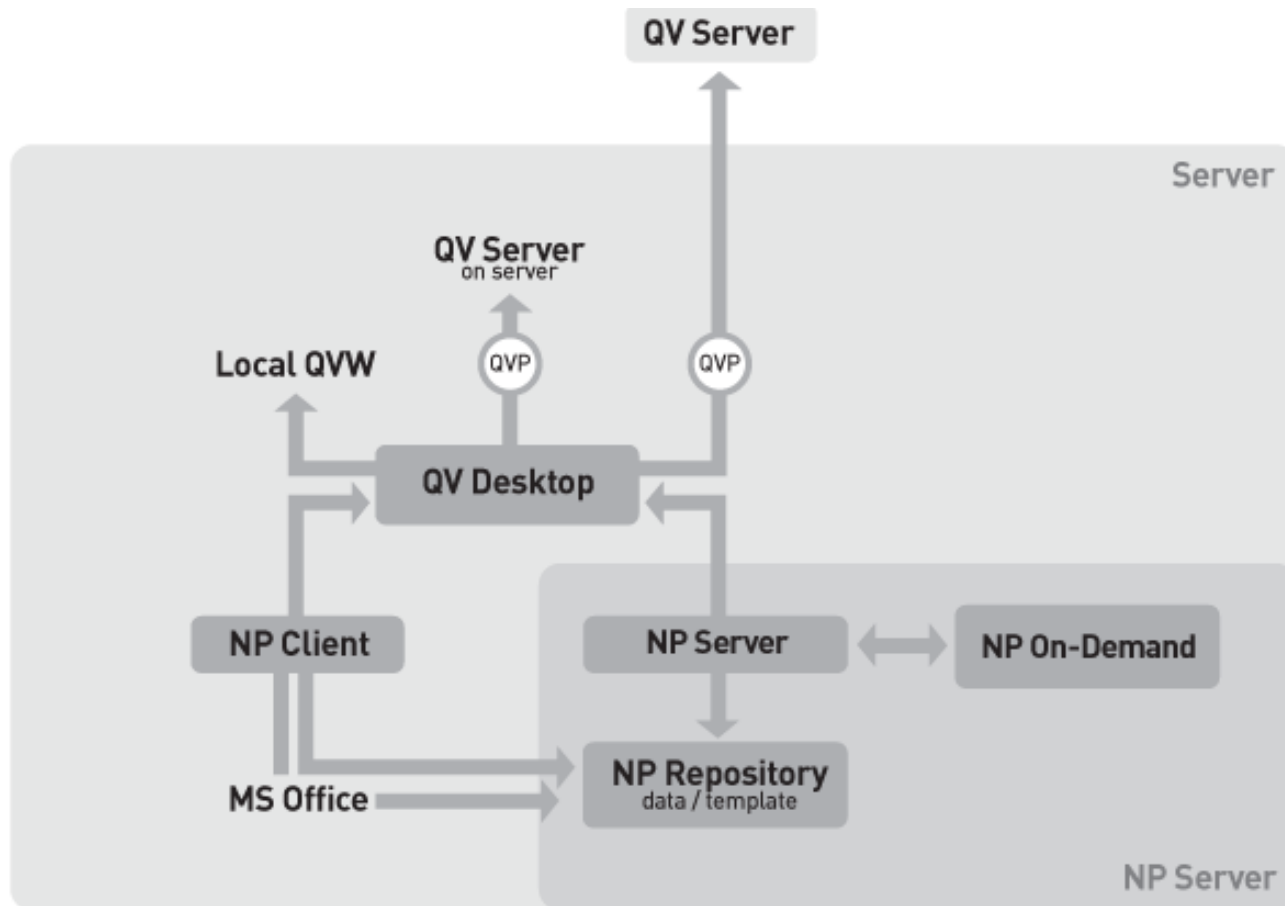
- Time-stable version
- Bug fixes and quarterly Service Releases (SR)
- No new features: a new version each year

NPrinting Feature Track

- Includes all new features, improvements and bug fixes
- New versions released as new features are developed

NOTE: .nsq files developed in Feature release cannot be opened with Enterprise version

NPrinting Basic Architecture



Classroom Exercise

Install NPrinting on your PC

Installation Tutorials:

Pre Requisites and Requirements

- [Requirements for NPrinting 14 and following versions](#) Page 7

Exercises:

Step By Step Installation

- [Install NPrinting Release 14.x and Later](#) Page 10

License Activation

- Connection to internet required for automatic license activation
- Offline activation is manual – generate a .rqt file and send it to support@vizubi.com who will send you an .rsp file
- .rqt and .rsp files are xml files; they sometimes become corrupt when they are downloaded on a network behind a firewall. You can copy the contents of the .rsp and .rqt files into an email and ask the client to save the text into a file in .xml format with the .rsp extension
- NB: The NPrinting licensing system will be replaced by the Qlik licensing system (through the use of lef files) starting February 13th. Clients on the old system will be encouraged to upgrade to the newest version and therefore allow them to use the Qlik licensing system.

Activate your NPrinting License

- Tutorial: [Activate or Reactivate NPrinting Client](#). Page 21
- Tutorial: [Activate or Reactivate NPrinting Server](#). Page 26
- Tutorial: [Activate or Reactivate NPrinting Offline](#). Page 30

Typical NPrinting Folder Structure

Suggested Folder Structure:

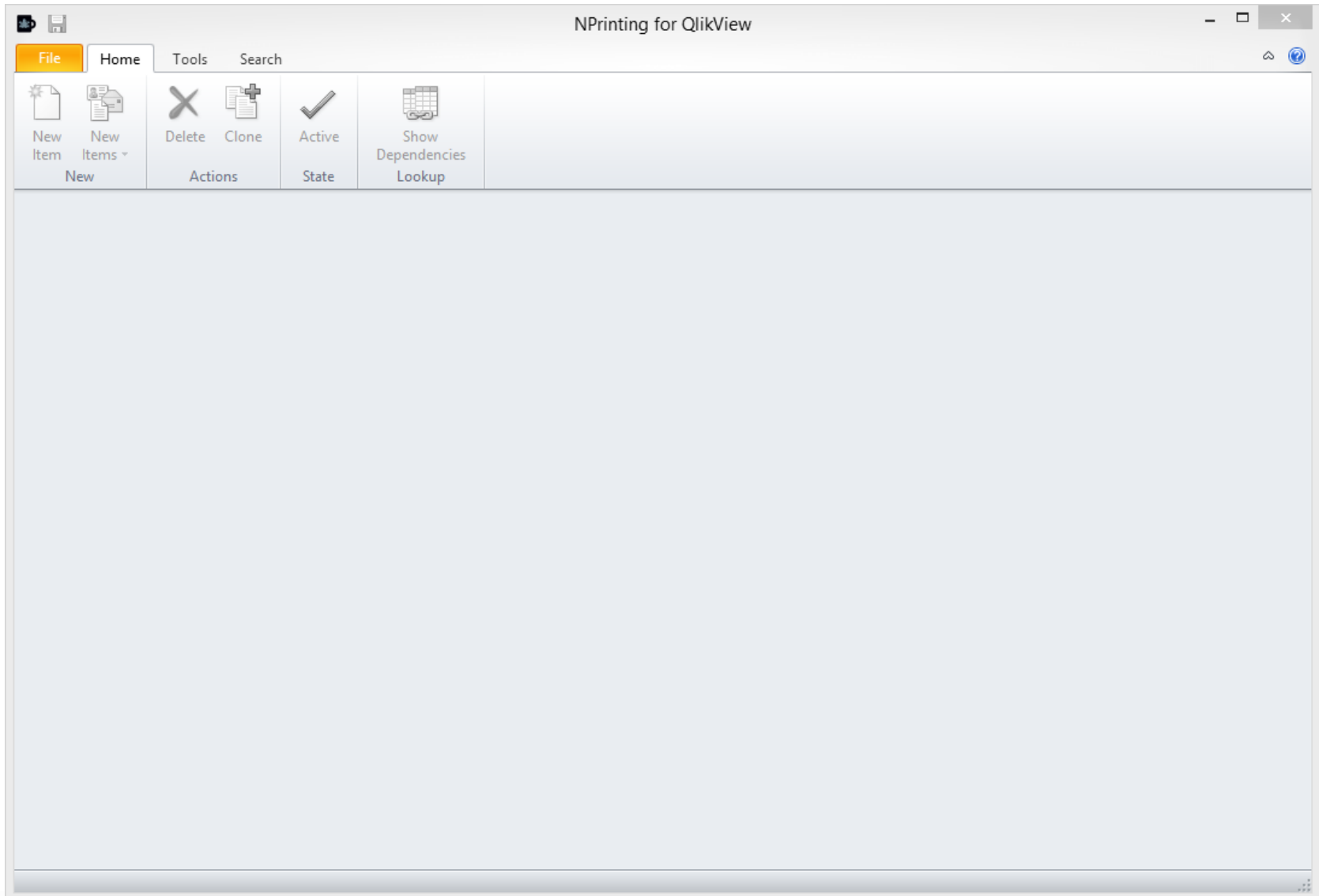
- **NPrinting Files:** save all your NPrinting .nsq models here.
 - The **NSQ** contains all NPrinting project attributes including Filters, Recipients, Reports, Tasks, Jobs Schedules etc.
- **Log Files:** application and service log files
- **QlikView Documents:** local QlikView source documents
- **Templates:** save all your templates here
- **Output:** for generated reports
- **Temp:** periodically delete temporary files

This is not a mandatory structure. It can be customized as desired.

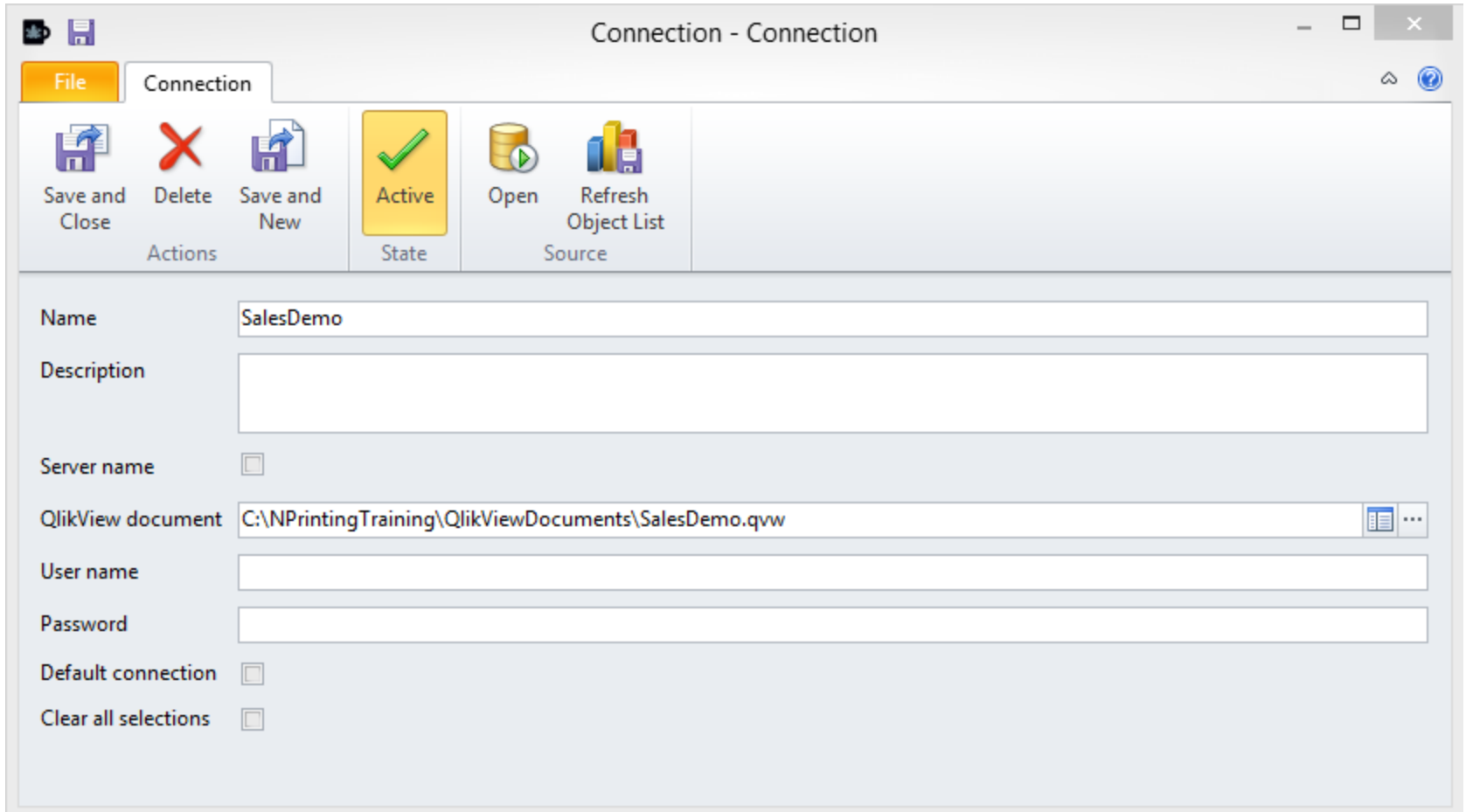
Best Practices: Multiple Developers

- Directories with templates must be accessible to developers
- Templates can be organized into various folders
- Templates can be cloned and modified

Create a New NPrinting NSQ File



Create a New Connection



Connection - Connection

File Connection

Save and Close Delete Save and New Active Open Refresh Object List

Actions State Source

Name SalesDemo

Description

Server name ☐

QlikView document C:\NPrintingTraining\QlikViewDocuments\SalesDemo.qvw

User name

Password

Default connection ☐

Clear all selections ☐

Creating Connections - Limitations

Connections – Known Limitations:

- QVP over SSL is not supported
- It is only possible to create a single connection to each QVW within an NPrinting project (an .nsq file)

Creating Connections 1

Connection:

- At least one Connection in each NPrinting NSQ
- NPrinting uses the default connection if none selected
- Reports can contain data from many connections
- Connections to multiple QVWs

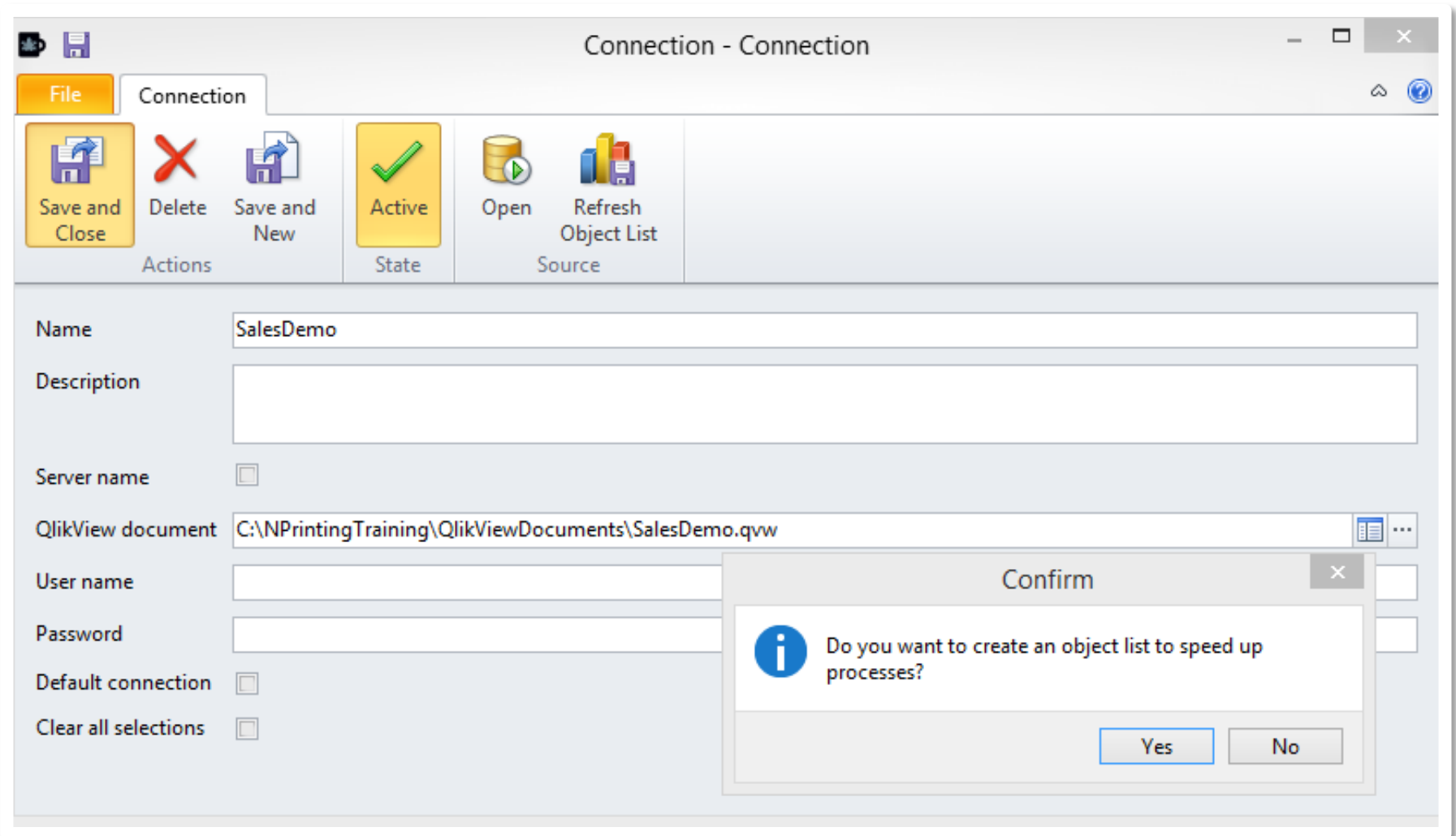
Creating Connections 2

- Connections tell NPrinting where your QlikView documents are
- QlikView documents could be:
 - In a Local or Network Drive
 - Accessed through a QlikView Server via QVP
 - QVPx is not supported

Creating Connections 3

- Flag the most frequently used connection as the "**Default Connection**" when you have an NPrinting .nsq file with multiple connections. The NPrinting Connection will be used for creating new NPrinting entities
- Flagging "Clear All Selections" clears all selections when NPrinting runs a process like a report preview, a task, etc.
 - This will clear unlocked and locked selections
 - Filters created exclusively in NPrinting are applied to NPrinting reports

Creating Connections 5



Creating Connections 4

- When saving, click "Yes" on the window to allow objects list creation
 - This will accelerate the display of an object list when you add an object to a template
 - Each time you add a new connection to a report template, the object list will need to be reloaded
 - You can either create the object list at this point or when you add an object into a report template for the first time

Classroom Exercise

Create the first QlikView connection

- Tutorial: [How do I connect to my QlikView documents?](#). Page 35

NPrinting Graphical User Interface

Some buttons and concepts common throughout the application

- Actions
 - Delete
 - Clone
 - Up
 - Down
- Entities
 - New
 - Add
 - Remove

Reports

Known Limitations

NPrinting does not support the following in reports:

- Extension objects
 - Currently there is an internal prototype which supports extension objects
 - We are evaluating whether to put it into NP15 or to wait until Opera (the next generation product) is released
- Alternate States
 - NPrinting can use QVWs with alternate states
 - The “default” state is always used when generating output
- Pivot Tables
 - Can be imported as data but no formatting is possible and formulas cannot be applied to that data

Common Concepts 1

There are two kind of Reports:

- Template based reports
 - Microsoft Office Templates
 - HTML templates
 - PixelPerfect
- QlikView Entity reports
 - QlikView Objects
 - QlikView Reports
 - Entire Sheets from a QVW

Common Concepts 2

Some parts are common to all kinds of NPrinting Reports:

- Name:
 - Required field
 - Created automatically with a default name value. Give the report a suitable, descriptive name.
- Filters:
 - If a report has a filter applied, every time the report is generated, that filter (in addition to any Task, Recipient and Chart filters will be applied)

Common Concepts 3

Some parts are common to all kinds of NPrinting Reports:

- **Cycles**
 - A cycle will create a separate file for every value of one of more dimensions
 - If there are multiple dimensions, a file will be created for every non-null intersection of the dimensions
- **Conditions**
 - It is possible to create conditions based on the value of variables and whether a chart in QlikView has values or is empty
 - Conditions are applied to reports but are tested at the recipient level

NPrinting Template Based Reports 1

NPrinting generates customized reports from templates

- Templates can be Microsoft Office files:
 - Excel
 - Word
 - PowerPoint
 - Compatible with Office 2007, 2010 and 2013 32 or 64 bit
- Templates can be HTML files
- PixelPerfect templates are created using a banded style report editor and saves encrypted .npx files

NPrinting Template Based Reports 2

File Excel Report

Save and Close Delete Save and New Preview Active General Filters Cycle Conditions New Edit

Actions State Show Template

Name Excel - Dynamic Report by Country

Description This report sets the variable Dimension01 to the value Country. We can obtain multiple Excel reports with a single QlikView object by changing only the value of a variable.

Connection SalesDemo

Template









Template name C:\NPrintingTraining\Templates\Dynamic Excel Report template.xls

Output File

File name Excel - Dynamic Report by Country

Enable Dynamic Naming ☒

Custom Dynamic Naming

| Item | Value | |
|-------------|-----------------------------------|---|
| Date | yyyy-mm-dd |     |
| Report name | Excel - Dynamic Report by Country |     |

Separator _

Preview 2015-01-29_Excel - Dynamic Report by Country

Concepts common to template based reports:

- Templates are Files
- Make new templates starting from a blank file or by modifying an existing file in the appropriate format
NB: if you modify a template used by many reports, all reports will be affected
- Create new reports by cloning existing ones
- Leverage the features of HTML, Office applications or the PixelPerfect editor

Template Editor Commands

Common Commands on the toolbar

- Save Icon: saves the opened template. Do frequently
- Close Icon: closes the editor and returns you to the report window without saving changes to the template
- Save and Close: saves the template and close the editor
- Save As: use for the first time save of a report or to clone an existing one to create a derivative one
- Preview launches a preview in the format selected
- Toolbar exposes the MS Office ribbon of the application used in report authoring

“File window”

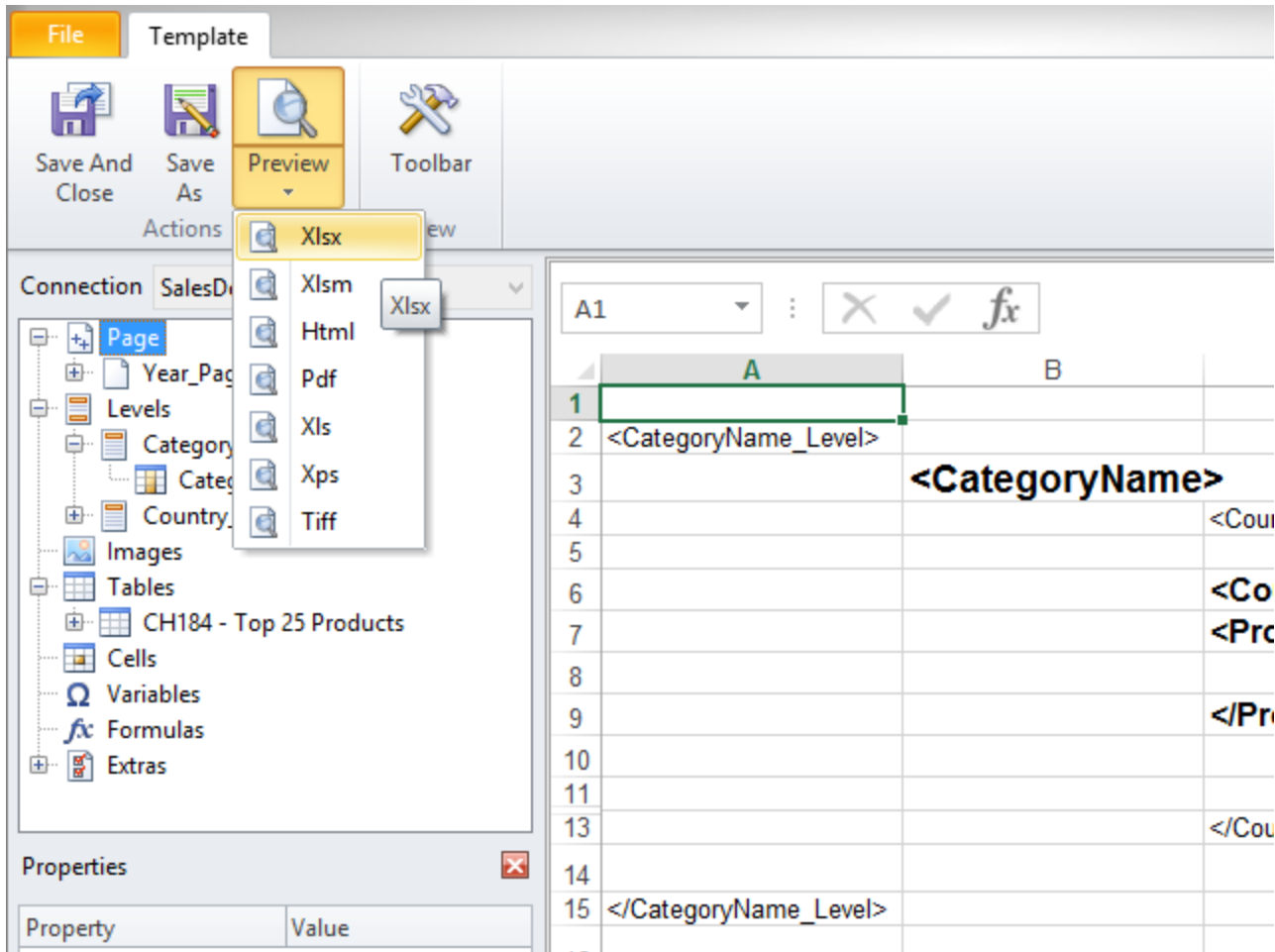
- Close: closes the editor and returns you to the report window without saving changes to the template
- Save: saves the template and returns you to the template window

NPrinting Template Reports: Preview 1

Report preview lets you see the results of your editing

- Allows developers to see report layout without having to execute a Task
- Executes Pages and Levels if present
- Applies filters
- Does not execute cycles
- Can preview in various formats
 - You'll see only allowed formats

NPrinting Template Reports: Preview 2



Template Editor: Images

- Images
 - Export QlikView objects as images
 - QlikView charts, entire sheets and many other objects can be exported to NPrinting Reports as images
 - No interaction with data. Images are a static png files embedded into reports
 - QlikView formatting maintained
 - What you see in QlikView is what you get
- Resize:
 - Set output dimensions in Excel and PixelPerfect
 - Drag to resize in Word, PowerPoint and PixelPerfect
 - Use HTML tags to set size in HTML

Classroom Exercise

Create Your First Excel Report

- Tutorial: "[How to Create Excel Reports](#)". Page 43

Template Editor: Tables

- Export data from QlikView objects to NPrinting tables
- Keep (or remove) QlikView formats
- Or you may apply Office, PixelPerfect or HTML formats
- Can apply custom formats
- Office, PixelPerfect, HTML and custom formatting can be applied to entire table or single columns

Common Exercise

Add a Table to the Excel Report

- Tutorial: "[How to Create Excel Reports](#)". Page 43
 - Until report preview




Excel Tags Population


- Tags are populated with data or images from left to right and top to bottom.
- Columns are not expanded: therefore if you place two image tags in the same row in adjacent columns, the contents of the left hand tag will overlap the contents of the right hand tag
- Images will cover both other images and data

Template Editor Pages

- Creates a different worksheet or slide for every value of the selected field
- Available only in Excel and PowerPoint reports
- One field per worksheet in Excel
- Multiple Pages per report (but each can only be applied to a single worksheet or slide)
- Right click to add a field or chart to the selected sheet or slide
 - In Excel, you can use fields, table boxes with one field or charts with a single dimension (hide expressions).
 - In PowerPoint you can use fields, table boxes or charts
 - Using charts will prevent empty slides
- Drag the Page field into the template to show the value for that dimension on that slide or worksheet

Template Editor Pages

 Save And Close
 Save As
 Preview
 Actions

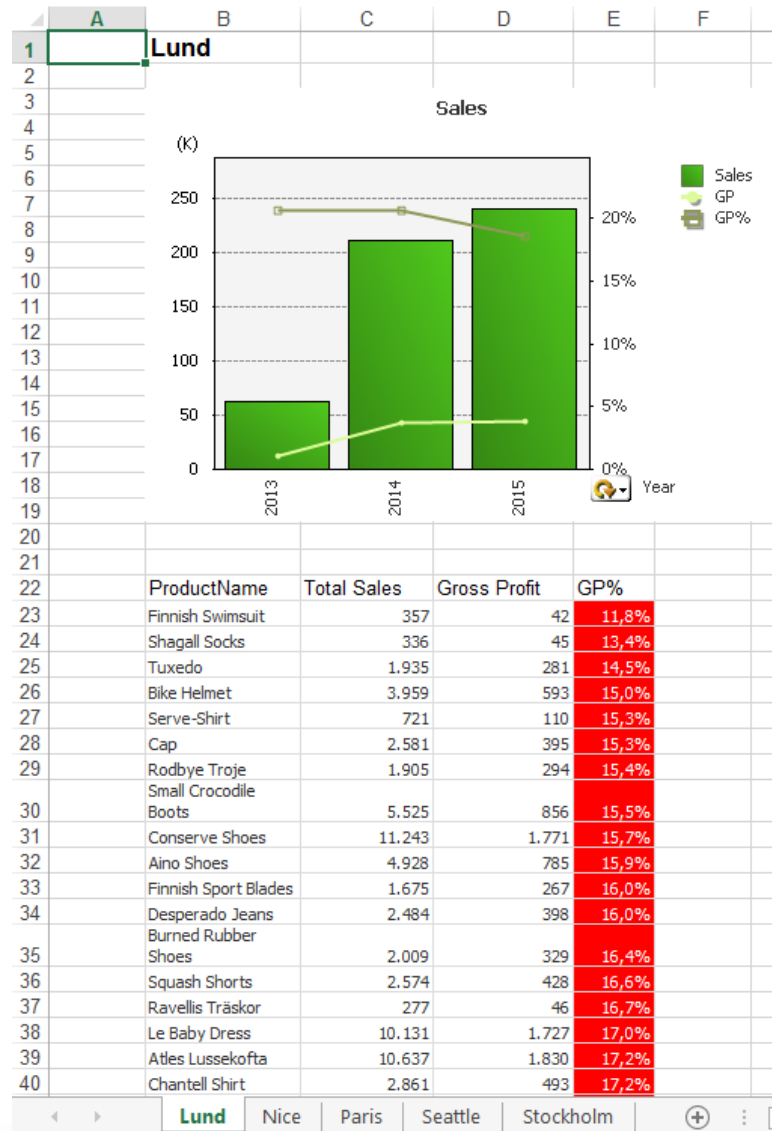
 Toolbar
 View

Connection **SalesDemo**

- Page
 - SalesOffice_Page
 - SalesOffice
- Levels
- Images
 - CH187 - Sales over time
- Tables
 - CH184 - Top 25 Products
 - ProductName
 - Total Sales
 - Gross Profit
 - GP%
- Cells
- Variables
- Formulas
- Extras

| | A | B | C | D | E |
|----|---|---------------|---------------|----------------|-------|
| 1 | | <SalesOffice> | | | |
| 2 | | | | | |
| 3 | | <CH187> | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | ProductName | Total Sales | Gross Profit | GP% |
| 7 | | <ProductName> | <Total Sales> | <Gross Profit> | <GP%> |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |

Template Editor Pages Output



Classroom Exercise

Add Pages to the Excel Report

Tutorial: [How to Create Excel Reports](#). Page 43

From "Multi-Page Publishing" (page 50) to the end of the tutorial.

Variables

You can use Variables in reports:

- Right click on Variables node and select the variables you want to use
- Drag and drop variable onto report area
- You cannot use variables as levels

Classroom Exercise

Create a complete PowerPoint report

- Tutorial: "[How to Create PowerPoint Reports](#)". Page 53

Classroom Exercise

Create a new Word template

- Word templates do not support Nprinting “Pages”
- Emulate “Pages” by using “levels” with a page break
- Tutorial: "[How to Create Word Reports](#)". Page 59

HTML Templates

HTML templates:

- Generate reports usable in e-mail body
- Support custom HTML Editor coding

Template Editor “Levels”

- Use tags to create “Levels”: everything between tags gets "cycled"
- Create a separate section within a worksheet or within a page.
- Each section will only contain data associated with the value of a dimension or every row of a chart
- Levels can be nested
- Right click to add a field or an object to the selected sheet as a level
- Drag the level node into the template to create the level
- Open the level node and drag the field into the level to place the dimension(s) value(s) in that location in the report

Classroom Exercise

Create a new HTML template: “[How to Create HTML Reports](#)” that uses Levels. Page 67

PixelPerfect Introduction

- Banded reporting editor
- No additional download or add on is required
- Available within NPrinting Client 15.0.0.0 or higher
- Works as an additional template editor alongside the existing HTML and Microsoft Office NPrinting Template Editors

PixelPerfect Unique Characteristics

- Key differences with developing in the PixelPerfect Editor vs the MS Office and HTML template Editors
 - “Tables” node can only be used to populate Pixel Perfect chart, sparklines, etc
 - Levels hierarchy must be the same in the field explorer and the detailed reports
 - Does NOT require MS Office for authoring
 - Supports .rtf output

PixelPerfect Benefits

Provides granular control over layout and appearance including:

- Object positioning and dimensions
- Fonts and colors
- Customized charts
- Many other customizable properties

PixelPerfect Template Editor Supports

- NPrinting 'Levels'
- QlikView Formulas
- QlikView Variables
- QlikView Cells
- QlikView Images
- QlikView Tables as data sources
- PixelPerfect Charts
- PixelPerfect Sparkline Charts

NOTE: Image and Table filtering is not supported in PixelPerfect Editor

PixelPerfect Template Editor

The screenshot displays the PixelPerfect Template Editor interface, which is used for designing reports. The main workspace shows a report titled "Company Dashboard" with the following structure:

- Detail**
 - Top 5 Salesmen**
 - DetailReport - "CH319_Level"**
 - GroupHeader1**

| Salesman | Total Sales | Gross Profit | Cost | Gross Profit % |
|----------------|---------------|----------------|-------------|----------------|
| [Salesman] | [Total Sales] | [Gross Profit] | [Cos] | [GP%] |
| Sum([Total Sa | | Sum([Gross P | Sum([Cost] | [GP_Total_Per |
 - Detail1**
 - GroupFooter1**
 - DetailReport1**
 - Detail2**
 - DetailReport2 - "Year_Level"**
 - GroupHeader2**
 - Detail3**

Yearly Sales by Category and Country

[Year]

Total Sales in [Year]: [TotalSales]

| Category | Total Sales |
|----------|-------------|
| C | 100% |
| E | 90% |
| A | 80% |
| B | 70% |
| D | 60% |

The interface includes several panels:

- Field List:** Contains a tree view of report fields including Levels (CH319_Level, CH327_Level, Year_Level), Images, Tables, Cells, Variables, and Formulas.
- Property Grid:** Shows properties for the selected report element, including Appearance (Background, Border Color, Border Style, Border Width, Borders, Font, Foreground, Formatting, Padding, Page Color).
- Tool Box:** Contains a list of standard controls and objects such as Pointer, Label, Check Box, Rich Text, Picture Box, Panel, Table, Line, Shape, Bar Code, Zip Code, Chart, Sparkline, Table Of Contents, Page Info, Page Break, Cross-band Line, and Cross-band Box.

PixelPerfect Output Report

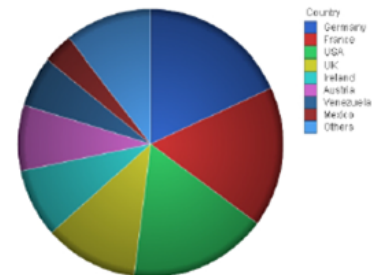
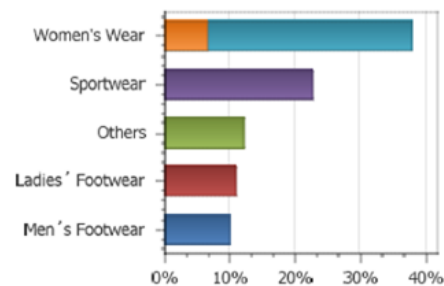


Company Dashboard Top 5 Salesmen

| Salesman | Total Sales | Gross Profit | Cost | Gross Profit % |
|--------------|-------------|--------------|------------|----------------|
| Rob Carsson | \$ 201.424 | \$ 45.002 | \$ 156.422 | 22,34% |
| Tom Lindwall | \$ 153.997 | \$ 31.613 | \$ 122.384 | 20,53% |
| Rock Roll | \$ 150.522 | \$ 31.016 | \$ 119.506 | 20,61% |
| Helen Brolin | \$ 125.794 | \$ 28.327 | \$ 97.467 | 22,52% |
| Leif Shine | \$ 120.295 | \$ 25.039 | \$ 95.256 | 20,81% |
| | \$ 752.032 | \$ 160.998 | \$ 591.034 | 20,81% |

Yearly Sales by Category and Country 2012

Total Sales in 2012: \$ 344,043



PixelPerfect Property Options & Features

Each PixelPerfect object has a rich set of properties which can be customized using the Property Grid

- [Properties of PixelPerfect Labels, Table and Charts](#)
- [Understanding PixelPerfect Features](#)

Create a Simple Table

- As a banded reporting tool, to create a table in PixelPerfect, you need to use 'Levels'
- Differs from Excel or Word reports because each row of a table is a value of a level
- Tutorial: "[How to Create a Simple PixelPerfect Report](#)". Page 76

Export a QlikView Chart as Image

- PixelPerfect lets you export QlikView objects as images
- Images are also allowed within a 'Level'
- PixelPerfect also supports 'MultiDoc'
- Tutorial: [How to Create PixelPerfect Reports with a Level](#). Page 88

QlikView Entities

QlikView Entity Report

- NPrinting can distribute your QlikView reports and objects
- Entities include single charts, entire sheets and existing QlikView reports
 - Leverage what you have already developed to maximize ROI
 - Rapid deployment
 - Direct "as is" export of objects
 - Image dimensions are automatically set to fit the entire sheet
 - PDF, images and CSV file output formats (Office format output not supported)

Classroom Exercise

Create an image from a QlikView Entity

- Tutorial: [How to Create QlikView Entity Reports](#). Page 98

Recipients

NPrinting Recipients: Definition

Recipients are report destinations

- People
- Organizations
- Internal
- External

Recipients contain:

- Name, company...
- Delivery information (email, directory path)
- Security information (passwords)
- Filtering information (selections we want to apply to output so that recipients only see the data they are supposed to see)

NPrinting Recipients: Manual Creation

Manual Creation: fill the fields you need by hand:

- **ID:** If used during an import, it works as a primary key and lets you manage more than one recipient with the same Fullname
- **Name:** the only mandatory information: primary key when importing recipients if ID is empty
- **E-mail address:** if you want to send reports via e-mail
- **Folder & Subfolder:** for creating dynamic save paths
- **Security:** QlikView and/or Report Security
- **PGP Encryption:** send encrypted reports
- **Filters:** select which data the recipient can view
- **Notifications:** CC's every message sent to the recipient to the e-mail addresses listed
- **Details:** add more recipient details

NPrinting Recipients: Manual Creation

The screenshot shows the 'Elvis Presley - Section Access - Recipient' window. The 'File' menu is open, showing options: Save and Close, Delete, Save and New, Active, General, Details, Filters, and Notifications. The 'Active' button is highlighted. The 'Name' field contains 'Elvis Presley - Section Access' and is marked as 'Imported from task'. The 'Description' and 'ID' fields are empty. The 'Distribution Information' section includes 'Email' (Elvis.Presley@yourcompany.com), 'Folder' (C:\NPrintingTraining\PersonalFolders\ElvisPresley), and 'SubFolder' (ElvisPresley). The 'QlikView Security' section has 'Enable Security' checked, 'User ID' (Elvis), and 'Password' (masked with asterisks). The 'Open PGP Encryption' section has 'Enable Encryption' unchecked. The 'Report Security' section has 'Password to open' and 'Password to write' fields, both empty, and 'Show password' unchecked.

Elvis Presley - Section Access - Recipient

File Recipient

Save and Close Delete Save and New Active General Details Filters Notifications

Actions State Show

Name Elvis Presley - Section Access ... Imported from task ✓

Description

ID

Distribution Information

Email Elvis.Presley@yourcompany.com

Folder C:\NPrintingTraining\PersonalFolders\ElvisPresley

SubFolder ElvisPresley

QlikView Security

Enable Security ☒

User ID Elvis

Password ***** Show password ☐

Open PGP Encryption

Enable Encryption ☐

Report Security

Password to open

Password to write


Show password ☐


Manual Creation Details Tab


Elvis Presley - Section Access - Recipient


File


Recipient


 Save and Close


 Delete


 Save and New

 Active

 General

 Details

 Filters

 Notifications

Actions

State


Show

Name

Elvis Presley - Section Access

...

Imported from task



Description

ID

Company

Company Inc.

Department

Sales

Office

USA

Nickname

Title

Mr.

Job Title

Senior Salesman

Custom 1

Custom 2

Custom 3

Classroom Exercise

Manually create one simple recipient

- Tutorial: [How to Create and Import Recipients with Filters and Distribution Groups](#). Page 103
 - Only the first step

Filters

NPrinting Filters: Definition and Type

- Determine what data will be presented in reports
- Three Types:
 - Fields with Values and/or Formulas
 - QlikView Variables with Values and/or Formulas
 - Bookmarks
- Filters can be multi-connection

NPrinting Filters: Definition and Type

Fields and field values:

- As many as needed
- Multiple values in the same filter field is like selecting multiple values at the same time in QlikView
- Can add field values that are not in the database
 - slowly changing fields like Country
- Can use QlikView formulas and these will be evaluated and applied to that field (covered in advanced training)

NPrinting Filters: Parameters

For each field, you can set parameters:

- **Locked:** lock the field and other selections will not be applied to that field
- **Verify Filter:** suppress the report if the filter produces a null data set
- **Select Excluded:** select for the complement of the values that you have selected. Not available in Linked Fields based filters
- **Drop Field in Reduce:** if applied in a reduce task, the reduced .qvw file will not contain the field
- **Unlock if Locked:** unlock fields that are locked in the .QVW
- **Clear Selections:** when a filter with this flag activated is applied, the selections of the field are cleared. The selections are cleared only for the specific fields with the clear selections option activated. The selections on other fields remain active. These are typically used for chart specific filters

NPrinting Report Tasks: Add Filters

Add some Filters to the Report Task:

- Select from the filter list
- Applied to all reports for all recipients in the task

NPrinting Filters: Filter Priority

If there are multiple filters on the same field on multiple objects:

- Filtering Priority/Order
- Multiple filters, same field on multiple objects
- Only one will be applied
- The filtering hierarchy is:
 - **Chart>Level/Page>Report>Cycle>Recipient>Task**
 - Chart filters have the highest priority and Task filters have the lowest priority
- Multiple filters on the same NPrinting Report, Task or Recipient is like an **AND**
 - ie; A filter with Country=Brazil and Year=2015

Classroom Exercise

Create a filter based on a field

- Tutorial: "[How to Create Static and Dynamic Filters Based on Fields](#)".
Page 118

Classroom Exercise

Associate the filter with the recipient

- Tutorial: "[How to Add Filters to Recipients](#)". Page 126

Verify Filter

NPrinting Verify Filter

NPrinting Filter Options:

- If the resulting data set of a group of filters applied to a report is empty and the Verify Filter option is selected, no report will be generated
- If the resulting data set of a group of filters applied to a report is empty and the Verify Filter option not selected, a report will be generated but it will contain all possible values for the field(s) used in that filter

NPrinting Verify Filter Try It Yourself

NPrinting Filter Options:

- Clone the previous report
- Clone the previous filter, deactivate the Verify Filter option for both fields and add the new filter to the report
- Run a report preview. The report will be generated and it will contain data for all salesmen
- Check "Excel Report WITH Verify Filter" and "Excel Report WITHOUT Verify Filter" in the training environment

Tasks

NPrinting Tasks: Six Types

Frequently used Tasks:

1. Report Tasks
2. Import Recipients Tasks

Other Available Tasks

1. Reload Tasks
2. Partial Reload Tasks
3. Reduce Tasks
4. Run QlikView Macro Tasks

Create a New Report Tasks

Create a new Report Task:

- Common settings
 - Name: mandatory
 - Description
 - Connections are retrieved from added reports

Create a New Report Tasks

Excel Report with Straight Table - Report Task

File Report Task

Save and Close Delete Save and New Active General Reports Recipients Filters Message

Actions State Show Mail

Name: Excel Report with Straight Table

Description: Excel Report with Straight Table

Connection: SalesDemo Close connection when task ends ☐

Output folder

Create folder if it does not exist ☒

Use ☐ Task output folder ☐ Task folder with recipient subfolder ☐ Recipient folder ☒ Custom folder

Custom folder

| | | | | | | | | | |
|------|-------------------|-------|-----------------------------|----------------|-------------------------------------|--|--|--|--|
| Type | Custom path | Value | C:\NPrintingTraining\Output | Make subfolder | <input checked="" type="checkbox"/> | | | | |
| Type | QlikView variable | Value | SalesDemo_vTodayDateText | Make subfolder | <input checked="" type="checkbox"/> | | | | |
| Type | Recipient name | Value | | Make subfolder | <input checked="" type="checkbox"/> | | | | |

Preview: C:\NPrintingTraining\Output\{SalesDemo_vTodayDateText}\{RecipientName}\

Compression settings

Create an archive containing the compressed reports ☐

Archive Name

Use recipient password ☐ Archive Password Show password ☐

Report security

Password to open

Password to write

Show password ☐

Printer configuration for hard copies

Print ☒

Printer Name: \\Server00\PRINTER00

NPrinting Report Tasks Output Folder 1

Output folder

- Generated reports are saved here
- Mandatory field
- NPrinting uses the default setting if not set to something else
- Create the folder if it does not exist

NPrinting Report Tasks Output Folder 2

- Task output folder
- Task folder with recipient subfolder
- Recipient Folder
- Custom Folder:
 - Dynamically generated
 - Sequence of fields
 - Use QlikView variables and NPrinting parameters
 - FTP destinations

NPrinting Report Tasks Output Folder 3

- Custom folder
 - The output path is appended automatically by adding additional folder types
 - Make subfolder
 - Enabled by default
 - If activated, causes the string to become a subfolder name
 - If deactivated, causes the string to become part of the previous subfolder name
 - The final path is previewed at the bottom of the window

NPrinting Report Tasks: Output Folder 4

File Report Task

Save and Close Delete Save and New Active General Reports Recipients Filters Message

Actions State Show Mail

Name: Excel Report with Straight Table

Description: Excel Report with Straight Table













Connection: SalesDemo Close connection when task ends ☐

Output folder

Create folder if it does not exist ☒

Use ☐ Task output folder ☐ Task folder with recipient subfolder ☐ Recipient folder ☒ Custom folder

Custom folder

| | | | | | | |
|------|-------------------|-------|-----------------------------|----------------|-------------------------------------|---|
| Type | Custom path | Value | C:\NPrintingTraining\Output | Make subfolder | <input checked="" type="checkbox"/> |     |
| Type | QlikView variable | Value | SalesDemo_vTodayDateText | Make subfolder | <input checked="" type="checkbox"/> |     |
| Type | Recipient name | Value | | Make subfolder | <input checked="" type="checkbox"/> |     |

Preview: C:\NPrintingTraining\Output\{SalesDemo_vTodayDateText}\{RecipientName}\

Set Reports Output Format

- Add one or more reports to a Report Task:
 - All will have the same settings
 - Set the Output format:
 - **Word**: Native, PDF, HTML
 - **PowerPoint**: Native, PDF
 - **Excel**: Native, PDF, Image, HTML
 - **HTML**
 - **QlikView Entity**: PDF, Image, CSV
 - **PixelPerfect**: PDF, HTML, RTF, Excel, CSV, Images
 - All report tasks can generate printed hard copies

Classroom Exercise

- Create Your First Task
- Tutorial: "[How to Create Tasks](#)". Page 131
 - Without message configuration
 - Save and close
 - Run

NPrinting Report Tasks: Manual Task Run

Run tasks manually for:

- Debugging or previewing
- Use it when you need a specific report but you cannot wait till the next scheduled execution
- Detailed logs on screen and saved in file
- You can also use the “TEST” feature to test your tasks as well

NPrinting Report Tasks: Add Recipient

- Add some Recipients to a Report Task:
 - You can add some individual recipients
 - You can add some groups
 - Maintenance is quick and easy because of groups
 - Recipients will receive all reports in the task with the data filtered

NPrinting Report Tasks: Add Recipient

Save and Close
 Delete
 Save and New

Active

General
 Reports
 Recipients
 Filters

Message

New
 Add
 Remove

Actions

State

Show

Mail

Recipients

Name

Excel Report with Straight Table

Description

Excel Report with Straight Table

Connection

SalesDemo

Close connection when task ends ☐

Recipients

| Type | Name | Output Folder | Description | Imported | State |
|------|------------------|--|-------------|----------|-------|
| | USA | | | | |
| | Elvis Presley | C:\NPrintingTraining\Output\{SalesDemo_vTodayDateText}\Elvis Presley\ | | | |
| | Leif Shine | C:\NPrintingTraining\Output\{SalesDemo_vTodayDateText}\Leif Shine\ | | | |
| | Lennart Skoglund | C:\NPrintingTraining\Output\{SalesDemo_vTodayDateText}\Lennart Skoglund\ | | | |

Classroom Exercise

Add recipients to a task



- Tutorial: [How to Distribute User Specific QlikView Reports by E-mail.](#)
Page 140

Jobs

NPrinting Jobs

- A Job is a sequence of Tasks
 - Executes one task at a time. A subsequent task does not start until the previous one has finished.
 - This guarantees that a report cannot be sent until data loading has been completed
 - Only type of entity that can be executed by schedule
 - Order of execution can be modified


NPrinting Jobs





Reload QlikView and Send Reports - Job


File


Job


 Save and Close


 Delete


 Save and New


 Active

 New

 Add

 Remove

 Up

 Down

Actions

State

Tasks

Name

Reload QlikView and Send Reports

Description

Tasks

| Name | Description | Connection | State |
|----------------------------------|--|------------|-------|
| Reload QlikView Document | Reload the source QlikView document from the original database | SalesDemo | ✓ |
| Excel Report with Straight Table | Excel Report with Straight Table | SalesDemo | ✓ |

Classroom Exercise

- Create your first Job
- Tutorial: "[How to Create Jobs](#)". Page 149

NPrinting Schedules

- Schedules set the date and time when a specific operation is to be executed
 - Currently only time based
 - Press the Start button to activate schedules from NPrinting Client this disables all other NPrinting features
 - Schedules can be executed automatically by NPrinting Server (soon to be QlikView NPrinting Server)

NPrinting Advanced Scheduling Functions

- Advanced scheduling functions
 - Start and end date
 - Number of executions
 - One shot, daily, weekly, monthly or annual
- Schedule a sequence of jobs
- **NOTE:** NPrinting is currently single threaded thus tasks, jobs and schedules run in **Series** (one at a time) and not in Parallel. The next generation of NPrinting will be multithreaded and support parallel report processing.

NPrinting Schedules

schedule - Schedule

File **Schedule**

Save and Close Delete Save and New Active General Jobs

Actions State Show

Name: Send all reports

Description:

Start

Date: 25-02-2013

Schedule type

☐ One-shot Weekly

☐ Daily Every 1 week(s) on:

☒ Weekly Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒

☐ Monthly Friday ☒ Saturday ☐ Sunday ☐

☐ Yearly

Daily frequency

☒ Occurs once at 10:00:00

☐ Occurs every 1 Minutes between 00:00:00 and 23:59:59

End

☒ Never

☐ Event count 1

☐ Day count 1

☐ Date: 17-06-2013 Time: 23:59:59

Classroom Exercise

Create your first Schedule

- Tutorial: "[How to Schedule Jobs](#)". Page 152



NPrinting Enablement Course

Advanced

Qlikview Connections

NPrinting Installation for Distribution

If you have QlikView Server:

- Enterprise Server

OR

- Small Business Edition

New NPrinting File: Managing Connections

- Compatible with QlikView security: server and document User ID and Password (Alternate identity not supported)
- A single NPrinting .nsq file can be connected to many QlikView documents
 - But each QlikView document can be connected only once to each .nsq
- A report can take data from more than one connection

New NPrinting File: Managing Connections

The screenshot displays the NPrinting for QlikView application interface. The main window is titled "C:\NPrintingTraining\NPrintingFiles\NPrintingTraining.nsq - NPrinting for QlikView". The left sidebar contains a tree view with "Connections" selected, and other options like "Linked Fields", "Schedules", "Tasks", "Reports", "Filters", "Conditions", "Recipients", and "Sources". The main area shows a table of connections.

| Name | Description | Default | Clear Sel. | State |
|---------------------------|--|---------|------------|-------|
| Sales Compass | %evQlikViewFiles%\SalesCompass.qvw | | ✓ | ✓ |
| Sales Demo Section Access | %evQlikViewFiles%\SalesDemoSectionAccess.qvw | | ✓ | ✓ |
| SalesDemo | C:\NPrintingTraining\QlikViewDocuments\SalesDemo.qvw | | | ✓ |

Below the table, the "SalesDemo - Connection" dialog is open. It has a "File" tab and a "Connection" sub-tab. The dialog contains the following fields and options:

- Name: SalesDemo
- Description: (empty text box)
- Server name: ☐
- QlikView document: C:\NPrintingTraining\QlikViewDocuments\SalesDemo.qvw
- User name: (empty text box)
- Password: (empty text box)
- Default connection: ☐
- Clear all selections: ☐

The "SalesDemo - Connection" dialog also features a ribbon with the following groups and icons:

- Actions: Save and Close, Delete, Save and New
- State: Active
- Source: Open, Refresh Object List

At the bottom of the main window, a status bar indicates "NPrinting Service uses this file".

Distribution

Add Recipients to a Task

- Tutorial: "[How to Distribute User Specific QlikView Reports to User Folders](#)". Page 158

NPrinting Recipients: Organization by Groups

- Distribution Groups:
 - Are lists of Recipients
 - Can be created manually or during automatic import
 - Maintenance is made easy by sending reports to groups
 - A recipient who is added to a group receives all reports sent to the group with the recipient's personal filters applied
 - Group filters are not supported

Classroom Exercise

Create a group of recipients

- Tutorial: [How to Create Recipient Groups](#). Page 164

Send Custom Email Message 1

Send E-mail from Report Task:

- Activate the flag "Send E-mail"
- Fill in the "From" address field
- Add CC and/or BCC if needed
- Enter a Subject:
 - Fixed text
 - Dynamic text with tags. Open the list and insert
- The flag "Attachments" is usually enabled
 - Click on the paperclip to select which reports to attach
 - Add external files
- Select the format of the e-mail text:
 - Simple Text
 - **HTML**
 - HTML from Template

Send Custom Email Message 2

- Enter the body text
- Add tags for dynamic content
 - QlikView Variables
 - Recipient information
 - Embed HTML reports
 - Enter Report Path/Name
 - Enter timestamp

Send Custom Email Message 3

Excel Report with Straight Table - Report Task

File | Report Task

Actions: Save and Close, Delete, Save and New

State: Active

Show: General, Reports, Recipients, Filters

Mail: Message

Name: Excel Report with Straight Table

Description: Excel Report with Straight Table

Connection: SalesDemo Close connection when task ends ☐

Email

Send Email ☒

From: marketing@nprinting.com

Add CC/BCC ☐

Subject: %%FullName%%: please read the attached report

Attachments ☒

Reports/Files: Excel Report - Straight Table with 2 or more dimension template (Excel Workbook, Compressed)

Format: ☐ Text ☒ Html Text ☐ Html File

Body: Dear %%FullName%%,

Attached yuo'll find the report :"%File_Name_Excel Report - Straight Table with 2 or more dimension template_xlsx_Compressed%%".
Please read it carefully.

Footer Image

Classroom Exercise

Send an e-mail with the reports as attachment.

- Tutorial: "[How to Create Tasks](#)". Page 131

From "Add a message" (top of page 135)

QlikView Variables in Email

You can include dynamic content in the emails by including QlikView variables

- Use the QlikView document variables
- **Task filters** are applied before the variable is calculated
- Any other filter doesn't affect the value of the variable
- Usable in subject and body of any email
- Tags are replaced with QlikView variable values
- Available under QlikView nodes
- Syntax:
%%Variables_QlikViewDocumentName_QlikViewVariableName%%

Recipient Variables in Email

- Recipient variable values are affected by **recipient and task filters**
- Usable in subject and body of any email
- Tags are replaced with variable values
- Available under Recipients nodes
- Syntax:
%%Recipient_Variables_QlikViewDocumentName_QlikViewVariableName%%

QlikView Variables in Email: Example

- QlikView variable `vTotalSales = money(sum(Sales),'$ #,##0.00')`
- An Email for each salesperson
- Add both variable tags:
 - “%%Recipient_Variable_SalesDemo_vTotalSales%%”
 - Recipient filters will be applied before the value of the variable is calculated
 - In the email the salesperson will only see their own sales
 - “%%Variable_SalesDemo_vTotalSales%%”
 - Only task filters will be applied before the value of the variable is calculated
 - In the email the salesperson will only see total company sales

Recipient Filter Dependent Tag: QlikView Variables in Email

Email

Send Email ☒

From Address Full Name

Add CC/BCC ☐

Subject

Attachments ☒

Reports/Files

Format ☐ Text ☒ Html Text ☐ Html File

Body

Dear %%Recipient_Variable_SalesDemo_vSalesman%%,

You sales amount for %%Recipient_Current_Selections%% is %%Recipient_Variable_SalesDemo_vTotalSales%%

Our complani total sales is %%Variable_SalesDemo_vTotalSales%%

Best Regards

Classroom Exercise

Add some dynamic field in the e-mail subject or body

- Tutorial: [How to include dynamic elements in NPrinting e-mail](#). Page 168

Compress the Attachments

- Send notifications by configuring each recipient
- Compression settings:
 - Compressed reports can be attached as one archive
 - Password protected
- Close connection when task ends

Compress the Attachments

The screenshot shows the 'Excel Report with Straight Table - Report Task' window. The 'Reports' tab is selected in the ribbon, and the 'Compress' checkbox is checked in the 'Excel Report - Straight Table with a 2 or more dimension template' row.

Report Task Configuration:

- Name: Excel Report with Straight Table
- Description: Excel Report with Straight Table
- Connection: SalesDemo
- Close connection when task ends: ☐

Reports Table:

| Name | Description | Connection | Output Format | Compress | Advanced | State |
|---|-------------|------------|---------------|-------------------------------------|----------|-------|
| Excel Report - Straight Table with a 2 or more dimension template | | SalesDemo | Xlsx | <input checked="" type="checkbox"/> | ... | ✓ |

Enable report compression to create one compressed file for each report

Classroom Exercise

Compress the attachments

- Tutorial: "[How do I ZIP my reports?](#)". Page 176

Classroom Exercise

Embed an HTML Report into an Email

- Tutorial: [How to Embed an HTML Report in the Body of an E-mail Message](#). Page 179

Classroom Exercise

Send your report to an FTP

- NPrinting can use an FTP server as destination
- It's possible to create subfolders on the remote FTP destination
- Tutorial: [Distributing Reports to FTP Destinations](#). Page 187

SFTP is also supported

Classroom Exercise

Output folder





Create folder if it does not exist ☒





Use ☐ Task output folder ☐ Task folder with recipient subfolder ☐ Recipient folder ☒ Custom folder

Custom folder

Type Recipient subfolder Value

Type Recipient subfolder Value

Make subfolder ☒    

Make subfolder ☒    

Preview

Compression settings

Create an archive containing the compressed reports ☐

Archive Name

Use recipient password ☐ Archive Password

226 7 matches total
Directory listing successful

Remote site: /

- ? ElvisPresley
- ? HelenBrolin
- ? Rob_Carsson
- ? TomLindwall

| Filename | Filesize | Filetype | Last modified | Permissions | Owner/Group |
|--------------|----------|-------------|---------------------|-------------|-------------|
| .. | | | | | |
| HelenBrolin | | File folder | 23/04/2014 15:01:04 | 0755 | 33168 33170 |
| TomLindwall | | File folder | 23/04/2014 15:01:26 | 0755 | 33168 33170 |
| Rob_Carsson | | File folder | 23/04/2014 15:01:35 | 0755 | 33168 33170 |
| ElvisPresley | | File folder | 23/04/2014 15:01:44 | 0755 | 33168 33170 |

Essential Settings: E-mail Setup

- If the SMTP server requires SSL or TLS, must install 32 bit version of OpenSSL (old versions of NPrinting only)
- MAPI:
 - Requires MAPI client
 - MAPI client security settings must view NPrinting as a trusted application
 - **Works with NPrinting Client only.** Not supported for use with NPrinting Server

Classroom Exercise

Configure your e-mail server (SMTP)

- Tutorial: [How do I set up e-mail in NPrinting?](#). Page 193

NPrinting Report Tasks: Paper Copies

- Printer configuration for hard copies
 - To print paper copies of you reports. Please pay attention to the number of pages
- Tutorial: [How to Create Hard Copies of Your Reports](#). Page 196

Advanced Filtering

NPrinting Reports Filters

- Filters
 - **Add** one or more existing filters in the .nsq
 - **Create** new or **Remove** existing filter
 - All generated reports will be affected by the report filters applied

NPrinting Filters: Current Selections

- You can Import QlikView Current Selections – used if you don't want to create a bookmark
- Field based filters and variable filters only
 - Only filters currently active in QlikView document
 - You can select some or all active filters

Classroom Exercise

Import QlikView document current selections as an NPrinting filter

- Tutorial: [How to Import Current Selections](#). Page 200

NPrinting Filters: Benefits

- NPrinting Filtering is Centralized
 - Modifications to a filter propagate to all entities to which it is applied
- Reusability to facilitate development:
 - Filters can be applied at these locations:
Charts, Recipients, Reports and Tasks
 - Multiple filters can be applied to a Recipient, Report or Task

NPrinting Filters: QlikView Bookmarks

- You can use QlikView bookmarks for filtering data:
 - NPrinting saves the link to the bookmark and doesn't save the filter structure
 - Modifications in QlikView bookmarks are inherited by NPrinting
 - Do not change the name of QlikView bookmarks used in NPrinting filters or they will not work
 - Bookmark default behavior is "Clear all selections" and apply bookmark
 - Generally better to set "Apply on top of current selection"
 - Must be Server/Document Bookmark. User Bookmarks do not work.
 - You can leverage advanced search in a QlikView list box and then create a bookmark for use with NPrinting

Classroom Exercise

Create a bookmark based filter

- Tutorial: [Creating NPrinting Filters Based on Existing QlikView Bookmarks](#). Page 205

QlikView Formulas in Filters

Formulas in Filters:

- You can use formulas for dynamic values and use them as filter values
- QlikView Syntax
- Formulas whose output is a single value can be used
- QlikView Advanced Search is supported
 - For instance select all categories with more than 50.000\$ in sales: `sum(Sales) > 50.000`

Classroom Exercise

- Tutorial: “[How to Use QlikView Advanced Search with NPrinting Filters](#)” Page 208
- Tutorial (optional): [How to Report Sales for Last Year and This to Date](#). Page 214

NPrinting Filters: Set a QlikView Variable

- You can use an NPrinting filter to set the value of QlikView variables
 - Create a new Filter
 - Open the Variables tab and click on Add
 - Select the QlikView variable by using the dots
 - Insert the Variable Value
 - Confirm and Save

NPrinting Filters: Set a QlikView Variable

Set vCurrentYear to 2014 - Filters

File Filters

Save and Close Delete Save and New Import Filter Active Fields Variables Bookmarks Add Remove Up Down

Actions State Show Variables

Name Set vCurrentYear to 2014

Description

Connection SalesDemo

Variables

| Name | Label | Value | Connection |
|--------------|--------------|-------|------------|
| vCurrentYear | vCurrentYear | 2014 | SalesDemo |

Variable

Connection SalesDemo

Name vCurrentYear

Label

Value 2014 Calculate ☐

OK Cancel

Classroom Exercise

- Tutorial: “[How to Set a QlikView Variable to a Specific Value Using Filters](#)” Page 226

Recipients Management

Importing Recipients from Files

- You can import recipient lists from files and databases:
 - Recipient ID or Recipient Name used as primary key in imports
 - Set different IDs for duplicate names
 - Using IDs lets you use duplicated Full Name which is suitable for an email message
 - ID 01, Name John Smith
 - ID 02, Name John Smith
 - ID is alphanumeric

Importing Recipients from Files 2

- You can import recipient lists from files and databases:
 - Many formats: Excel, CSV, XML.
 - Import from databases like SQL server, Oracle, MS Access
 - Import Wizard tool for guided import
 - Set all fields in the wizard: ID, Name, Description, E-mail, Group, Filters, etc.
 - Automation: Import Tasks can be scheduled as needed for automated import Processing

Importing Recipients from Files 3

- You can import recipient lists from files and databases:
 - Groups:
 - Create new
 - Associate existing
 - Filters:
 - Create new filters
 - Associate existing filters
 - Set import task parameters
 - Unlimited number of fields and values may be used

Importing Recipients from Files 4

Import Wizard

File preview
The wizard has made some guesses about where your field breaks occur. If they are not correct, you can make adjustments now.

| | FullName | Description | Email | FolderName | SubFolderName | ImportFilterConnec | mFilterPr | Group1 | Group2 | CustomFilterID | Filter1 | Filter2 | rFil |
|---|--------------------|-------------------|----------------------------------|---|-------------------|--------------------|-----------|----------------|--------|-------------------------|----------------|----------------------------------|------|
| 1 | Albert Presley | | Albert.Presley@nprinting.com | C:\WPritingTraining\PersonalFolders\AlbertPresk | AlbertPresley | | No | | USA | Filtro per Albert | Albert Presley | | No |
| 2 | Julia Brolin | | Julia.Brolin@nprinting.com | C:\WPritingTraining\PersonalFolders\JuliaBrolin | JuliaBrolin | | No | Germany, Italy | USA | Julia Brolin | Julia Brolin | | No |
| 3 | Margie Hendrix | The Boss of Sue C | Margie.Hendrix@nprinting.com | C:\WPritingTraining\PersonalFolders\MargieHenc | MargieHendrix | | No | | | | | Salesman={Margie Hendrix,Sui No | |
| 4 | Sue Callins | | Sue.Callins@nprinting.com | C:\WPritingTraining\PersonalFolders\SueCallins | SueCallins | | No | | | | | Salesman={Sue Callins} | No |
| 5 | Robert Shine | | Robert.Shine@nprinting.com | C:\WPritingTraining\PersonalFolders\RobertShin | RobertShine | | No | Germany | | Filter for Margie Hendr | | Salesman={Robert Shine,Marg No | |
| 6 | John Skoglund | | John.Skoglund@nprinting.com | C:\WPritingTraining\PersonalFolders\JohnSkoglu | JohnSkoglund | | No | | | | | Salesman={John Skoglund} <c No | |
| 7 | Stephen Carsson | | Stephen.Carsson@nprinting.com | C:\WPritingTraining\PersonalFolders\StephenCar | StephenCarsson | | No | Germany | USA | | | Salesman={Stephen Carsson} No | |
| 8 | Clint Roll | | Clint.Roll@nprinting.com | C:\WPritingTraining\PersonalFolders\ClintRoll | ClintRoll | SalesDemoClearAll | No | | USA | | | Salesman={Clint Roll} | Yes |
| 9 | Sebastian Lindwall | | Sebastian.Lindwall@nprinting.com | C:\WPritingTraining\PersonalFolders\SebastianL | SebastianLindwall | SalesDemoClearAll | Yes | Germany | | Salesman and Product | | Salesman={Sebastian Lindwall} No | |

[New Syntax Explanation](#) /
 [New Syntax Screenshot](#) /
 [Recipients](#) /
 [Recipients Original](#) /
 [Clear Group List](#) /
 [Sheet1](#)

<< < Back Next >> Cancel

Classroom Exercise

Import Recipients from a file

- Tutorial: [How to Create and Import Recipients with Filters and Distribution Groups](#). Page 103

From the second step to the end

Import Recipients from a QlikView Chart

- You can import recipients from your QlikView document (Features Track only)
 - Create a QlikView object with the recipients you want to import
 - Create an NPrinting recipient import that reads that object
 - Create a import recipient task
 - Schedule the Job

Classroom exercise – make a connection to the SalesDemo QVW in C:\NPrintingTraining\QlikViewDocuments and import the recipients from chart #CH265 - NPrinting Recipients List

Importing Recipients from Directory Services

NPrinting can import Recipients from Windows Active Directory and other LDAP (Lightweight Directory Access Protocol) servers:

- Insert your server parameters
- Explore your directory tree
- You cannot import filters

Classroom Exercise

Import recipients from LDAP server

- Tutorial (Optional): [Import Users from LDAP Directory Subfolders](#). Page 255

Importing Recipients Benefits

- Recipient import supports modification, replacement, duplication, and deletion
 - Deletion of a recipient is possible only by the same Import Task entity that imported the recipient
- You can create an Import Recipient entity and schedule the execution avoiding to run the job by hand any time you need to update the list
- Maintain recipient lists up-to-date automatically:
 - Import from QVWs, files, databases or connect to an LDAP directory etc
 - Create and save imported Recipients and associate them with distribution groups
 - Schedule regular imports
 - Send reports to groups

Advanced Templates

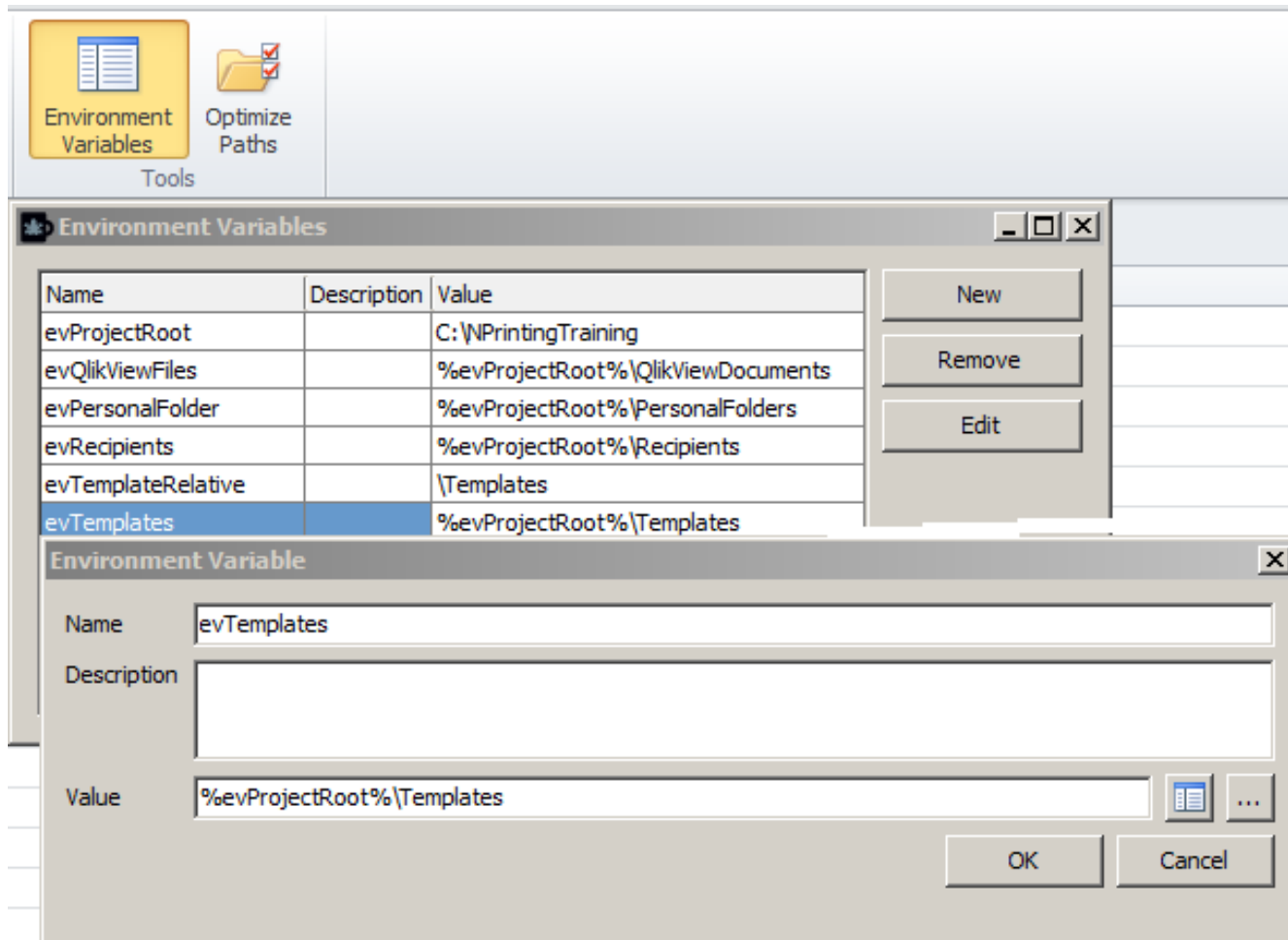
Templates: Advanced Paths 1

- NPrinting supports Environmental Variables:
 - NPrinting Variables
 - Variables for some folders in NPrinting Options
 - User Variables
 - Created by the developer
 - System Variables
 - Defined in Operating System

Templates: Advanced Paths 2

- A User Variable can be used to define another User Variable
- Usable in template files and .qvw paths
 - Mouse over to see the final folder
- To insert a Variable in a template path, click on the variable button
- Easily move projects from one PC to another
- NPrinting also supports Relative Paths in templates and .qvw's folder
 - They refer to the relative location of the .nsq
 - Combine Variables with Relative Paths

Templates: Advanced Paths 3



Templates: Advanced Paths 4

- "Optimize Path": convert absolute paths into paths with Environment Variables
 - You can select the paths to convert
- NPrinting supports variables containing QlikView Server Names
 - Use them with QVP connections
 - "Default QlikView server" option

Classroom Exercise

- Tutorial: “[How to Use Environment Variables](#)”. Page 260

Use Image Dimensions Options

NPrinting always maintains the aspect ratio of images imported from QlikView except in PixelPerfect templates.

- Image dimension: the "Stretch" property that can be set to:
 - **Don't Fit:** (Default in Excel): embeds images exactly as they are exported from QlikView.
 - **Fit Inside:** image height and width are the same as exported from QlikView or the height and width are reduced proportionally until both are smaller than the settings in the template.

Use Image Dimensions Options 2

- **Fit Width:** image width is the same width as exported from QlikView or the width set in the template, whichever is less. Image height is adjusted proportionally
- **Fit Height:** image height is the same height as exported from QlikView or the height set in the template, whichever is less. Image width is adjusted proportionally.

Use Image Dimensions Options 3

- **Stretch:** (Default in PowerPoint and Word): image dimensions are increased or decreased proportionately until one is the same as set in the template and the other is less than the corresponding dimension.
- Use HTML tags to set image sizes in HTML reports
 - Advanced HTML knowledge need to perform this action

Classroom Exercise

Set image dimensions inside reports

- Tutorial: [Image Dimension Management in Microsoft Office Reports](#).
Page 267
- For PixelPerfect refer to [Understanding PixelPerfect Features](#)

Data Formats

- Column Custom Formats:
 - Right click on column name and deselect Keep Source Formats
 - Formatting with standard syntax
 - 0 to display 1235
 - #,##0 to display 1,235
 - Also works with HTML and Word templates
 - Use this to customize number format with these types of reports
 - Set number format only

Advanced Templates: Data Formats

- Tutorial: [Which formats can I use in columns?](#). Page 282

Cell by Cell reporting in the Excel Template Editor

You can insert specific cells of QlikView objects into any position of your template:

- Add the QlikView object in the Cells node
- Drag and drop cells into the template
- Deselect 'Keep Source Formats'
- Set the cell format as preferred using Nprint format property or Excel cell properties

Classroom Exercise

Cell by Cell reporting in the Excel Template Editor

- Tutorial: [Selected QlikView Cell Values Used in Excel Reports](#). Page 285

NPrinting Formulas Editor 1

- NPrinting supports any QlikView formula which returns a single string or value:
 - For instance `=Sum(Sales)`
- Use QlikView syntax formulas in the Formula editor
- Notice that `GetCurrentSelections()` returns active selections as a single string
- NPrinting supports QlikView formulas with set analysis
 - `=sum({$<Salesman={$(vSalesman)}>}Sales)`
 - Returns the sales of the selected salesman

NPrinting Formulas Editor 2

- NPrinting **does not support** QlikView formulas which return an array of values
 - =Aggr(Count(DISTINCT CustomerID), Salesman)
 - Calculates the distinct number of customers for each salesman entered as a dimension of a QlikView chart
 - Shows a result only when a filter with a single salesman selection is applied to an NPrinting report
 - Workaround, use =concat(Aggr(Count(DISTINCT CustomerID), Salesman), ' - ')
 - Concat() forces the result of an array to be a single string
 - Check report "Excel Report with QlikView Formulas" and CH313 in the Salesman sheet of the training environment

Classroom Exercise

Insert a QlikView formula

- Tutorial: [Formulas](#). Page 293

Advanced Excel Templates

NPrinting MultiDoc

NPrinting MultiDoc: Report with objects from multiple QlikView documents

- Template based Reports with QlikView Objects from Multiple Sources
- Reports can be connected to more than one QlikView document
- Report Tasks can be linked to multiple QlikView documents
- Select the source Connection when inserting an object

Classroom Exercise

Create a report with objects from multiple QlikView documents

Available in all template-based reports

- Tutorial: [How to Create Simple Excel Reports with Objects from Multiple QlikView Documents](#). Page 302

Linked Fields

- **Linked Fields:** a new entity that allows you to create a logical mapping between fields from different connections
- Accessible under Sources
- Keeps all values or only matching ones
- Usable with Filters, Pages, Levels and Cycles

Classroom Exercise

Create a report with objects from multiple QlikView documents

- Tutorial: [How to Use Linked Fields with Keep All Values](#). Page 311
- Tutorial: [How to Use Linked Fields with Keep All Matching Values Only](#). Page 322

Template Editor Tables

- Tables:
 - QlikView Straight Table
 - Single tag for full chart or individual field tags per column
 - Granular control of structure and formatting
 - Can add calculated columns with Excel formulas without knowing the number of rows to be calculated

Calculated Columns by Using Levels

If you want to add calculated columns to Excel templates, use Levels based on a supported QlikView chart:

- The Excel formula will appear in all report lines
- Insert the Excel formulas to get the calculated column table you want
- Only straight tables are supported; if you don't find the chart you want, convert it into a straight table or clone it and convert the clone
- Allow you to create calculated rows without knowing in advance how many rows there will be

Levels

File Template

Save And Close Save As Preview Toolbar

Actions View

Page Levels

CH302_Level - Pivot by Category, P

- CategoryName
- ProductName
- Country
- =\$ (vLastYear)
- =\$ (vCurrentYear)

Images Tables Cells Variables Formulas

- vLastYear
- vCurrentYear

ISTEXT X ✓ f_x =SUM(G4:G6)

| | A | B | C | D | E | F | G | H | I |
|---|----------------|----------------|---------------|-----------|-------------------|----------------------|---------|---------|---|
| 2 | | | | | | | | | |
| 3 | | Category Name | Product Name | Country | Sales <vLastYear> | Sales <vCurrentYear> | Delta | Delta % | |
| 4 | <CH302_Level> | | | | | | | | |
| 5 | | <CategoryName> | <ProductName> | <Country> | <=\$ (vLastYear)> | <=\$ (vCurrentYear)> | #VALUE! | #VALUE! | |
| 6 | </CH302_Level> | | | | | | | | |
| 7 | | | | | \$ - | \$ - | =SUM(G4 | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |

Levels

| | | | | | | | | | |
|---|---|---------------|-------------------|-------------|-----------------|-----------------|---------------|---------|--|
| D630E834BB8A4CE48A8FB39 | | | | | | | | | |
| <div> <div>File</div> <div>Home</div> <div>Insert</div> <div>Page Layout</div> <div>Formulas</div> <div>Data</div> <div>Review</div> <div>View</div> <div>Developer</div> <div>Vizubi</div> </div> | | | | | | | | | |
| <div> <div>From Access</div> <div>From Web</div> <div>From Text</div> <div>From Other Sources</div> <div>Existing Connections</div> <div>Refresh All</div> <div>Connections</div> <div>Properties</div> <div>Edit Links</div> <div>Sort</div> <div>Filter</div> <div>Clear</div> <div>Reapply</div> <div>Advanced</div> <div>Text to Columns</div> <div>Remove Duplicates</div> <div>Data Validation</div> <div>Cons</div> </div> | | | | | | | | | |
| <div> <div>H796</div> <div>fx</div> <div>=IF(OR(E796=0,F796=0),"",(F796-E796)/E796)</div> </div> | | | | | | | | | |
| | A | B | C | D | E | F | G | H | |
| 2 | | | | | | | | | |
| 3 | | Category Name | Product Name | Country | Sales 2012 | Sales 2013 | Delta | Delta % | |
| 787 | | Sportwear | Wimbledon T-Shirt | Mexico | \$ 137.81 | \$ - | \$ (137.81) | | |
| 788 | | Sportwear | Wimbledon T-Shirt | Venezuela | \$ - | \$ 4,115.74 | \$ 4,115.74 | | |
| 789 | | Sportwear | Wimbledon T-Shirt | Ireland | \$ - | \$ 2,228.69 | \$ 2,228.69 | | |
| 790 | | Sportwear | Wimbledon T-Shirt | Denmark | \$ - | \$ 1,351.82 | \$ 1,351.82 | | |
| 791 | | Sportwear | Wimbledon T-Shirt | Brazil | \$ - | \$ 750.75 | \$ 750.75 | | |
| 792 | | Sportwear | Wimbledon T-Shirt | Switzerland | \$ - | \$ 320.95 | \$ 320.95 | | |
| 793 | | Womens wear | X-Dress | Germany | \$ 2,669.56 | \$ - | \$ (2,669.56) | | |
| 794 | | Womens wear | X-Dress | Denmark | \$ 171.03 | \$ - | \$ (171.03) | | |
| 795 | | Womens wear | X-Dress | Spain | \$ - | \$ 3,743.40 | \$ 3,743.40 | | |
| 796 | | Womens wear | X-Dress | UK | \$ - | \$ 2,916.45 | \$ 2,916.45 | | |
| 797 | | Womens wear | X-Dress | Italy | \$ - | \$ 2,723.66 | \$ 2,723.66 | | |
| 798 | | Womens wear | X-Dress | Argentina | \$ - | \$ 2,181.20 | \$ 2,181.20 | | |
| 799 | | Womens wear | X-Dress | France | \$ - | \$ 1,842.34 | \$ 1,842.34 | | |
| 300 | | | | | \$ 1,066,275.43 | \$ 1,805,167.34 | \$ 738,891.91 | 69% | |
| 301 | | | | | | | | | |

Classroom Exercise

Create an Excel report with nested Levels

- Tutorial: [How to Make a Calculated Column in Excel Reports](#). Page 331

Totals and Subtotals

- Tips for total and subtotal on columns:
 - Sum formulas have to include all cells from data down
 - Must divide by 2 to avoid double counting sub-totals
 - Grand Totals must be outside level range(s)
- Use concatenation to create dynamic titles
 - You can also use QlikView calculated column names

Totals and Subtotals

The screenshot shows the QlikView interface with a table of data. The table has columns A through G. The data is organized into categories and subtotals.

| | A | B | C | D | E | F | G |
|----|---|-----------------------|------------------|---------------|---------------|---|---|
| 1 | | | | | | | |
| 2 | | <CategoryName_Level> | | | | | |
| 3 | | <CategoryName> | | | | | |
| 4 | | | <Country_Level> | | | | |
| 5 | | | | | | | |
| 6 | | | <Country> | ProductName | Total Sales | | |
| 7 | | | | <ProductName> | <Total Sales> | | |
| 9 | | | | | \$ - | | |
| 10 | | | | | | | |
| 11 | | | </Country_Level> | | | | |
| 12 | | | | | \$ - | | |
| 13 | | | | | | | |
| 14 | | </CategoryName_Level> | | | | | |
| 15 | | | | | =SUM(E2:E14) | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |

The formula bar shows the formula: `=SUM(E2:E14)/3`.

Totals and Subtotals

1F420F0D329B41C4923C74FCAC8DC

| File Home Insert Page Layout Formulas Data Review View Developer | | | | | |
|--|-----------|---------|-----------------------|----------------|---|
| Clipboard | | Font | | Alignment | |
| ISTEXT X ✓ fx =SUM(E2:E60)/3 | | | | | |
| A | B | C | D | E | F |
| 27 | Sportwear | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 42 | | Denmark | ProductName | Total Sales | |
| 43 | | | Feiss Fleece Trousers | 3,083 | |
| 44 | | | Bike Helmet | 2,927 | |
| 45 | | | Tennis Suit | 1,245 | |
| 46 | | | Rasta WCT | 1,160 | |
| 47 | | | Sheat Shoes | 1,040 | |
| 48 | | | Basket Shoes | 842 | |
| 49 | | | Adihash Running Shoe | 644 | |
| 50 | | | Car Boots | 585 | |
| 51 | | | Cap | 565 | |
| 52 | | | Wimbledon T-Shirt | 409 | |
| 53 | | | Basket Vest | 349 | |
| 54 | | | Squash Shorts | 234 | |
| 55 | | | Game Over T-Shirt | 45 | |
| 56 | | | | | |
| 57 | | | | \$ 13,129.74 | |
| 58 | | | | | |
| 59 | | | | \$ 15,151.78 | |
| 60 | | | | | |
| 61 | | | | =SUM(E2:E60)/3 | |
| 62 | | | | | |
| 63 | | | | | |

Sheet1

Edit

Classroom Exercise

- Add Column Total
- Tutorial: [Totals at the Feet of Columns in Tables](#). Page 347
- Tutorial (Optional): [How to Create Excel Reports with Nested Levels and Subtotals](#) Page 353

Excel Charts from QlikView Data

- You can populate Excel charts with data from QlikView
 - Same principle as populating sum functions
 - Use Excel chart type and formats
 - Move and resize the chart

Classroom Exercise

Create an Excel Report with Chart Levels can also be used to create a report with an Excel chart

- Tutorial: [How to Create Excel Charts](#). Page 364

Calculated Columns on Fixed Number of Rows

If you want to add calculated columns to your Excel templates, and you know the exact number of rows in the final report you can also:

- Add the QlikView object as a Table
- Unflag the "**Expand range**" option
- Drag and drop the table into the template
- Insert a copy of the formula for each row of the final report

Calculated Columns 2 Template

Template Editor

File Template

Save And Close Save As Preview Toolbar

Actions View

Connection: SalesDemo

Page Levels

- CH286_Level - For Excel Pivot
- CH268_Level - Sales By Country
- CH251_Level - Sales Over Time By Category

Images

Tables

- CH268 - Sales By Country
 - Country_2 - Country
 - Sum (Sales)_1

Cells

Variables

- vCurrentYear
- vLastYear

Formulas

Properties

| Property | Value |
|---------------------|-------------------------------------|
| Name | CH268 |
| Description | Sales By Country |
| Keep Source Formats | <input checked="" type="checkbox"/> |
| Custom Rows | 1-10 |
| Expand Range | <input type="checkbox"/> |
| Show Headers | Show in tag cell |
| Wrap Text | <input checked="" type="checkbox"/> |

Sheet1

| A1 | B | C | D | E | F |
|----|------------------|-------------------|----------------------|------------|---------|
| 1 | | | | | |
| 2 | | | | | |
| 3 | Country | Sales | | | |
| 4 | <Country_2> | <Sum (Sales)_1> | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | Category | Sales <vLastYear> | Sales <vCurrentYear> | | |
| 19 | <CH251_Level> | | | | |
| 20 | <CategoryName> | <= \$(vLastYear)> | <= \$(vCurrentYear)> | | |
| 21 | </CH251_Level> | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | Category | Country | Year | Salesman | Sales |
| 26 | <CH286_Level> | | | | |
| 27 | <CategoryName_1> | <Country_1> | <Year> | <Salesman> | <Sales> |
| 28 | </CH286_Level> | | | | |
| 29 | | | | | |
| 30 | | | | | |
| 31 | | | | | |

Calculated Columns 3 Output

551472264E574242ABDFA653041680FB.xlsx - Microsoft Excel

| | A | B | C | D | E | F | G | H | I | J |
|----|---|------------------|-------------------|-------------------|-----------------|--------------|---|---|---|---|
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | Country | Sales | | | | | | | |
| 4 | | Germany | \$510,925.50 | | | | | | | |
| 5 | | USA | \$175,173.67 | | | | | | | |
| 6 | | France | \$174,856.01 | | | | | | | |
| 7 | | UK | \$156,734.76 | | | | | | | |
| 8 | | Ireland | \$128,415.66 | | | | | | | |
| 9 | | Brazil | \$112,415.89 | | | | | | | |
| 10 | | Mexico | \$86,072.48 | | | | | | | |
| 11 | | Venezuela | \$65,226.18 | | | | | | | |
| 12 | | Denmark | \$57,543.85 | | | | | | | |
| 13 | | Austria | \$54,468.49 | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | Category | Sales 2012 | Sales 2013 | | | | | | |
| 19 | | Womens wear | 326050.1262 | 732381.0341 | | | | | | |
| 20 | | Sportwear | 168895.3507 | 264069.0464 | | | | | | |
| 21 | | Men's Footwear | 180297.5521 | 245260.9507 | | | | | | |
| 22 | | Babywear | 94488.23007 | 156814.2374 | | | | | | |
| 23 | | Men's Clothes | 84101.22904 | 151178.5771 | | | | | | |
| 24 | | Ladies' Footwear | 127668.2931 | 107761.2271 | | | | | | |
| 25 | | Children's wear | 49072.47703 | 98851.24853 | | | | | | |
| 26 | | Bath Clothes | 35702.17405 | 48851.01805 | | | | | | |
| 27 | | | | | | | | | | |
| 28 | | | | | | | | | | |
| 29 | | | | | | | | | | |
| 30 | | Category | Country | Year | Salesman | Sales | | | | |
| 31 | | Womens wear | Germany | 2011 | Leif Shine | 10631.9 | | | | |

Ready | Average: 152183.2483 | Count: 22 | Sum: 1521832.483 | 100%

Classroom Exercise

Create a Report with Top Products

Combine Expand Range, custom rows and custom formats to display top ranked products

- Tutorial: [Select Top Ranks from QlikView and Use Them With Custom Excel Formulas](#). Page 375

Classroom Exercise

Excel pivot tables can be created faster and more easily with Excel Tables for 2007 or later

- Tutorial: [How to Create a Pivot Table from Excel Table Columns](#). Page 383

Advanced Reports Other than Excel

QlikView Pivot Table

- QlikView Pivot Table
 - Single tag
 - Same structure
 - Only QlikView formatting can be applied
 - If QlikView doc changes, report changes
 - Individual pivot table fields cannot be exported to any template editor
 - You can manage columns individually by converting a QlikView pivot table into a straight table

Classroom Exercise

Create a QlikView report with a QlikView Pivot Table object

- Tutorial: [How to Create QlikView Entity Reports](#). Page 98

Image Resolution in PDF

- Manage Image resolution in PDF reports based on PowerPoint and Word templates
 - Add a PowerPoint report to a task
 - Set output to PDF
 - Click on the dots in the Advanced column

According with Jpeg compression parameter, the quality of images in PDF output can be regulated:

- PowerPoint: High = 100, Medium = 60, Low = 20
- Word: High = 100, Medium = 66, Low = 33
- Excel: Not Available
- PixelPerfect: High, Medium, Low

Image Resolution Management

Tutorial: ["Image Resolution Management for PDF Output"](#) Page 393

Create Dynamically Named Reports

- Output Filename:
 - Static
 - Dynamic
 - Created from a sequence of fields
 - In addition to Report name and Cycle field value(s)
 - You can use: Report Name, Date, Time, QlikView Variables, Recipient Name and Custom text
 - You can Add, Move and Remove fields

Classroom Exercise

Configure a dynamic name for your report

- Tutorial: [Dynamic Report Naming](#). Page 403

Cycles

- Create a separate file for each value of cycle field(s)
- As many fields as you want
 - Create a report for every value of the cycled fields
- Cycle field name(s) must be added to report custom name

Classroom Exercise

Add a cycle to your report

- Tutorial: [Cycling Reports on Multiple Fields](#). Page 407

Conditions

- Conditions

Purpose

- Allows the creation a report only if one (or more) conditions are satisfied

Condition Options

- Chart has or does not have values
- Compares two QlikView variables
- Compares a QlikView variable to a constant or a QlikView syntax formula

General Points about Conditions

- Multiple conditions can be used
- Available for all NPrinting Reports

Conditions to Execute

- Scheduled reports are generated only if NPrinting conditions are satisfied and after all Task, Recipient and Report filters have been applied
- Reports can have multiple conditions – all conditions **must** be met for the report to be generated
- Ensure that your syntax is perfectly accurate or it could give an incorrect conditional result

Classroom Exercise

Add a condition to your report

- Tutorial: "[How to Control Report Generation with Conditions](#)". Page 415

Advanced Word

Advanced Word Reports

- To add a Table of Contents to a Word template:
 - Format titles using Styles
 - Add a Table of Contents
 - Save and run a preview: NPrinting will update the Table of Contents automatically
 - Table of contents rows are clickable in PDF
 - Check the "Table of Contents Word Report" report in the training environment

Add a Bookmark to a Word Template

- Open the Toolbar and go to Insert Bookmark
- Define the bookmarks
- Run a PDF preview: bookmarks will be available
- **NOTE:** Bookmarks inside levels are not supported for the moment

Import QlikView Charts into Word Templates

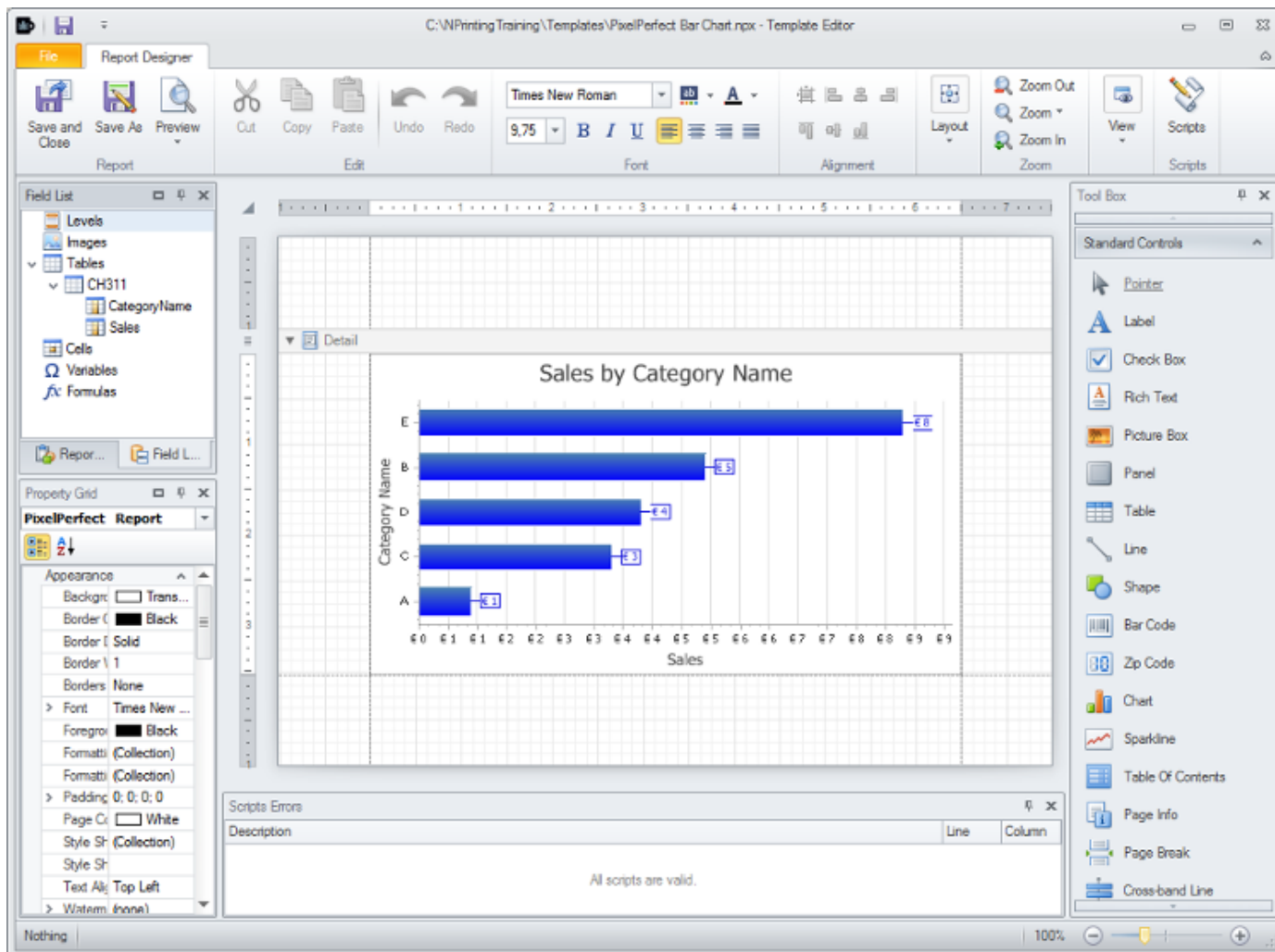
- It is possible to import QlikView charts into Word templates and convert them into Word tables
 - To maximize your customization options, create a table in Word, then drag and drop the QlikView fields into the Word table columns, then format the table as desired
- Tutorial [Can I Apply Word Formatting to my Word Reports?](#)
Page 426

Advanced PixelPerfect

PixelPerfect Charts

- You can create PixelPerfect native charts using QlikView data
 - Add QlikView objects in the Tables node: they will be the chart data source
 - Drag and drop the Chart object from the side Tool Box
 - Follow the wizard to create and customize the chart

PixelPerfect Chart 2



Classroom Exercise

- Tutorial: "[How to Create PixelPerfect Charts](#)". Page 432
- Tutorial "[How to Create a Well Formatted PixelPerfect Chart](#)". Page 440

Totals and Subtotals

- PixelPerfect Levels can be nested:
 - You can create group subtotals and report totals
 - Subtotals: insert a group header or footer and set a group summary function for the fields
 - Report Totals: insert a report total band and set a report summary function

Totals and Subtotals

| | | | | | |
|---|---|----------------------------------|---------------------------|---------------------------|-----------------------------------|
| ▼ | Detail | | | | |
| ▼ | DetailReport - "Year_Level" | | | | |
| ▼ | Detail1 | | | | |
| | | | | | [Year] |
| ▼ | DetailReport1 - "Year_Level.CategoryName_Level" | | | | |
| ▼ | Detail2 | | | | [CategoryName_Level.CategoryName] |
| ▼ | DetailReport2 - "Year_Level.CategoryName_Level.CH184_Level" | | | | |
| ▼ | GroupHeader1 | | | | |
| | | Product Name | Total Sales | Gross Profit | GP% |
| ▼ | Detail3 | | | | |
| | | [CategoryName_Level.CH184_Level] | [CategoryName_Level] | [CategoryName_Level] | [CategoryName_Level] |
| ▼ | GroupFooter1 | | | | |
| | | Category Totals | Sum([CategoryName_Level] | Sum([CategoryName_Level] | |
| ▼ | GroupFooter3 | | | | |
| | | Yearly Totals | | | |
| ▼ | ReportFooter1 [one band per report] | | | | |
| | | Sales Totals | | | |

Classroom Exercise

- Tutorial: "[How to Add Totals and Subtotals to PixelPerfect Reports](#)".
Page 456

Conditional Formatting

- PixelPerfect has many features. For instance, you can create conditional formatting rules:
 - On the Property Grid open the Formatting Rules editor
 - Create a new rule using the formula editor to add a condition: when it's true the rule will be applied
 - Apply the rule to the cells you want formatted
 - Optional Tutorial (or on your own time): [How to Manage PixelPerfect Conditional Output Formats Using the Formatting Rules Editor](#) Page 481

More Options

- PixelPerfect also supports:
 - Style Sheets
 - Sparklines
 - Multiple Axis Charts
 - Scripting in Visual Basic, C# and Jscript .NET
 - Visit [Pixel Perfect Reports](#) link for a listing of all available reporting options and tutorials on the web

Advanced PowerPoint

PowerPoint Objects With QlikView Data

- PPTX objects can be populated with data from QlikView

- PowerPoint Charts
 - Single dimension only

<http://community.vizubi.com/knowledgebase/articles/426107-how-to-create-a-powerpoint-chart-using-native-qlik>

- PowerPoint Tables
 - Formatting can be set by Nprinting
 - All data will remain on a single slide – they will not flow to the next slide if there is too much data

<http://community.vizubi.com/knowledgebase/articles/468233-how-to-insert-a-native-table-in-powerpoint-reports>

- Page in PowerPoint supports multiple dimensions
- Page can be applied to multiple slides at the same time

<http://community.vizubi.com/knowledgebase/articles/346263-how-to-use-pages-to-generate-individual-slides-in>

Advanced Tasks

QlikView Reload, Partial Reload and Reduce

NPrinting can update QlikView document data:

- Only for "local" connections which will open the QVW on the local machine, not for "server" connections which will open the QVW on the server using QVP .
- Run before running a report task to ensure recent data set
- Reload Task: Executes Reload script in QlikView document (CTRL+R)
- Partial Reload Task: Executes Partial Reload script in QlikView document (CTRL+Shift+R)
- Reduce task: Used to Reduce QVWs (using an NPrinting filter) for attaching to e-mail or distributing to folders

Run QlikView Macro Task

NPrinting can update QlikView document data:

- Reuse your QlikView Macros
- Typically run Macros before running other tasks

Classroom Exercise

Create a QlikView Reload task

- Tutorial: [How to Reload Data into Your QlikView Document](#). Page 490

Service

NPrinting Service

- NPrinting Server has a Windows service to run scheduled jobs
 - Guarantees continued execution via NPrinting Schedules
 - Continue to develop while completed reports are generated automatically in the background
 - Automatic restart
 - Several NSQ project files can be schedule for execution
 - Only one service can be active on an individual computer
 - Scheduled jobs and tasks run in series (one after the other).
 - The next generation of NPrinting will be able to multitask and run multiple schedules concurrently

NPrinting Service Setup 1

Open "NPrinting Management Console" to configure the service

- Stop the service: you cannot configure the service with it running
- Add one or more NPrinting .nsq files; all the schedules in the .nsq files will be executed at the appropriate time
- Add one or more folders. All the .nsq files saved in the folder will be executed

NPrinting Service Setup 2

- Enter a user account with these characteristics:
 - Has active QlikView license
 - Machine administrator
 - "Logon as a service" privilege
 - To change user, enter username and password again
 - With On-Demand, it is not necessary to add the .nsq to the NPrinting files list (On Demand covered later in the training)

NPrinting Service Setup 3

- Set the start type
 - Recommend: use automatic
- All three service status indicators should be green
- Next, click **Install** and then **Start**
- The NPrinting Server service should enter a 'started' state in the Windows 'Services' Console
- Stop and start the service only enabled from the NPrinting Management Console
- Change the NPrinting service account only from the NPrinting Management Console

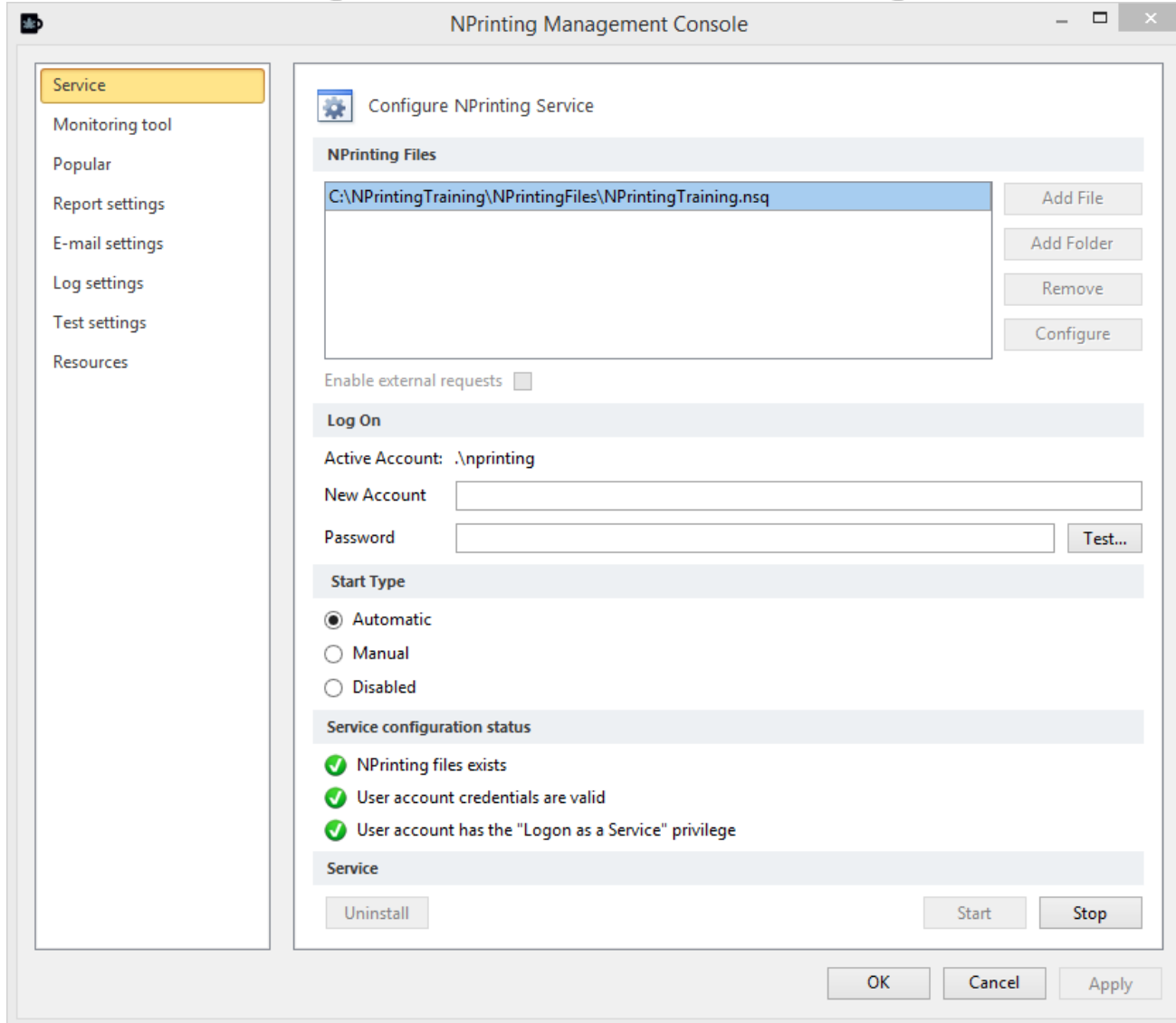
NPrinting Service: Paths

- Must use relative or UNC Network paths if service is on one machine and NPrinting Client is on another:
 - \\Server01\MySharedFolder\MyQlikViewDocument.qvw
 - \\MyServer\MySharedFolder\MyNPrintingFile.nsq
- No Mapped drives: Y:\MySharedFolder\MyQlikViewDocument.qvw
- Relative Paths and Relative path variables are supported

NPrinting Service: Tip and Tricks

- You cannot edit a template when it is being used by the service to generate a report
- Service permits generating NPrinting reports on demand (On Demand will be covered later in the Training)

NPrinting Service Configuration



The image shows the NPrinting Management Console window. On the left is a sidebar with a tree view containing 'Service' (highlighted), 'Monitoring tool', 'Popular', 'Report settings', 'E-mail settings', 'Log settings', 'Test settings', and 'Resources'. The main area is titled 'Configure NPrinting Service' and contains several sections: 'NPrinting Files' with a list box showing 'C:\NPrintingTraining\NPrintingFiles\NPrintingTraining.nsq' and buttons for 'Add File', 'Add Folder', 'Remove', and 'Configure'; 'Enable external requests' with an unchecked checkbox; 'Log On' with 'Active Account: .\nprinting', input fields for 'New Account' and 'Password', and a 'Test...' button; 'Start Type' with radio buttons for 'Automatic' (selected), 'Manual', and 'Disabled'; 'Service configuration status' with three green checkmarks indicating success; and a 'Service' section at the bottom with 'Uninstall', 'Start', and 'Stop' buttons. At the very bottom of the window are 'OK', 'Cancel', and 'Apply' buttons.

NPrinting Management Console

Service

- Monitoring tool
- Popular
- Report settings
- E-mail settings
- Log settings
- Test settings
- Resources

Configure NPrinting Service

NPrinting Files

C:\NPrintingTraining\NPrintingFiles\NPrintingTraining.nsq

Add File

Add Folder

Remove

Configure

Enable external requests ☐

Log On

Active Account: .\nprinting

New Account

Password Test...

Start Type

☒ Automatic

☐ Manual

☐ Disabled

Service configuration status

- ✓ NPrinting files exists
- ✓ User account credentials are valid
- ✓ User account has the "Logon as a Service" privilege

Service

Uninstall Start Stop

OK Cancel Apply

Essential Settings: Logs and Notifications


- NPrinting Task, Job and Schedule activity is recorded in log files
 - One log for the NPrinting service
 - One log for the NPrinting Client application
- One file per day (date is inserted in the file name)
- User specified directory
- Administrative Notifications can be set to attach log files automatically

Classroom Exercise

Configure the Log Files folders

- Tutorial: "[Configure Options](#)". Page 595

Monitoring Tool

 NPrinting Management Console

Service

Monitoring tool

Popular


Report settings

E-mail settings

Log settings





Test settings

Resources

 Service monitoring

Schedules monitoring

Grid ViewCalendar View

| State | Project | Schedule | Start Date | Start Time | End Date | End Time | Duration | Next Date | Next Time |
|---|-------------------|---|------------|------------|----------|----------|----------|------------|-----------|
|  | NPrintingTraining | Send all reports | 21/01/201 | 11:38:00 | | | | | |
|  | NPrintingTraining | Send PPT report in PDF format with native chart | | | | | | 21/01/2015 | 11:38:00 |
|  | NPrintingTraining | Schedule for Sending Top Ranks PDF Report | | | | | | 21/01/2015 | 12:00:00 |
|  | NPrintingTraining | Send HTML embedded report | | | | | | 02/02/2015 | 09:00:00 |

Classroom Exercise

Configure your service

- Tutorial: [How to Configure NPrinting Service](#). Page 493
- Ensure Detailed Server Configuration requirements are addressed:
 - [Troubleshooting: NPrinting Server Service and Schedules](#) Page 502
 - Complete this section in class
- An accurately configured NPrinting server will ensure a healthy running NPrinting server deployment

NPrinting Service: External Requests

- External Requests allows a user or an application to run a task or a job without it being scheduled
- Enable external request schedules and set the folder in service settings
- Create a .request xml file and put into the folder
- The tasks or jobs are executed and the file renamed
- Your app need only rename a file
- This is particularly useful for executing NPrinting Schedules after QV Publisher successfully reloads the QVW

Classroom Exercise

Create an external request

- Tutorial: [How to Execute NPrinting Reports by External XML Request.](#)
Page 504

Support Service

NPrinting Support Service

How to Contact our Support Service

- E-mail at support@vizubi.com
- Troubleshooting before contacting support:
 - Upgrade to the latest version or point release of NPrinting.
 - Then try to recreate the error: it may be a bug that has been resolved by the upgrade.
 - If the error can be reproduced, activate the NPrinting Client "Advanced Error Management" feature and send support the logs
 - Provide steps to reproduce the issue

How to Contact our Support Service

- Information to be included in the message:
- QlikView Desktop version and Service Release (SR) that you are using
- QlikView Server version and Service Release (SR) if you are using it
- Version of Microsoft Office that you are using (Word, Excel or Power Point)
- Operating system version and service pack (SP)

How to Contact our Support Service

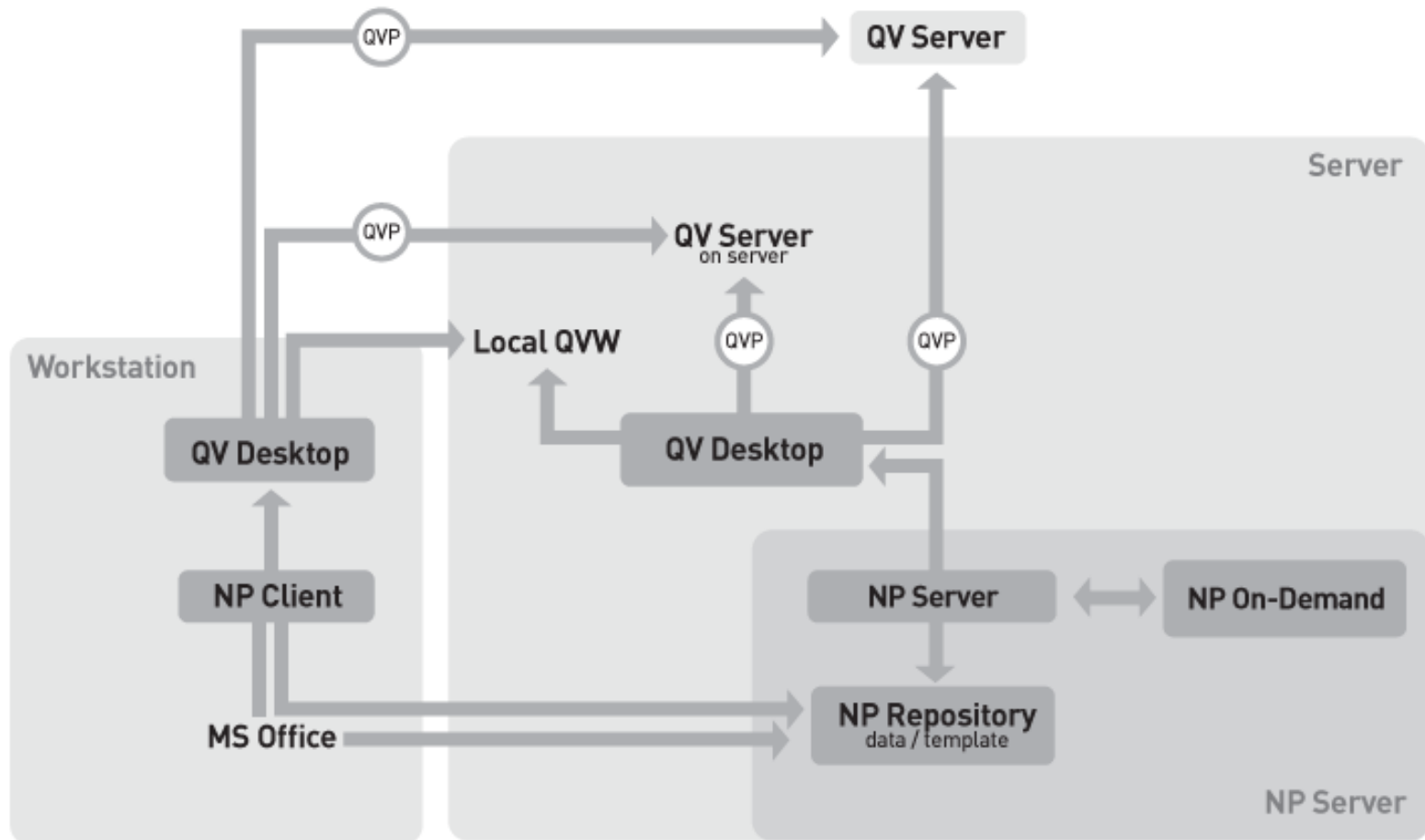
- A copy of the environment would be helpful including:
 - QlikView file (.qvw)
 - NPrinting file (.nsq)
 - Name of the entity you are trying to execute
 - Relevant report template(s)
 - NPrinting log file (.log)
 - NPrinting Service log file (.log) if you use it
- The QVW can be Scrambled and or reduced
- We will provide a secure BOX location if an upload site is required.

Licensing

NPrinting Licensing

- One License per Machine (virtual or physical)
- An NPrinting Client license allows only one developer at a time
- Will support manual execution of reports from single .nsq file using the NPrinting Client

NPrinting Client Server Architecture



NPrinting Licensing: Client

NPrinting Client

- Full-featured client application
- Designer for developers
- It allows users to develop and test all NPrinting features including recipient imports

NPrinting Licensing: Server

NPrinting Server

- Includes the NPrinting Service
- Includes NPrinting Management Console
- NPrinting server runs reports on a scheduled basis
- Guarantees uptime for reporting program
- Needs at least one NPrinting Client for developing projects

NPrinting Licensing: On-Demand

NPrinting On-Demand

- allows users to request the generation of reports or the execution of tasks in real time
- web-based environment
 - Ajax
 - Workbench
- users can apply QV selections to NPrinting On Demand reports
- selections can be combined with existing NPrinting filters
- NPrinting On-Demand requires the NP Server for execution
- On Demand Installation and Configuration: will be done later in the training

NPrinting Installation

Installation and Setup Guide: [Requirements for NPrinting 14 and following versions](#) Page 7

- Typically installed on a Server
- Software Upgrade Process:
 - Same as installation process.
 - Note: copy installation file to local machine
 - Note: right click and 'run as administrator'
 - no need to re-insert license key
 - Upgrade maintains all settings
 - Suggestion: manually stop NPrinting service

NPrinting Installation: Move License

- Moving license: must deactivate on old machine, reactivate on new machine
- NPrinting Licensing server stores
 - machine ID
 - activation code;
 - changes to CPU, RAM,
 - primary disk change will also change machine ID
- Must de-activate NPrinting code, make hardware changes and then re-activate NPrinting

Classroom Exercise

- Moving license (Tutorial is Optional as we are moving away from this license model very soon.
- Tutorial: [Deactivate Your License Before You Make Changes to Your Computer or Move NPrinting to Another Computer.](#) Page 510

Data Protection

Open Write Password

- NPrinting can save password protected documents:
 - Enter read and/or write passwords at the individual recipient level in each recipient's settings
 - Enter read and/or write passwords at the Task level for all reports and recipients contained in the task
 - Set password only for a specific report in a specific task

Classroom Exercise

Send Password Protected Reports

- Tutorial: [How to Manage Password Protection for Report Security](#).
Page 517

On-Demand

On-Demand

On-Demand is an NPrinting Server additional feature.

On-Demand is included in the Server license.

It was intended to allow users:

- Request Report generation or Tasks execution
- Specifying customized filters
- Adding specific recipients
- Without having an NPrinting installation in their machine

On-Demand Requirements

- Windows 7, Vista SP1 or later, Server 2008, or Server 2012
- .NET framework 4.0 full or higher
- QlikView Desktop 11.20 SR4 or higher if you are using Internet Explorer 10
- QlikView Desktop 11.20 SR5 or higher if you are using Internet Explorer 11

Minimum browser versions:

- Internet Explorer: IE10 or higher
- Chrome: 28 or higher
- Safari: 6 or higher
- FireFox: 23 or higher

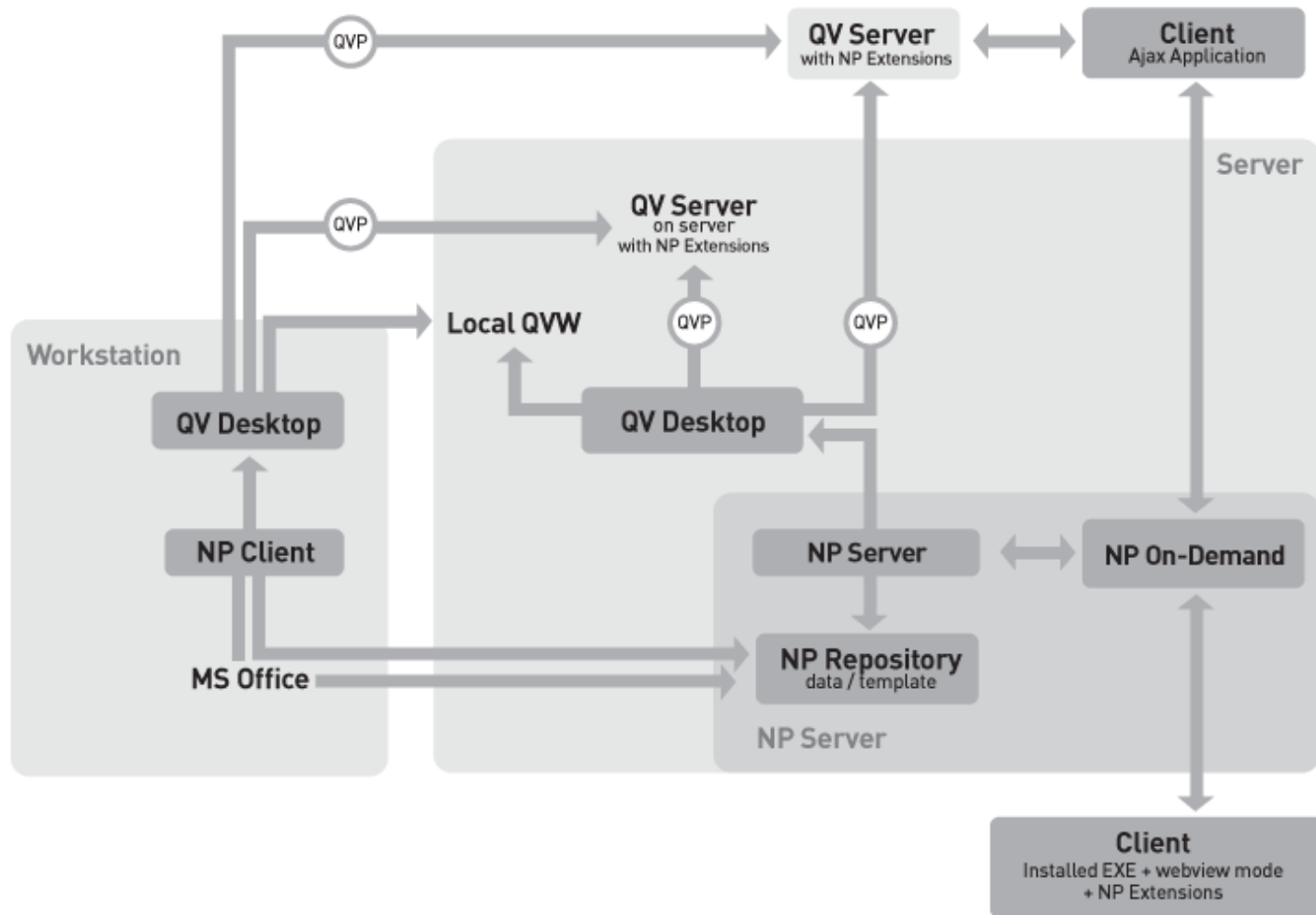
NPrinting On-Demand Architecture

- NPrinting On-Demand is a Windows service which exposes a set of APIs through two configurable endpoints:
 - WS endpoint: it is a web-service interface that uses standard SOAP protocol
 - HTTP endpoint: it is a web-service interface that uses RESTful protocol for Ajax extensions
 - Both support HTTP or HTTPS
 - Post Class Activity, review the documentation at: [NPrinting On-Demand: Architecture and Configuration](#)

On-Demand – Security and Authentication

- No security nor authentication system included
- Ajax scenarios: we assumed that logging into AccessPoint grants users to access On-Demand functionalities. Anyway, when it contains a value, we pass as additional recipient the QvUser() content.
- ASP .NET applications using workbench and Custom applications: customers need to provide their own authentication system.
- Do not expose On-Demand server directly

NPrinting On-Demand Architecture



NPrinting On-Demand

NPrinting Management Console

Service

- Monitoring tool
- Popular
- Report settings
- E-mail settings
- Log settings
- Test settings
- Resources

Configure NPrinting Service

NPrinting Files

C:\NPrintingTraining\NPrintingFiles\NPrintingTraining.nsq

Add File

Add Folder

Remove

Configure

Enable external requests ☐

Log On

Active Account: .\nprinting

New Account

Password **Test...**

Start Type

☒ Automatic

☐ Manual

☐ Disabled

Service configuration status

- ✓ NPrinting files exists
- ✓ User account credentials are valid
- ✓ User account has the "Logon as a Service" privilege

Service

Uninstall

Start

Stop

OK Cancel Apply

Classroom Exercise

Installing and Configuring On Demand

- Configure NPrinting Service from the NPrinting Management Console (Please complete if you haven't done so from tutorials earlier in the training [Troubleshooting: NPrinting Server Service and Schedules](#))
 - Follow Tutorial: [How to Use NPrinting On-Demand Extensions in QlikView Documents](#). Page 547
 - In this tutorial, you will use the following NSQ from the Training Environment
 - C:\NPrintingTraining\NPrintingFiles\OnDemand.nsq

NPrinting On-Demand

NPrinting On-Demand and Current Selections/Filters:

- Filter Data with:
 - QlikView Current Selections
 - NPrinting Filters
- Tutorial: [How to Use Current Selections with On-Demand Reporting](#). Page 557
- Tutorial (Optional): [How to Use Specific Filters with NPrinting On-Demand Reporting](#)

NPrinting On-Demand

NPrinting On-Demand:

- Deliver reports:
 - NPrinting Recipients and Groups
 - Recipients added by users
- Tutorial: [How to Use NPrinting On-Demand to Set Recipients in Tasks](#) Page 568

NPrinting On-Demand

Logs

- saved in the %appdata%/NPrinting/ODS folder of the user configured for running the NP Service
- auditing.log registers client (QlikView Desktop or web browser) calls to the service and server responses. Example IP address and time of client request to On-Demand
- internal.log contains internal On-Demand Engine logging details
- View the logs before contacting support. Logs may contain valuable information to resolve the issue

Miscellaneous

Message for Multiple Developers

- Service reads modifications to .nsq files at brief intervals and executes them via the NPrinting server.
- Do not edit templates if the schedule currently being executed uses those templates in reports. Failures will result if this is not adhered to.
- View the NPrinting Monitor (NPrinting 15.7 or higher) to view the status of NPrinting NSQ's

Questions?



Thank You

