



Template for Architecture NPrinting

Qlik NPrinting Environment Installation Configuration

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Introduction

This document is related to the installation activity of the Qlik NPrinting Environment infrastructure. The information in the present document refers to the release November 2018 currently distributed by QlikTech.

Related documentation

For any other information not included in the present document you are kindly invited to follow QlikSense Official Documentation.

The present document is not intended to be an installation manual.





Desired Architecture

Before Installing

Introduction

The following information details the installation of Qlik NPrinting November 2018

The developer users will have the full client install on their desktop and will lease licenses from a production server. The install and licensing are detailed below.

Pre-Installation

NPrinting Engine and Server Minimum Requirements

- Windows Server 2012 or Windows Server 2012 R2, Windows 2016
- Microsoft .Net Framework 4.7.2 or above
- 16 gigabytes of RAM for NPrinting Server
- 500 MB of disk space for NPrinting Server
- Minimum of 2 GB is required for each core with the minimum of 4GB of RAM in total for NPrinting Engine
- 300 MB of disk space for NPrinting Engine
- NPrinting Console supports Internet Explorer 10 or above, Chrome, Firefox, and Edge

NPrinting Port

See link for The Firewall port

<https://help.qlik.com/en-US/nprinting/November2018/Content/NPrinting/DeployingQVNprinting/Ports.htm>

NPrinting Designer Minimum Requirements

- Microsoft Windows 7, 8, 8.1, 10 operating systems (32- or 64-bit), Windows Server 2008 R2, Windows Server 2012, or Windows Server 2012 R2
- Microsoft Office is required for creating MS office templates with NPrinting Designer
- Microsoft .Net Framework 4.5.0 or above

Be Prepared

- Have NPrinting installation files downloaded
- Have NPrinting license and control number in possession
- Administrator group access to the NPrinting server.
- All userids and passwords for authenticating to servers and applications listed are in hand.
- Remote Desktop access to the NPrinting

Pre-Installation Steps

Validate all prerequisites above have been met before continuing with installation

Windows Setup



If you plan to rename the machine or workgroup, do it before installing NPrinting Server and NPrinting Engine.



Disable Windows Firewall completely (if this is not acceptable, open inbound ports 4993, 4994, 4995, 4996).



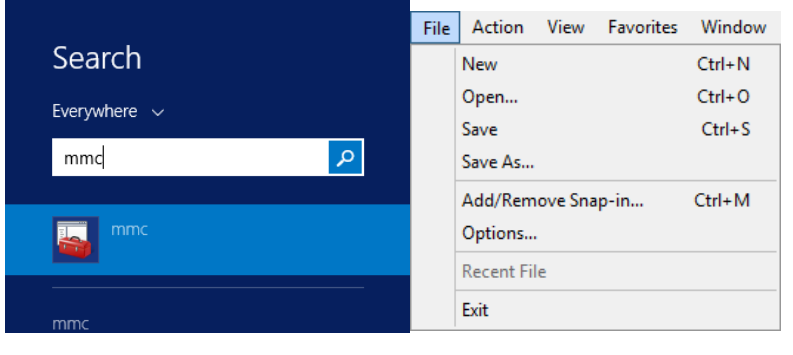
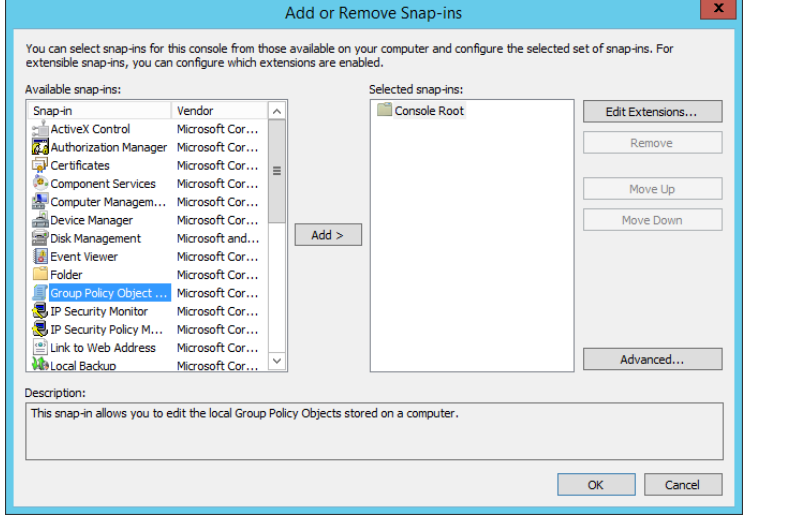
Disable Windows Internet Explorer Enhanced Security Configuration (IE ESC).

Servers preparation Before Installation

Screen-shots example for installation

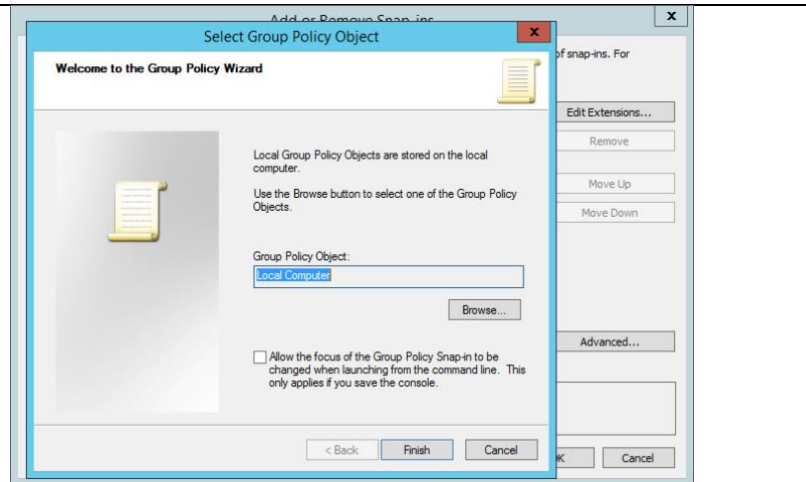
Before the installation starts, you need to make sure that the Service account is part of the Local Admin group of the servers

Please follow these instructions closely. NPrinting services require a specific order of install to work properly.

<p>Click on the Start button and search for and select MMC.</p> <p>When the MMC loads, select File...Add/Remove Snap-in...</p>	
<p>Click on the Group Policy Object entry and click the Add button.</p>	

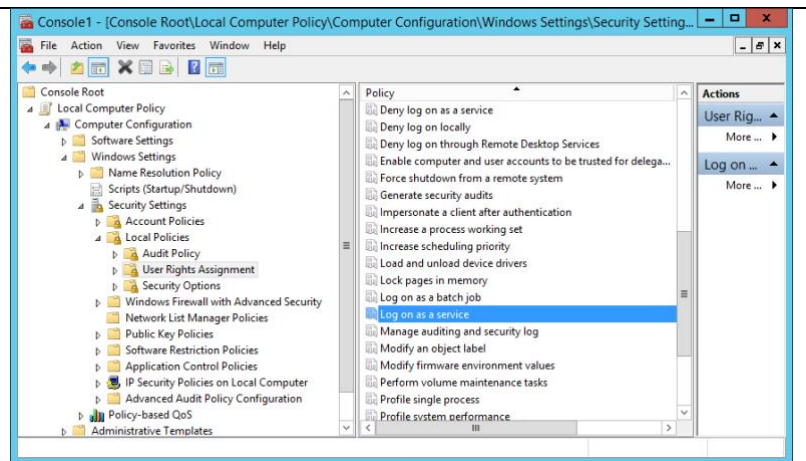
Confirm the group policy object for the Local Computer is highlighted and click Finish.

Click OK to exit the snap-in manager.



Navigate to Local Computer Policy/Windows Settings/Security Settings/Local Policies/User Rights Assignment on the left side of the screen.

On the right side of the screen, scroll down until you see Log on as a service entry and double click on it.

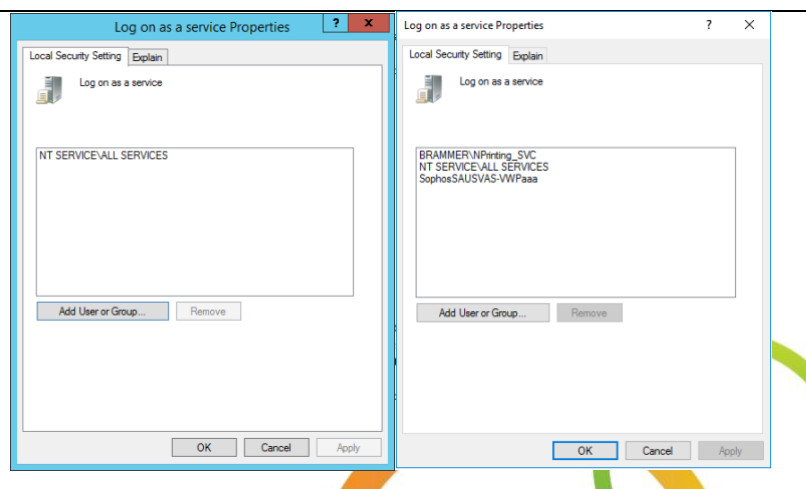


Click on Add User or Group.

In the entry window type %localmachinename%\svcpNprinting where %localmachinename% is the name of the server NPrinting is being installed on.

Click Check Names and then OK.

Click OK to close the window.





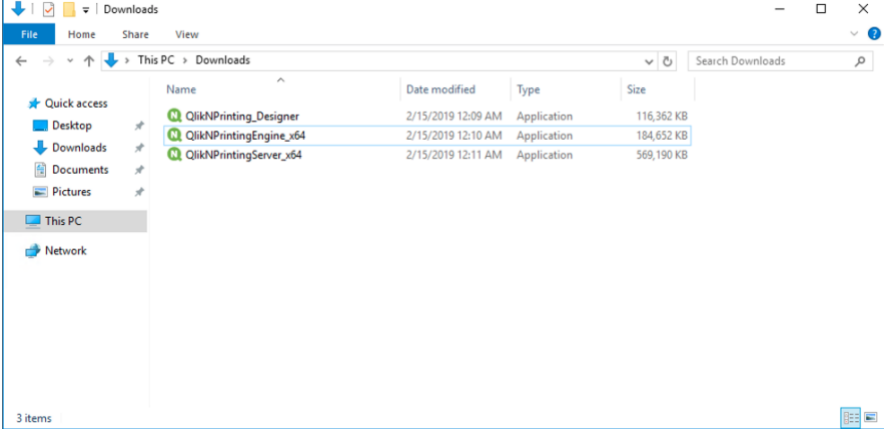
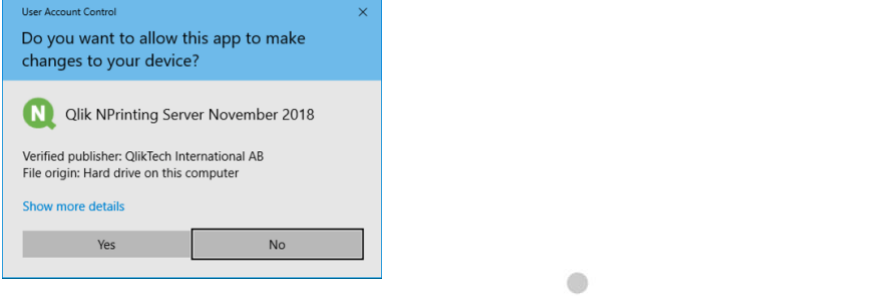
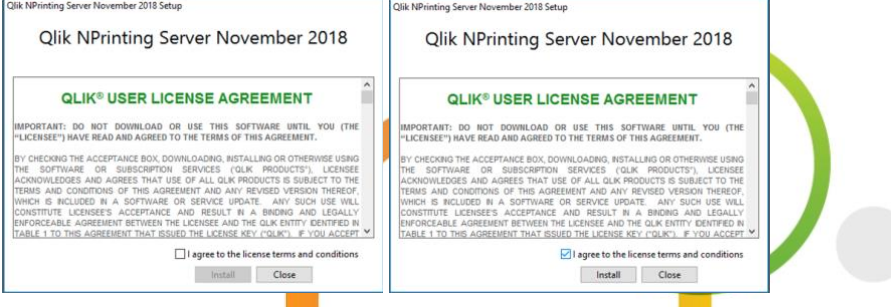
The NPrinting Server installation must be installed before the NPrinting Engine and NPrinting Designer. NPrinting may not work if the installation is not performed in the following order:

1. NPrinting Server
2. NPrinting Engine
3. NPrinting Designer

Please install the software in the correct order.

Server Installation

NPrinting Server Installation

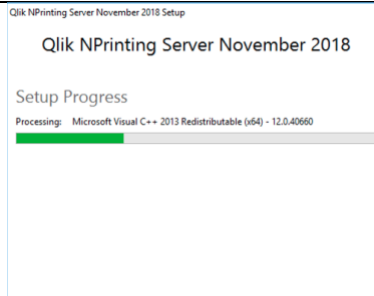
<p>Navigate to the location where NPrinting installation files reside.</p> <p>Double click on QlikNPrintingServer_x64.exe.</p>	
<p>Splash screen</p>	
<p>The Qlik NPrinting Server license agreement appears. Select the check box to agree to the license and click the Install button.</p> <p>A Setup progress window will appear.</p>	



When the Setup Progress window appears, click on the window and move it to the left. Below the window is the Microsoft C++ 2013 Redistributable installation.

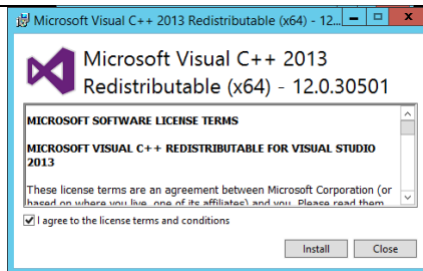
Activate the Microsoft C++ 2013 Redistributable installation window.

You will **not** see this window if you already have the appropriate version of Microsoft Visual C++ installed.



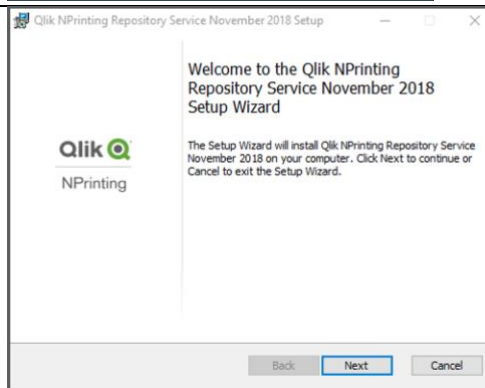
Select the check box to agree to the license terms and click the Install button.

When the installation completes, click the Close button to exit the Microsoft C++ Redistributable installer.



The Qlik NPrinting Repository Service installer appears.

Click the Next button.

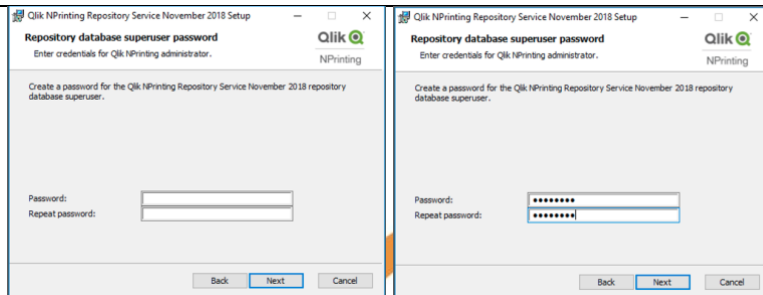


Enter a password for the repository database.

Password is the same as service account

Please make note of this password and keep it in a secure location.

Click the Next button.



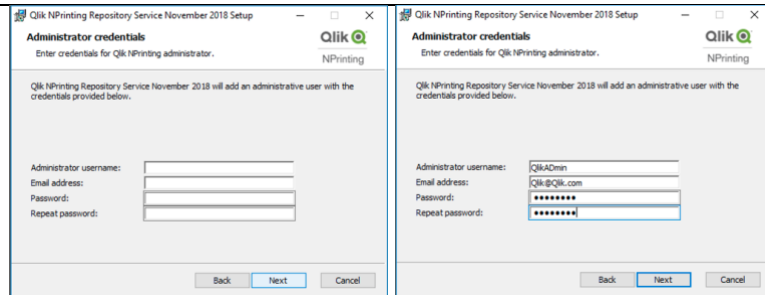
Enter the credentials that NPrinting will use for the NPrinting administrator.



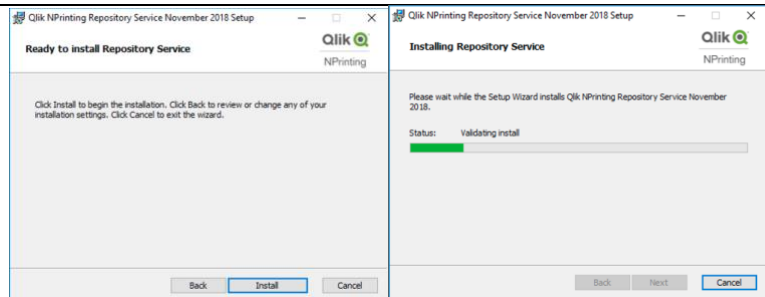
This account is different than the service account because it is NOT a Windows account. This is an account stored in the NPrinting repository.

Supply a username, an email address, and a password for the NPrinting administrator account.

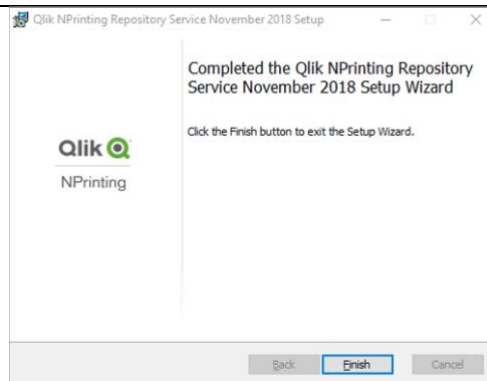
Click the Next button.



Click the Install button to start the installation of the software.

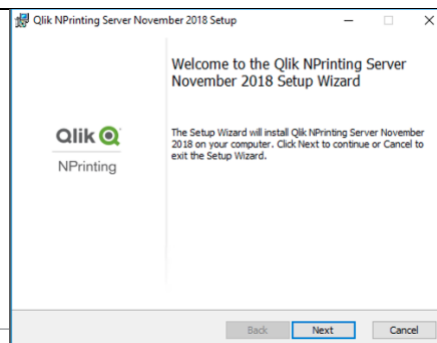


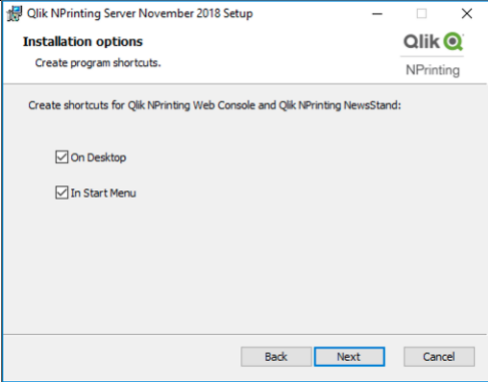

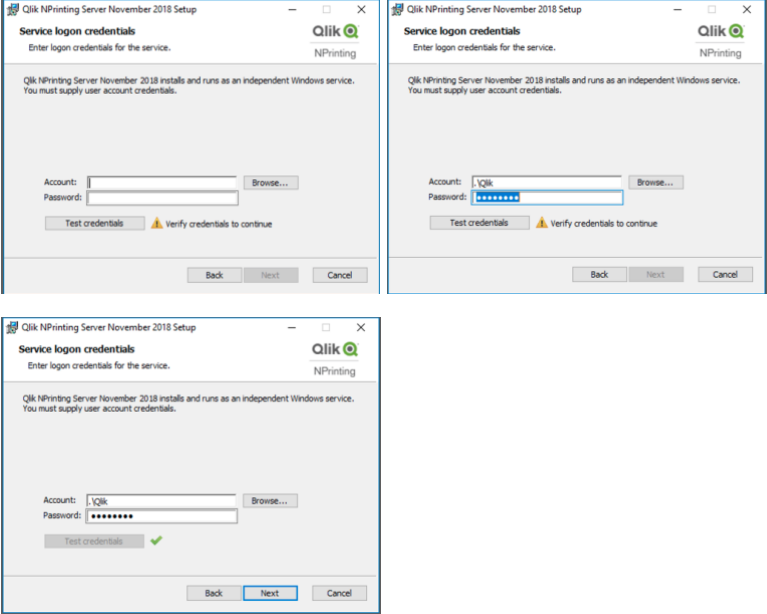
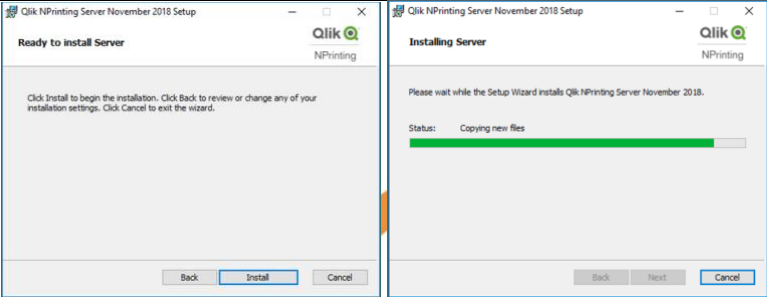
When the NPrinting Repository installation completes, click the Finish button.



The NPrinting Server installation appears.

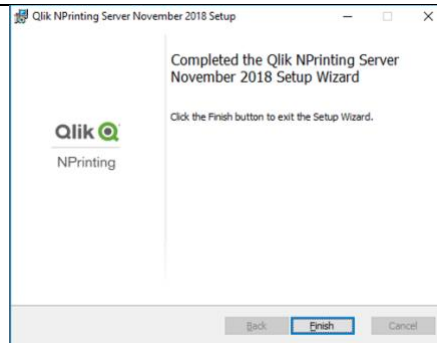
Click the Next button.



<p>Select the shortcuts for Qlik Nprinting Web Console and Qlik Nprinting Newsstand</p>	
<p>Enter the NPrinting service account (this is the Windows service account added in the create user section of the document) and password in the supplied fields.</p> <p> Make sure to enter the account in domain\userid format as in the image.</p> <p>Click the Test credentials button and verify the yellow warning sign changes to a green check box. If the green check box does not appear, the account does not have Logon as a service right. Please consult the NPrinting Service Account Setup section of this document.</p> <p>Click the Next button.</p>	
<p>Click the Install button to install Qlik NPrinting Server files.</p>	

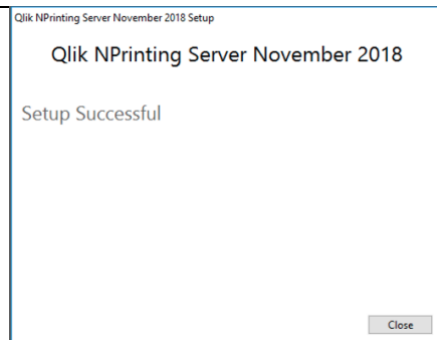


When the installer complete, click the Finish button to exit the installer.



Upon completion of all components, the main setup progress window will state success.

Click the Close button to exit the installation.

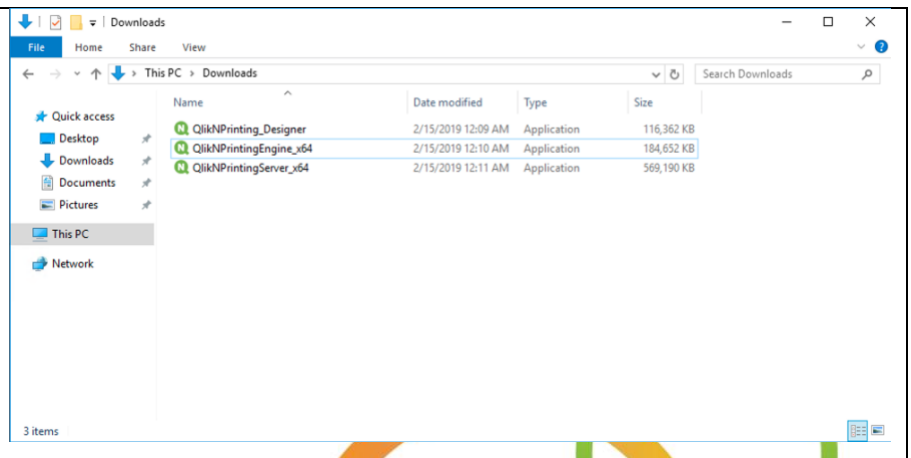




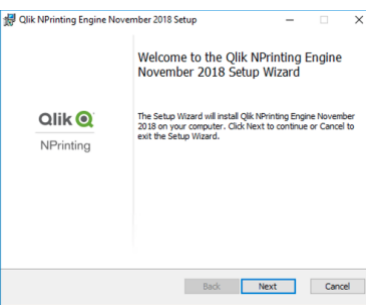
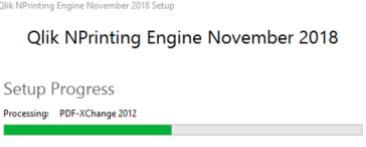

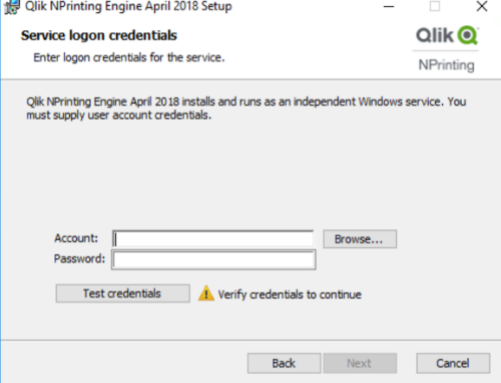

NPrinting Engine Installation

The NPrinting Engine is installed after the NPrinting Server. If you haven't installed NPrinting Server, please go back to the NPrinting Server Installation section of this document before continuing.

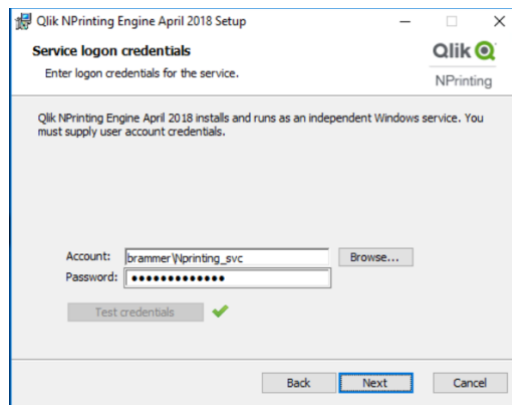
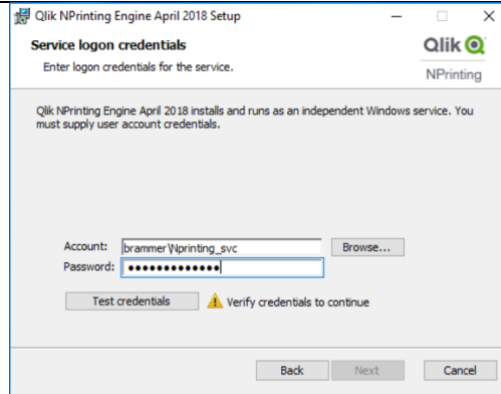
Navigate to the location where NPrinting installation files reside.

Double click on QlikNPrintingEngine_x64.exe.



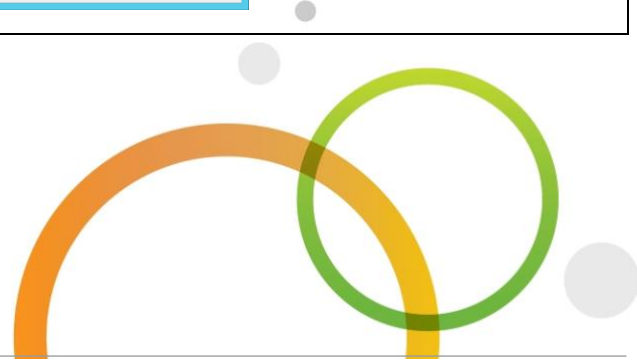
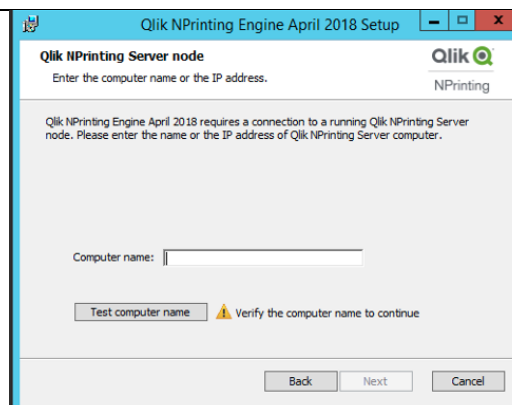
<p>Splash Screen</p>		
<p>Accept the licence and click Next</p> <p>Click the Next button.</p>	 	
<p>Enter the NPrinting service account (this is the Windows service account added in the create user section of the document) and password in the supplied fields.</p> <p> Make sure to enter the account in domain\userid format.</p> <p>Click the Test credentials button and verify the yellow warning sign changes to a green check box. If the green check box does not appear, the account does not have Logon as a service right. Please consult the NPrinting Service Account Setup section of this document.</p>	 	

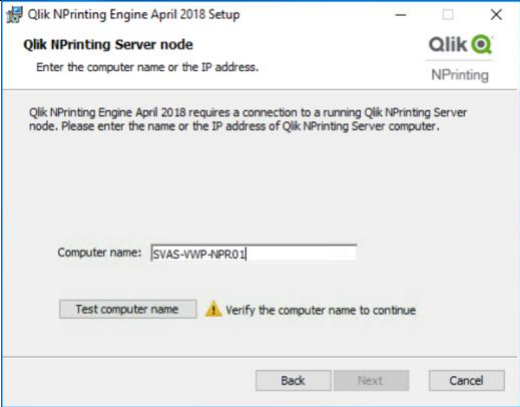
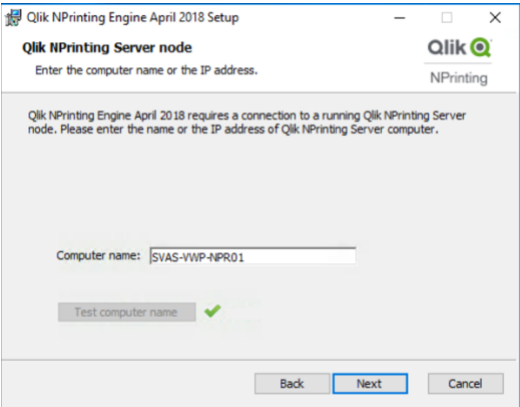
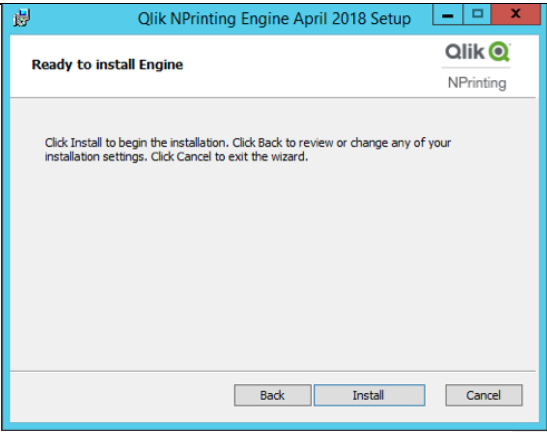
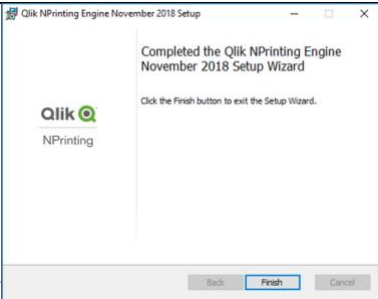
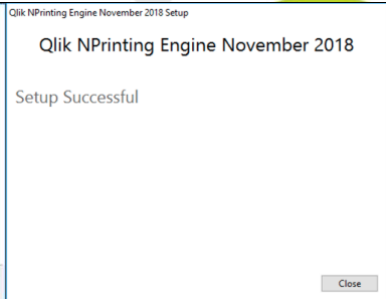
Click the Next button.



Enter the Windows system name in the field provided. It is recommended to enter the machine name only and not the fully qualified domain name of the server.

Click the Next button.

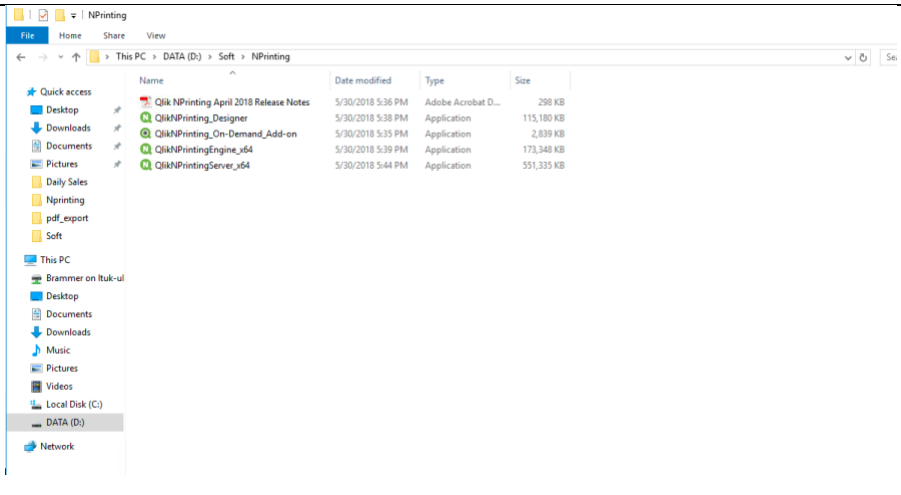
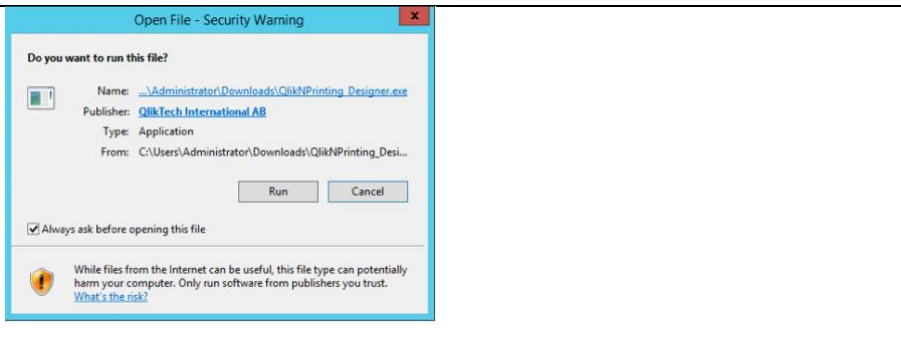
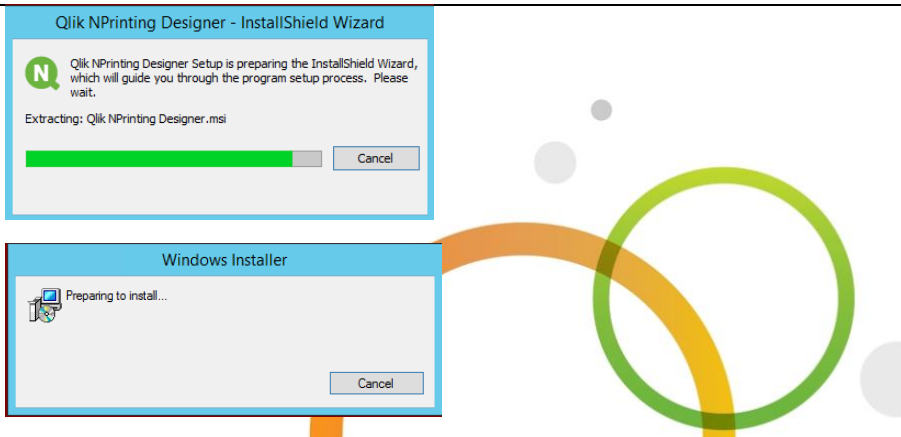


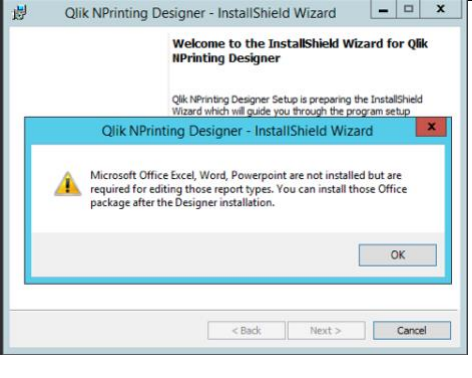
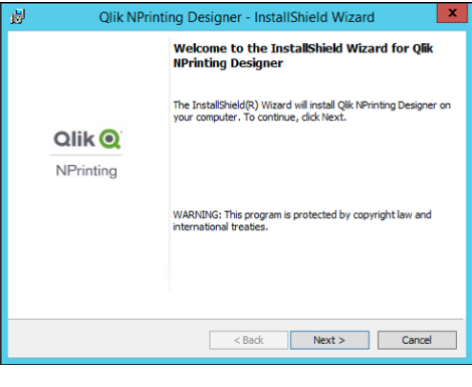

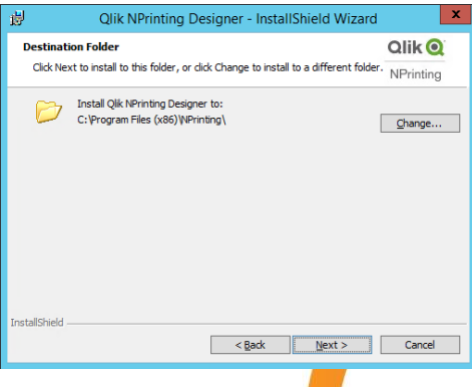

	 
<p>Click the Install button to start copying files to the system.</p>	
<p>When the installation completes, the completion window appears. Click the Finish button to exit the installer.</p>	 

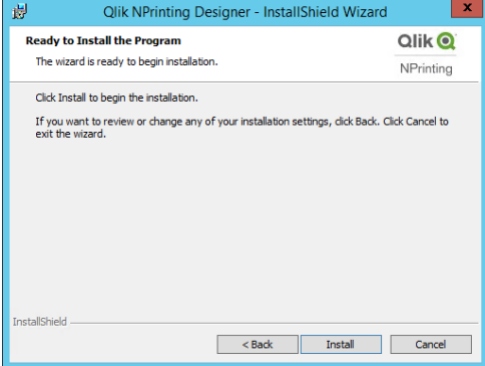
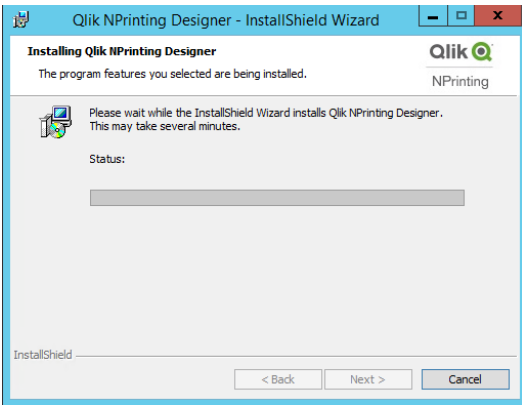
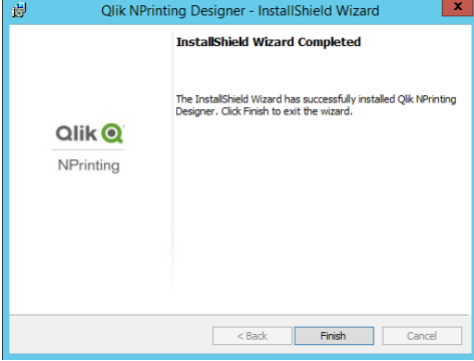


Install NPrinting Designer

NPrinting Designer is used to create NPrinting report templates. NPrinting Designer is installed typically on a desktop system for report development. However, it does not launch like a conventional desktop application. NPrinting Designer launches from NPrinting’s web interface.

<p>Navigate to the location where NPrinting installation files reside.</p> <p>Double click on Qlik_NPrinting_Designer.exe.</p>	
<p>Splash Screen</p>	
<p>Click Ok after the error, this error shows that there is no Microsoft office install on the system</p>	

		
Click Next		
Accept the terms of the license agreement and click next		
Click Next		

<p>Click Install</p>	 
<p>Click Finish to complete installation</p>	

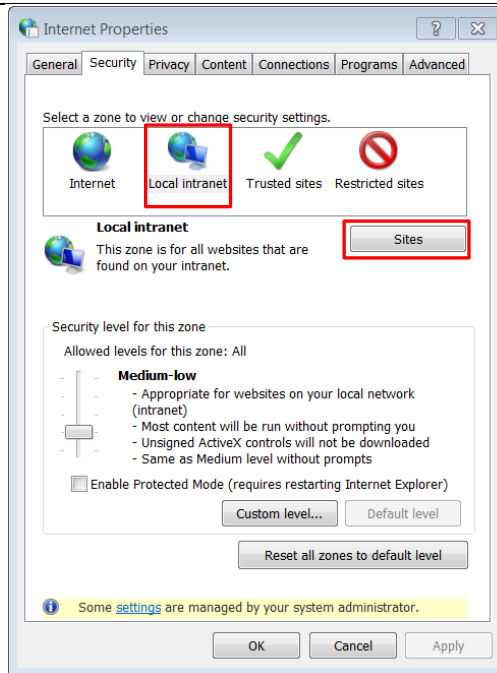


NPrinting Post Install Configuration

Configure Internet Options

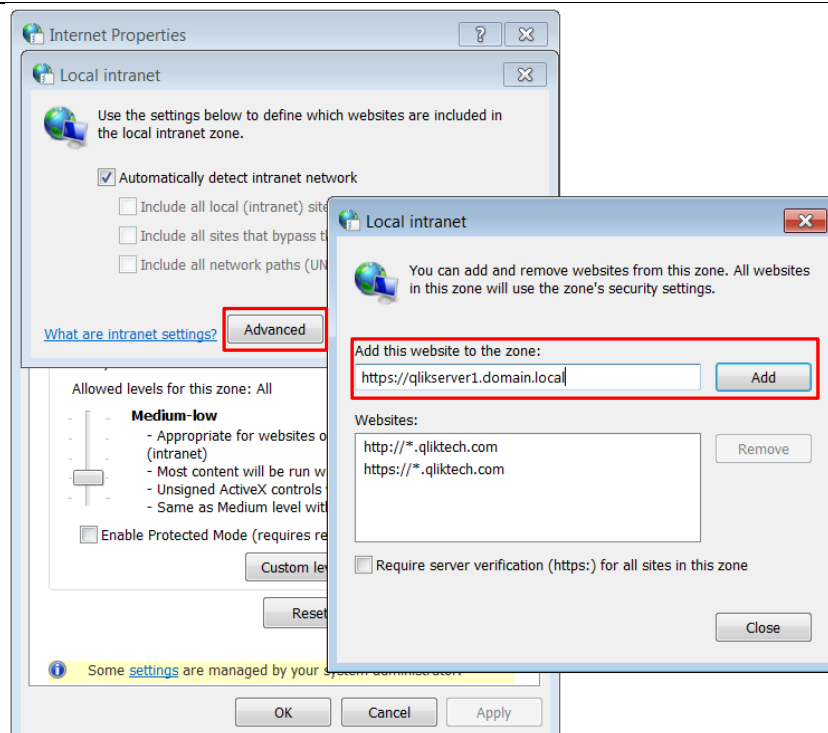
Open Internet Options from the Network and Sharing Center in the Control Panel.

Click on the Security tab, then click Local Intranet and then click the Sites button.

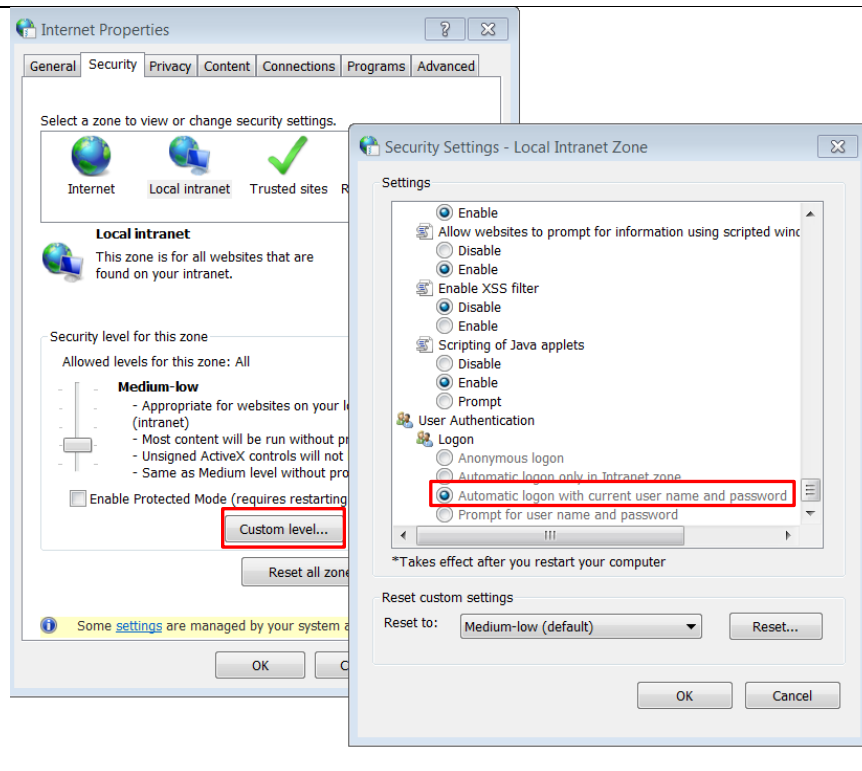


Then click Advanced and add <https://myNPrintingserverfull.name.domain> (for example, <https://qlikserver1.domain.local>).

Click Add, then OK, then Close to get back to the Internet Properties.



Once back on the Security tab, click on Custom level and make sure that "Automatic logon with current user name and password" is selected



Login for the First Time and Activate NPrinting

You use NPrinting Designer and view reports in the Newsstand in the browser.

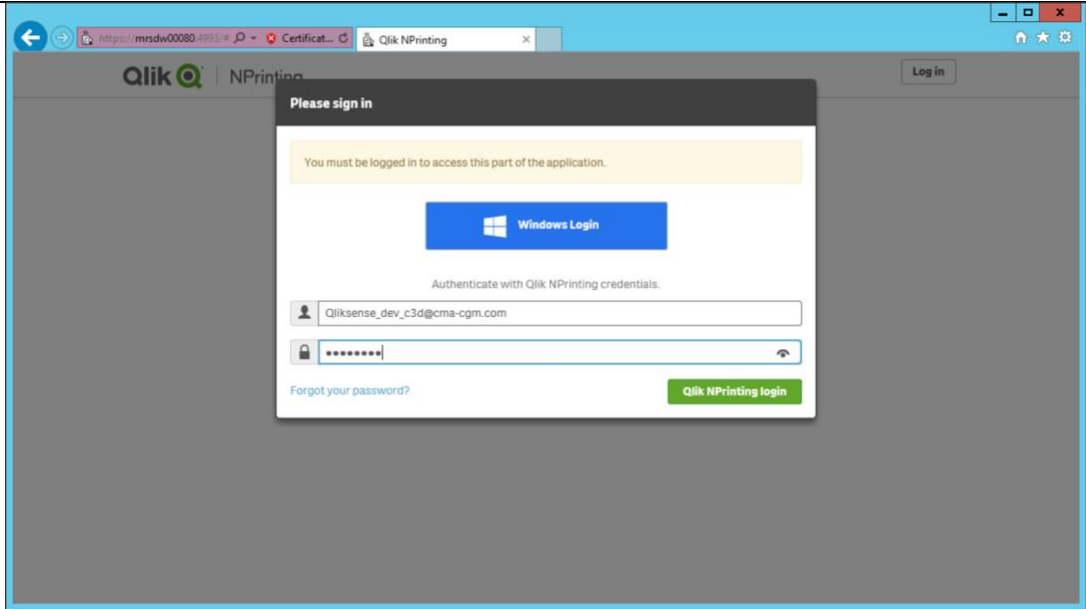


Typically, yourservername will be "localhost".

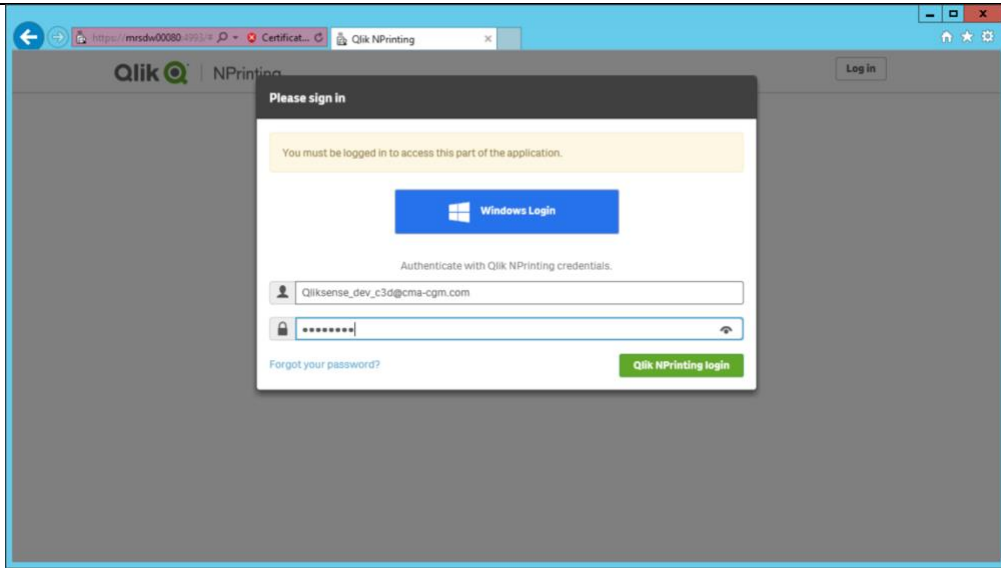
Log into NPrinting 17 at the following url:	https://yourservername:4993
Access the NewsStand at:	https://yourservername:4994

Enter the userid and password created when NPrinting Server was installed.

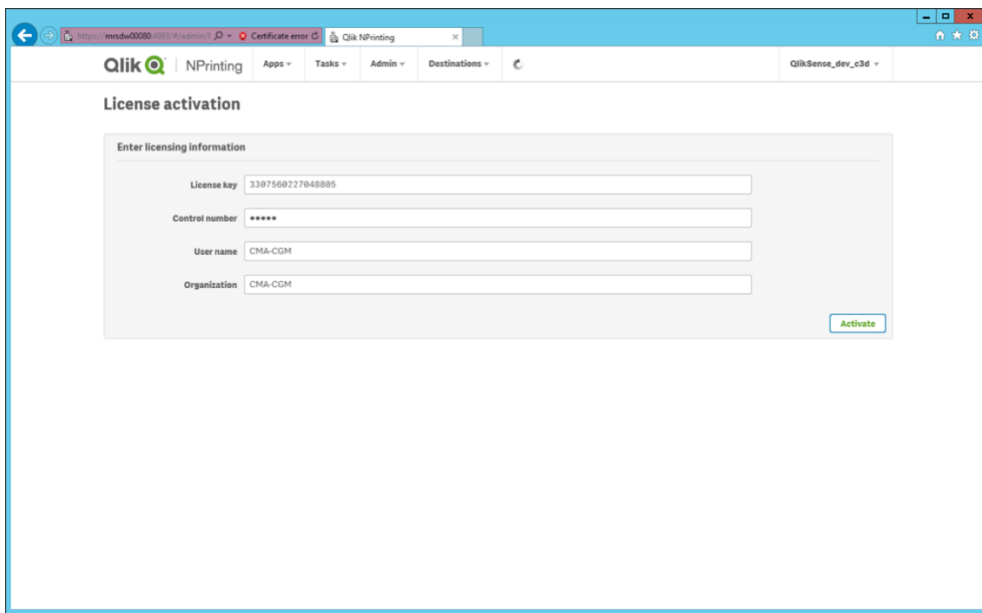
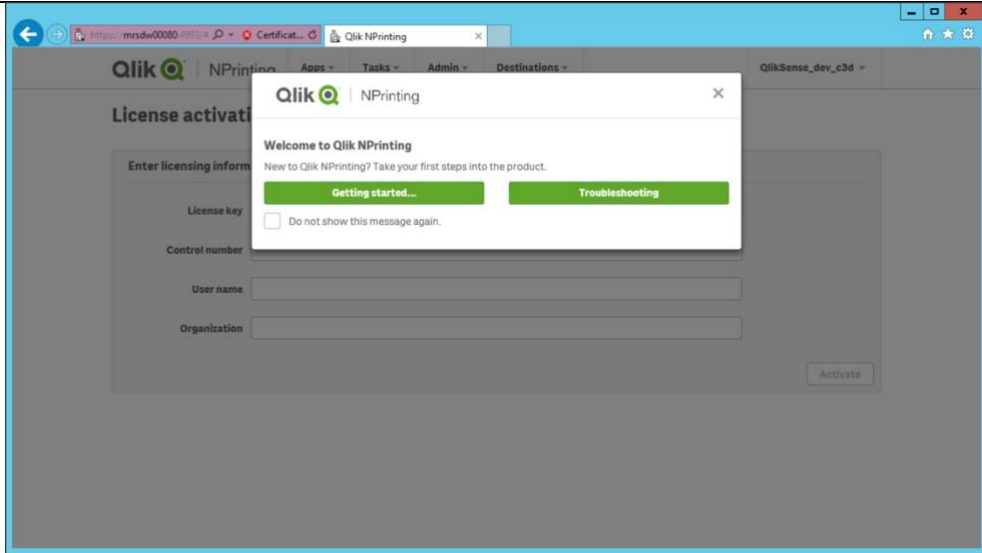
Password: same as service account



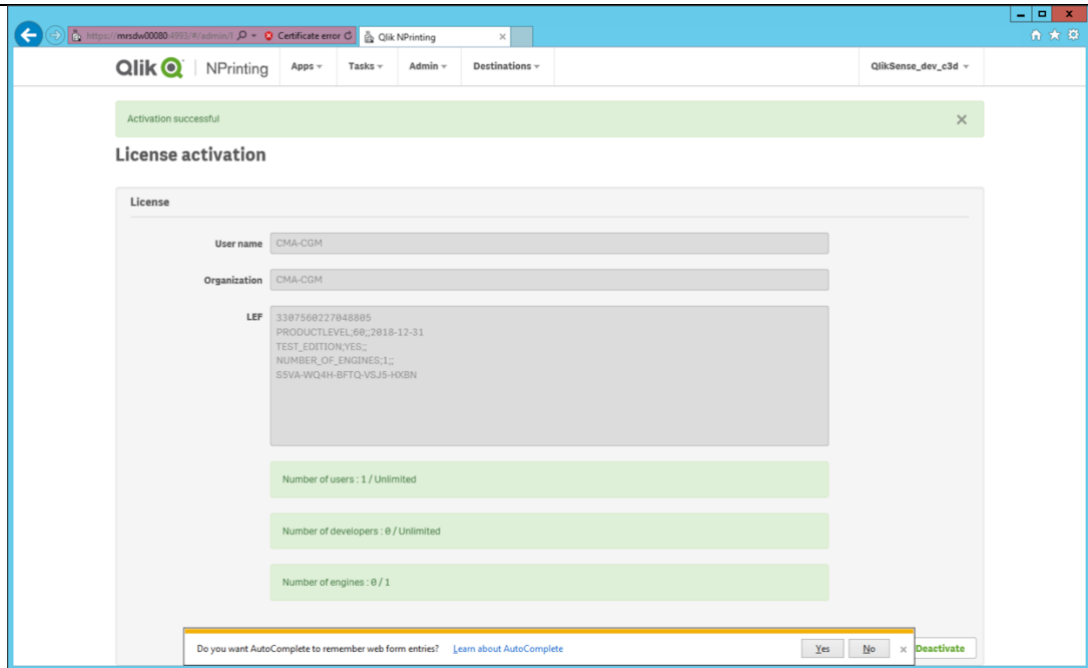
Close the Getting Started window



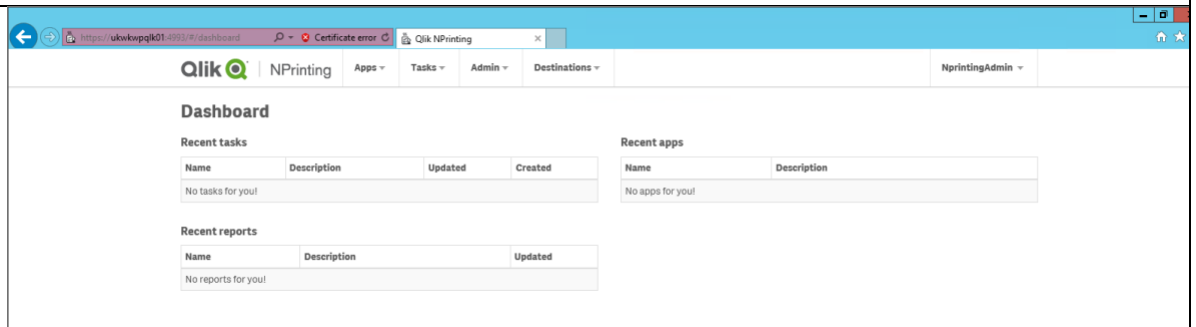
Activate NPrinting Server by inserting the license key and control number. Enter a user name and organization.



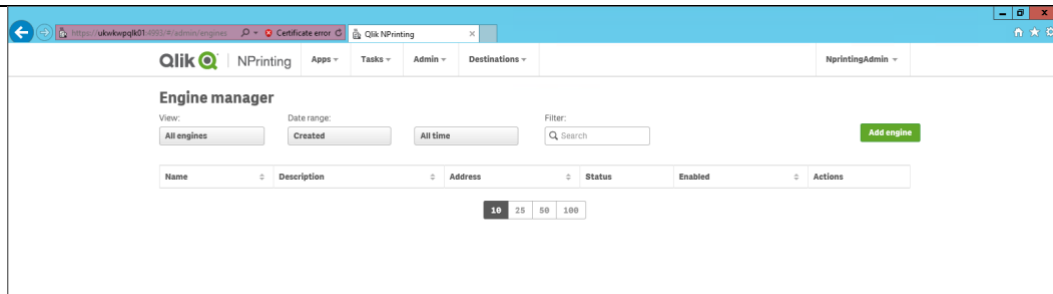
Once the product is activated, you can start to build out connections to Sense apps, reports and all the other objects you'll need to deliver reports.



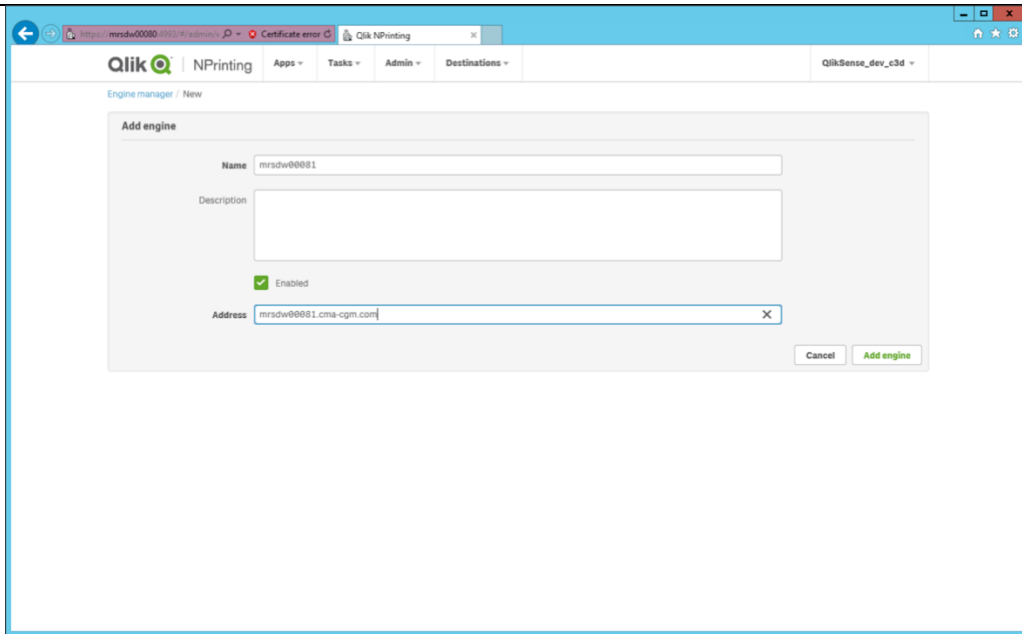
The next step is to activate the NPrinting Engine. To do this, navigate to the Admin area.



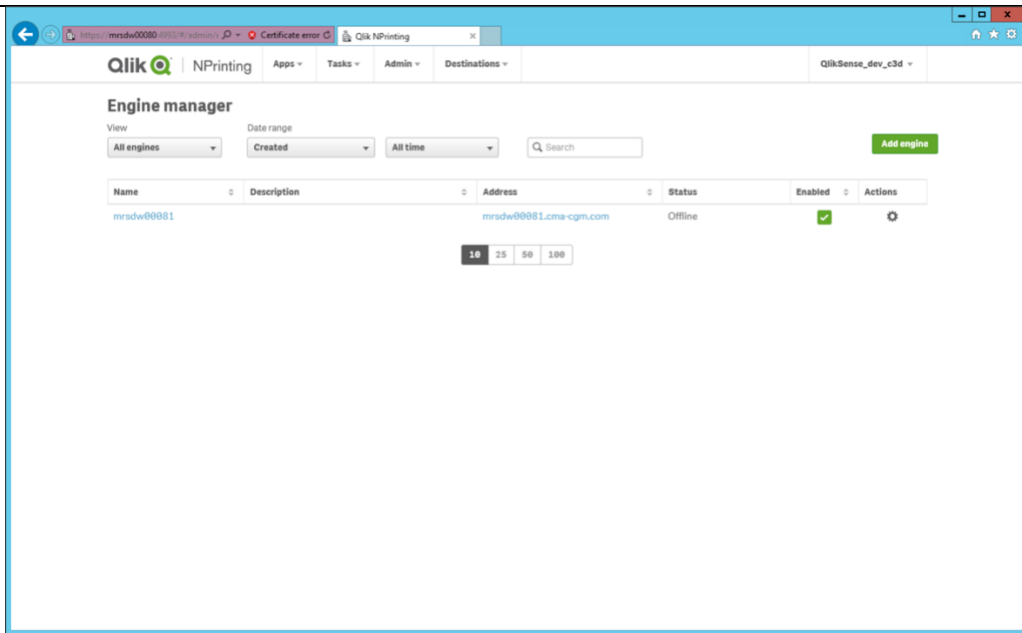
Select: Admin>Engine Manager and click "Add engine".



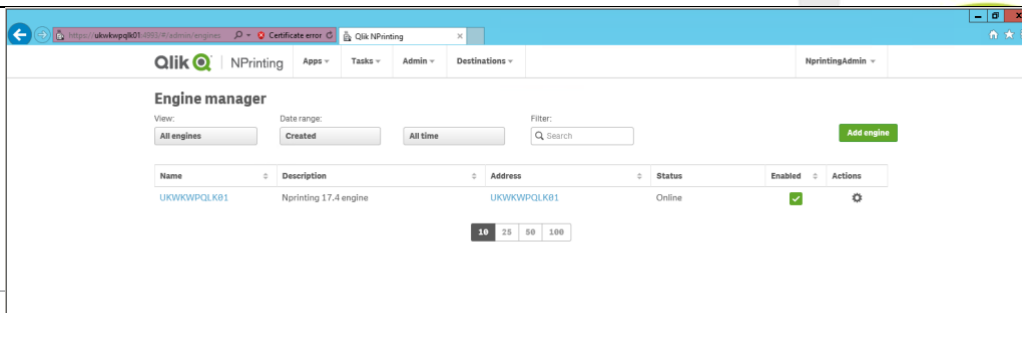
Give the engine any name you like and insert the machine name into the “Address” dialog box.



The engine will appear to be “Offline” for up to 5 minutes – this is normal.



Once the engine is online, you can start to connect to Qlik Sense and QlikView apps and start developing





NPrinting reports.	
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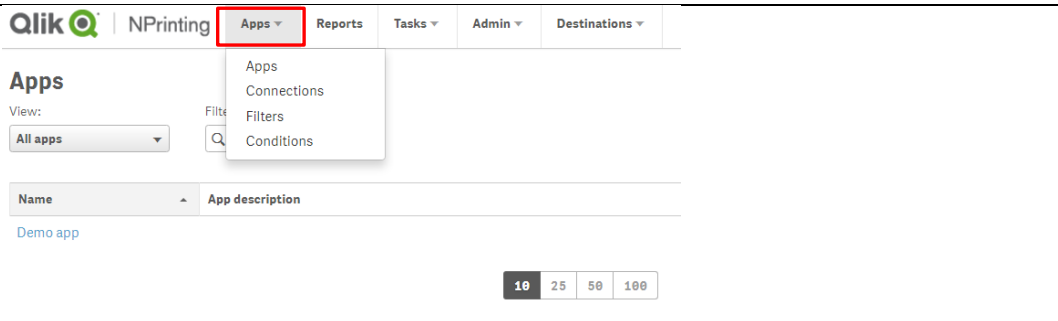
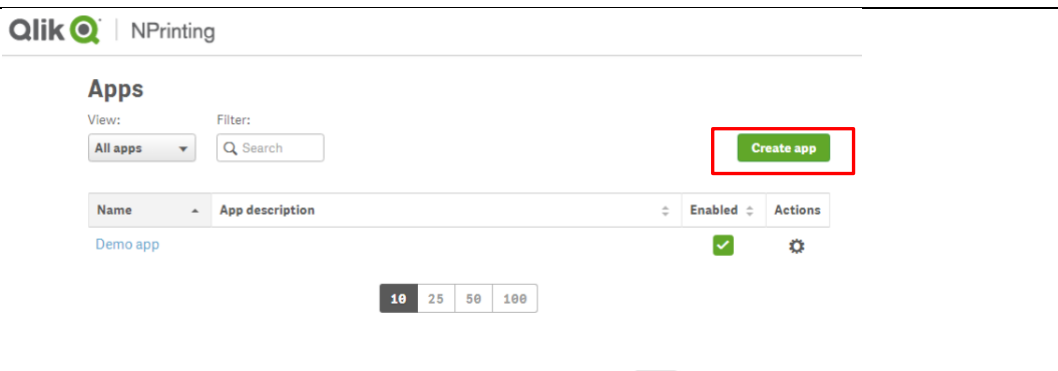
Connecting to a QlikView app in Qlik NPrinting (example)

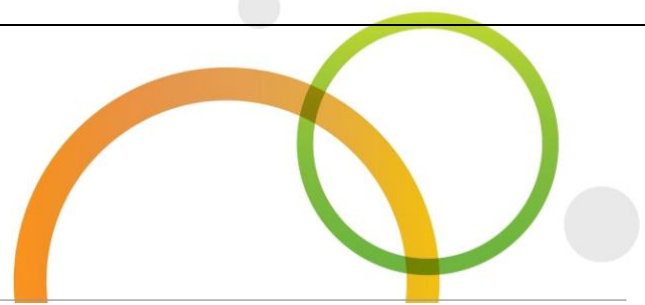
To connect to a QlikView app in Qlik NPrinting, you need to create an NPrinting app, specify the user who will create the connection, and define the QlikView as a destination in NPrinting.

Create an app in Qlik NPrinting

An NPrinting app is a collection of connections (QVWs/QVFs used for source data), filters, conditions, reports, and tasks.

You will need to create an NPrinting app before you can do anything else.

Click on Apps from the Apps drop-down menu in the ribbon	
Click the Create app button	





Give your app a name and description, if desired, and click Create.

You are now able to create a connection to a QlikView document.

Qlik NPrinting | NPrinting

Apps / New

Create app

Name: Demo app

Description:

Enabled

Cancel Create

Connections to Sense (examples)

Click on Connections from the Apps drop-down menu in the ribbon

Qlik NPrinting | NPrinting

Apps Reports Tasks Admin Destinations

Apps

View: All apps

Connections

Name App description

Demo app

10 25 50 100

Click the Create connection button

Qlik NPrinting | NPrinting

Connections

View: All connections App: All Filter: Search

Create connection

Name	Connection description	App	Connection status	Cache status	Last cache update	Actions
Sales Demo		Demo app	Ok	Generated	July 19, 2016 12:05 PM	⚙️
Test App (Sense)		Demo app	Ok	Generated	July 19, 2016 12:25 PM	⚙️

10 25 50 100

Give the connection a name and description, if desired.

In the app field, choose the Qlik NPrinting app with which to associate the connection from the drop-down menu.

Click the QlikView button as the source.


Then Local as a Type

And add the path of the Document *.qvw

Run the verification make sure that everything is ok and click after on create

The connection will appear and the cache status will be pending

The screenshot shows the Qlik NPrinting interface. At the top, there is a navigation bar with 'Qlik NPrinting' and various menu items like 'Apps', 'Reports', 'Tasks', 'Admin', and 'Destinations'. Below this is the 'Connections' section. It includes a search bar and a table of connections. The table has columns for 'Name', 'App', 'Connection status', 'Cache status', and 'Last cache update'. One connection, 'Connection to governance dashboard', is shown with a 'Pending' status in the 'Cache status' column. Another connection, 'Connection QV', is shown with a 'Generated' status.

 After you have created the connection in the lower right-hand corner.

This will take you back to the Connections page where the cache status for your new connection will show as 'Generating'.

This will automatically be updated when the cache is generated, or you can press F5 to refresh the page. Once the cache has been generated, you can author reports.

Cache generation may take several minutes and will depend on the size of the app and the number of objects in the app.

When it is complete it will change the status from generating to generated

This screenshot is similar to the previous one but shows the 'Connection to governance dashboard' with a 'Generating' status in the 'Cache status' column, highlighted with a red box. The 'Connection QV' remains 'Generated'.

This screenshot shows the 'Connection to governance dashboard' with a 'Generated' status in the 'Cache status' column, highlighted with a red box. The 'Connection QV' also remains 'Generated'.

Authoring and previewing reports

Report content

Qlik Sense objects which are/are not supported

- Reports can include
 - Charts
 - Tables
 - Formulas
 - Variables
- Reports do **not** include:
 - Sheets
 - Extension objects
 - Stories

Create a report

Click on Reports in the ribbon and then click the Create report button

Qlik Q[®] | NPrinting

Reports

View: Type: Date range:

Name	Type	Report description	App	Enabled	Actions
Demo Sense report	Power Point		Demo app	<input checked="" type="checkbox"/>	

10 25 50 100

Give your report a name and description, if desired. Choose the format type and the Qlik NPrinting app with which the report will be associated.

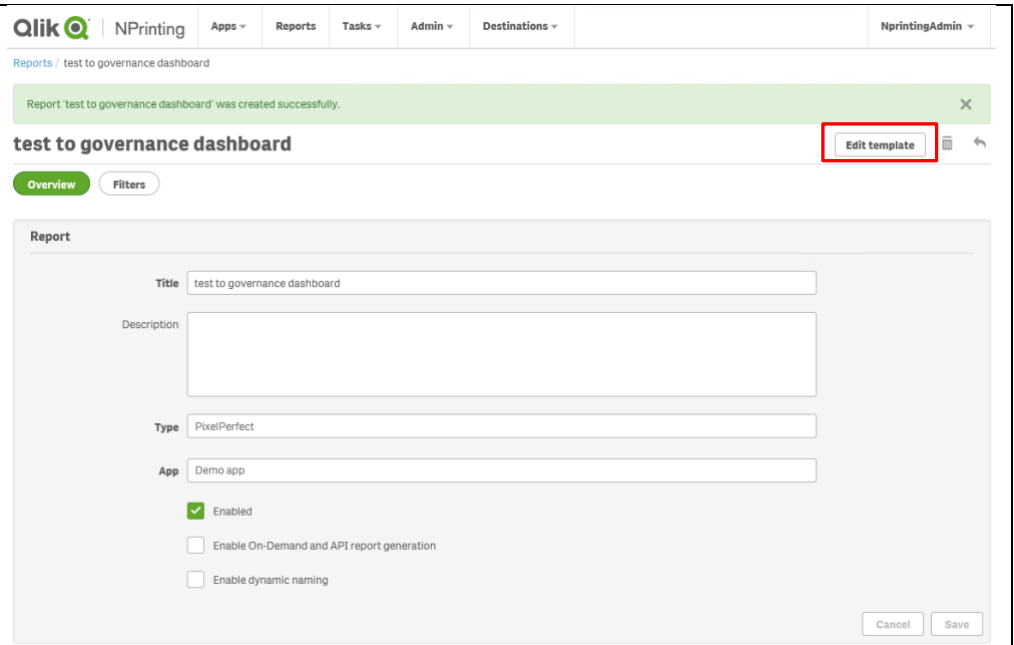
Then select from empty file, default template or custom file. Then click the Create button in the lower right-hand corner.



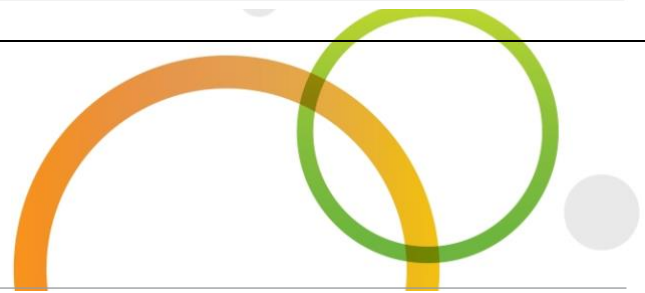
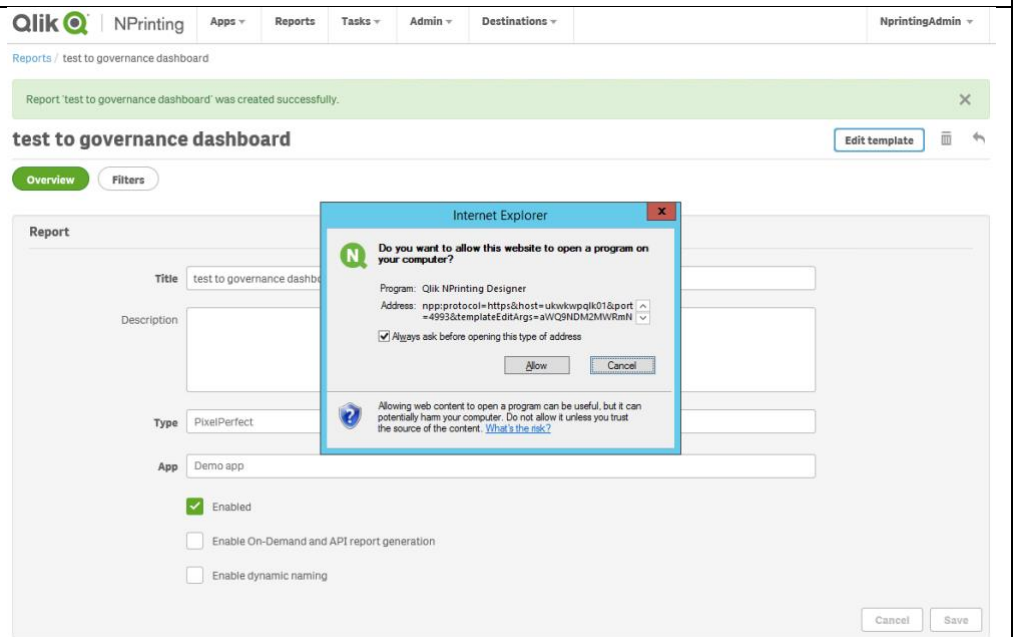
Tip! If you want to pre-load a default template to include things like logos and design, this can be done from the Admin section in the ribbon → Settings → Report settings.



Once the report is created, click on the Edit template button to launch Qlik NPrinting Designer. You will be prompted to enter credentials if this is your first time running the Designer.



A Pop-up windows will appear to allow Nprinting designer to run



Qlik | NPrinting | Apps | Reports | Tasks | Admin | Destinations | NprintingAdmin

Reports / test to governance dashboard

Report 'test to governance dashboard' was created successfully.

test to governance dashboard

Edit template

Overview Filters

Report

June 2017

Title: test to governance dashboard

Description: [Empty field]

Type: PixelPerfect

App: Demo app

Enabled

Enable On-Demand and API report generation

Enable dynamic naming

Cancel Save

It will ask to enter user details

Qlik | NPrinting | Apps | Reports | Tasks | Admin | Destinations | NprintingAdmin

Reports / test to governance dashboard

Report 'test to governance dashboard' was created successfully.

test to governance dashboard

Edit template

Overview Filters

Report

June 2017

Title: test to governance dashb...

Description: [Empty field]

Type: PixelPerfect

App: Demo app

Enabled

Enable On-Demand and API report generation

Enable dynamic naming

Cancel Save

Please sign in

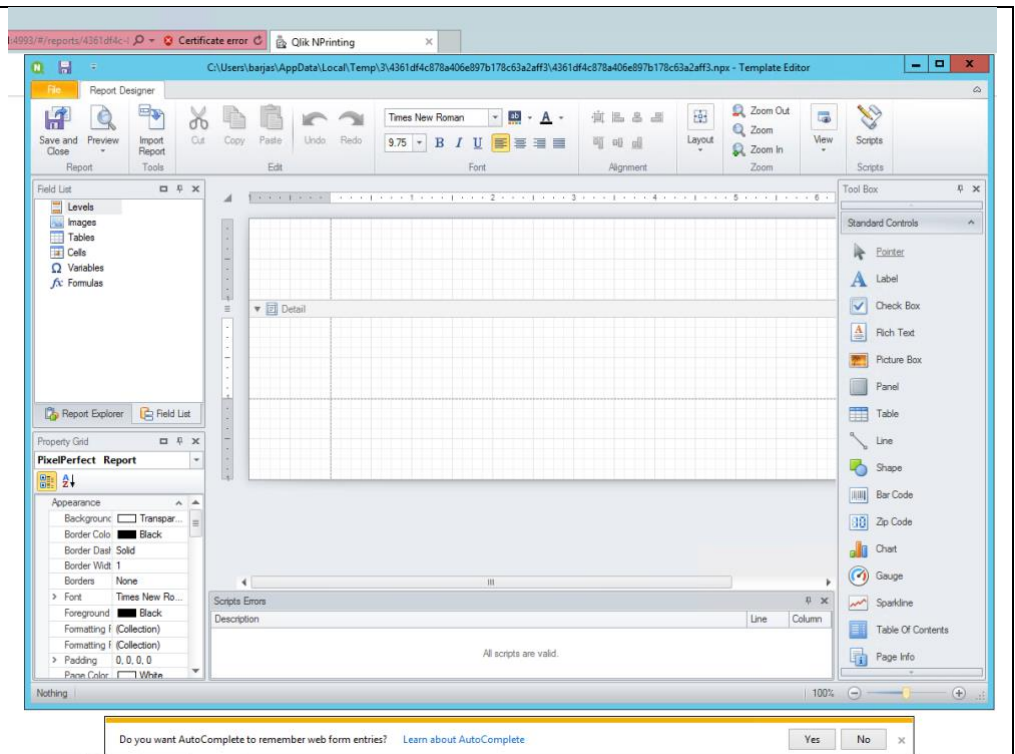
E-mail address: jvcnpnprinting@omwealth.com

Password: [Masked]

OK Cancel

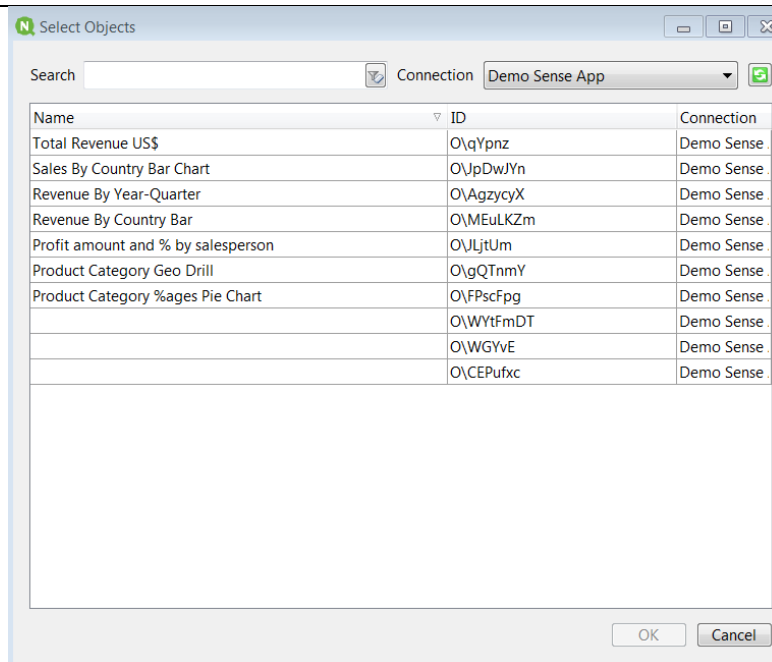


In the left panel, you can choose from images, tables, cells, variables and formulas to populate the report template.

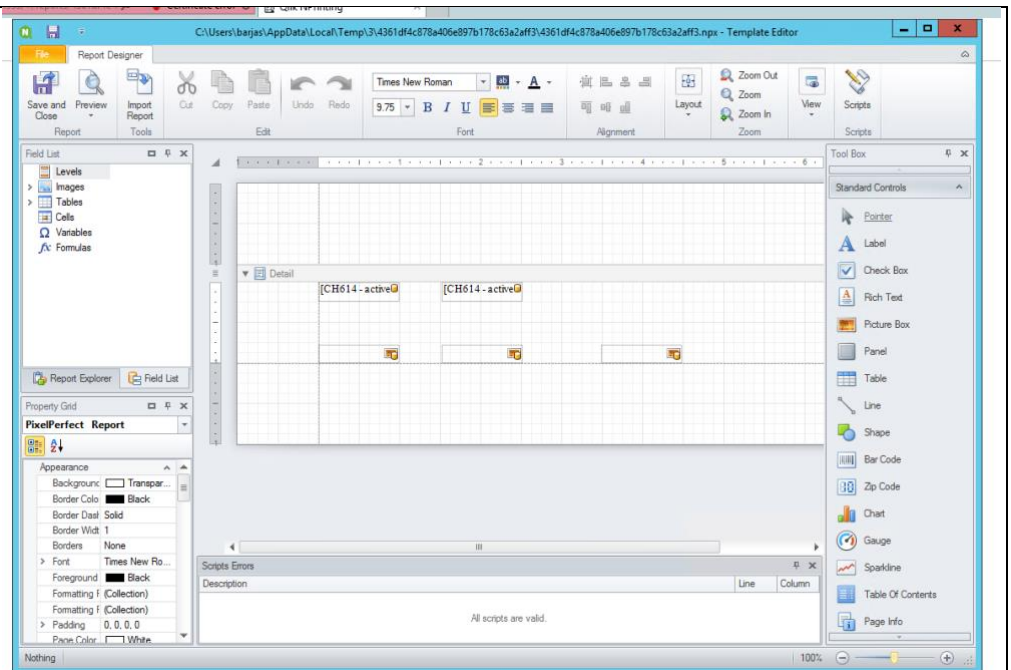


For this example, right-click on images and click on Add objects. The object list from your connection will appear.

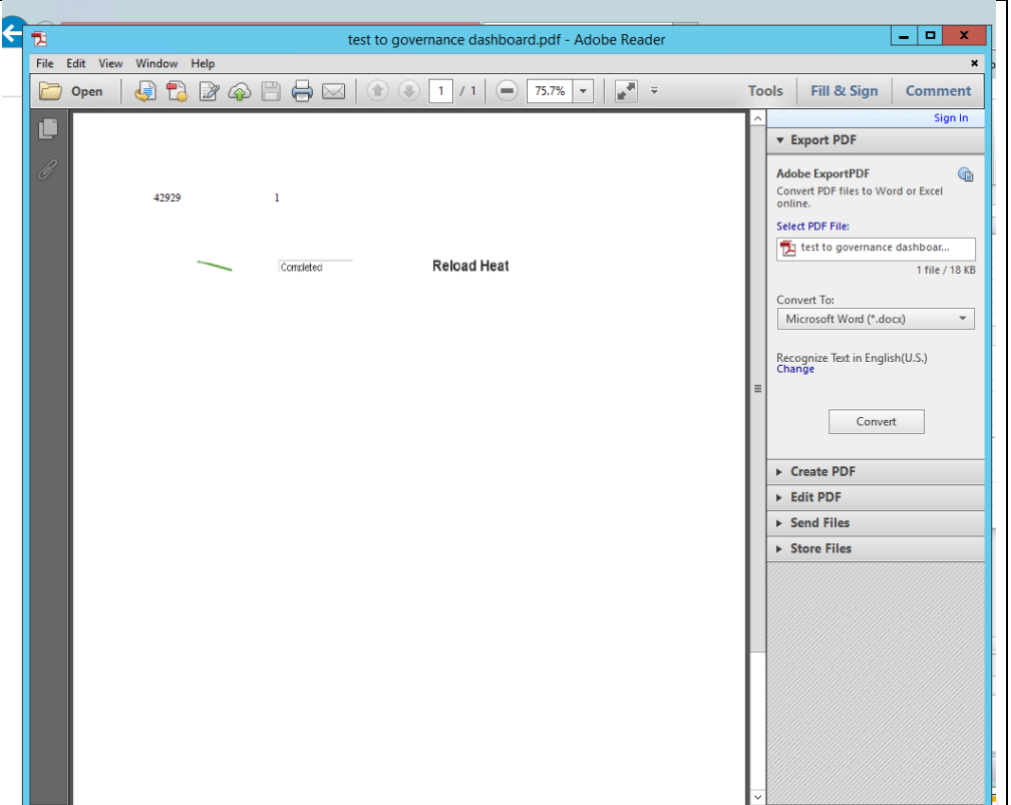
Qlik NPrinting should recognize the title of the object even if Show titles is set to 'Off' in Qlik Sense.



Select the object(s) you want to include in the report and click OK.

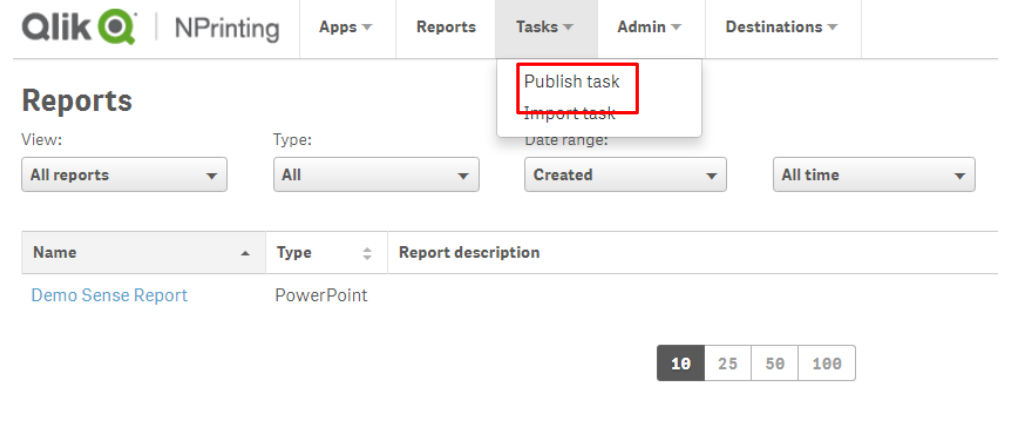
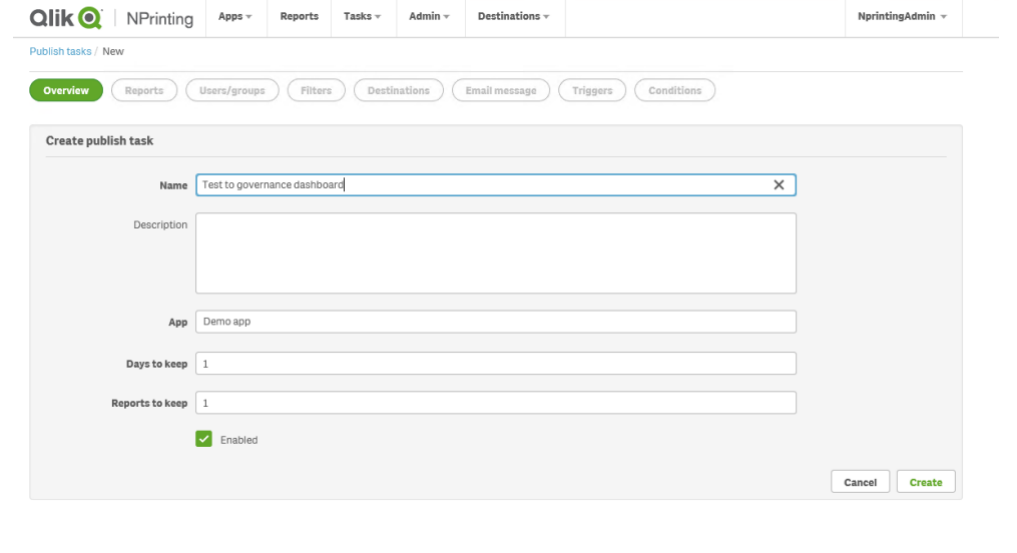


To add the object to the report, simply drag and drop the newly added object into the template in the desired location. To preview the report click on Preview



Report Distribution

To distribute reports, you need to create a Publish Task in Qlik NPrinting.

<p>Click on Publish task from the Tasks drop-down menu in the ribbon.</p>	 <p>The screenshot shows the Qlik NPrinting interface. The ribbon includes 'Apps', 'Reports', 'Tasks', 'Admin', and 'Destinations'. The 'Tasks' dropdown menu is open, and 'Publish task' is highlighted with a red box. Below the ribbon, the 'Reports' section is visible, showing filters for 'View' (All reports), 'Type' (All), 'Date range' (Created), and 'All time'. A table lists a report named 'Demo Sense Report' of type 'PowerPoint'. At the bottom right, there are pagination controls with '10' selected.</p>
<p>Then click the Create task button.</p> <p>Give the publish task a name and description, if desired. Choose the Qlik NPrinting app with which to associate the publish task.</p>	 <p>The screenshot shows the 'Create publish task' dialog box. It has a 'Name' field containing 'Test to governance dashboard', a 'Description' text area, an 'App' dropdown set to 'Demo app', 'Days to keep' set to '1', and 'Reports to keep' set to '1'. There is a checked 'Enabled' checkbox. 'Cancel' and 'Create' buttons are at the bottom right.</p>





It is possible to set both the number of days and the number of instances of a report to keep in the Newsstand and Hub “history” from an NPrinting publish task.

All reports in a Task will saved for the same period of time and the specified number of instances

The screenshot shows the 'Publish task' configuration page in Qlik NPrinting. At the top, there is a navigation bar with 'Qlik NPrinting' and several menu items: 'Apps', 'Reports', 'Tasks', 'Admin', and 'Destinations'. Below the navigation bar, a green notification bar states 'Task "Test to governance dashboard" was created successfully.' The main heading is 'Test to governance dashboard' with a 'Run now' button and a trash icon. Below the heading are several tabs: 'Overview', 'Reports', 'Users/groups', 'Filters', 'Destinations', 'Email message', 'Triggers', and 'Conditions'. The 'Publish task' form includes fields for 'Name' (Test to governance dashboard), 'Description', 'App' (Demo app), 'Days to keep' (1), and 'Reports to keep' (1). There is a checked checkbox for 'Enabled' and 'Cancel' and 'Save' buttons at the bottom right.

Next you will need to add a report(s) to the publish task. Click on the Reports button and then click the Add report button.

The screenshot shows the 'Reports' configuration page in Qlik NPrinting. The navigation bar is the same as in the previous screenshot. Below it, the breadcrumb is 'Publish tasks / Test to governance dashboard / Reports'. The main heading is 'Reports' with the same set of tabs as the previous screenshot. Below the tabs is a table with columns: 'Title', 'Report', 'Report type', 'Output format', 'Has conditions', and 'Enabled'. Below the table, there are pagination controls showing '10', '25', '50', and '100' items per page.



On the subsequent screen, select the report you want to add from the Choose report drop-down menu and edit the friendly name, if desired.

Tip! The friendly name is how reports will be displayed in the Newsstand. Any dynamic naming applied to the report will appear in the downloaded version of the report or to any reports sent via e-mail or saved to disk.

Select the desired output format.

Tip! The output formats available to you will depend on the template type you are using.

For example, a PowerPoint template can be rendered as PPTX or PDF, while an Excel template can be rendered as XLSX, XLS, PDF, HTML or TIFF.

Finally, click the Add report button in the lower right-hand corner.

Next, select the user(s) to receive the reports in the publish task.

Click on Users/groups and then the Add user or group button.

Select the user or group from the Choose recipient drop-down menu and then click the Add recipient button in the lower right-hand corner.

Select a destination(s) for report delivery. The default options available are Newsstand, E-mail and Hub.

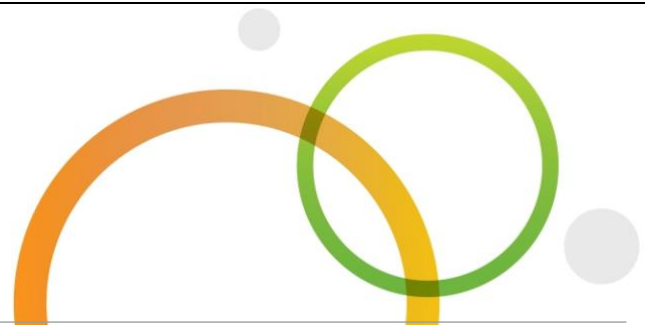


If you want to include a folder(s), this will have to be configured in the Destinations section prior to creating the publish task.

Recipients	NewsStand	Email
	<input type="checkbox"/> Publish for all	<input type="checkbox"/> Email for all
NprintingAdmin	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Create a trigger (schedule) for task execution. Click on Triggers and then click the Create trigger button.

Name	Description	Next execution	Enabled	Actions
10 25 50 100				



Give the trigger a name and description, if desired. The schedule types currently available are one-shot, daily and weekly.



Monthly and yearly schedules are on the development path but no release date is available at this time.

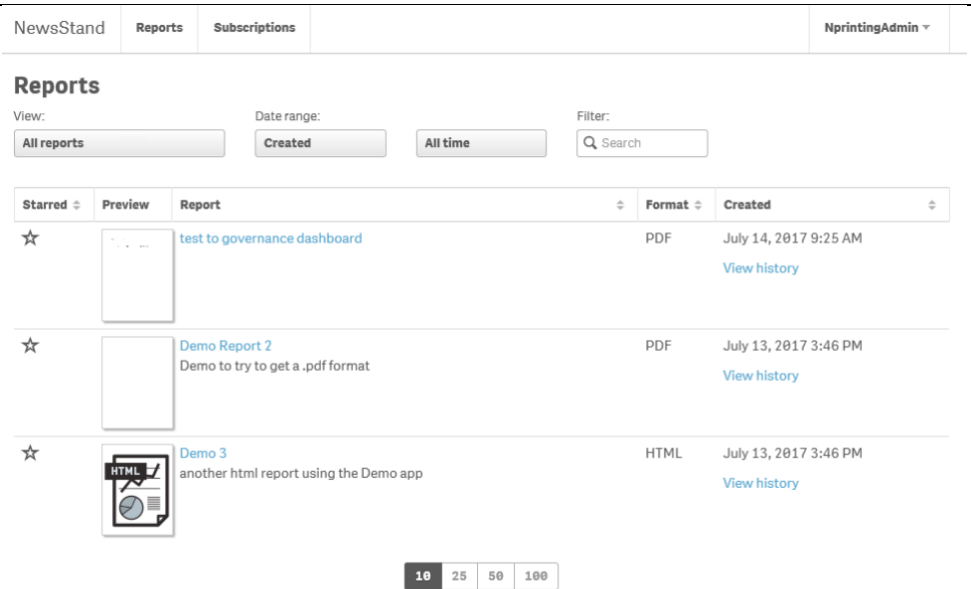
For recurring triggers, pick from the associated parameters as well as start date, time zone and end parameters. Once all information has been entered, click the Create button in the lower right-hand corner.

You can also manually run the task by clicking the Run now button which can be found in the publish task Overview section.




A message showing that the task was successfully scheduled for execution will appear.

When the publish task has run successfully, you will see the reports in the selected destinations.

From the Newsstand, the report can be previewed on the web without opening Office, a PDF reader or a web browser (for HTML reports). The report can also be downloaded and report history, dependent on the parameters initially established in the publish task, is also accessible.

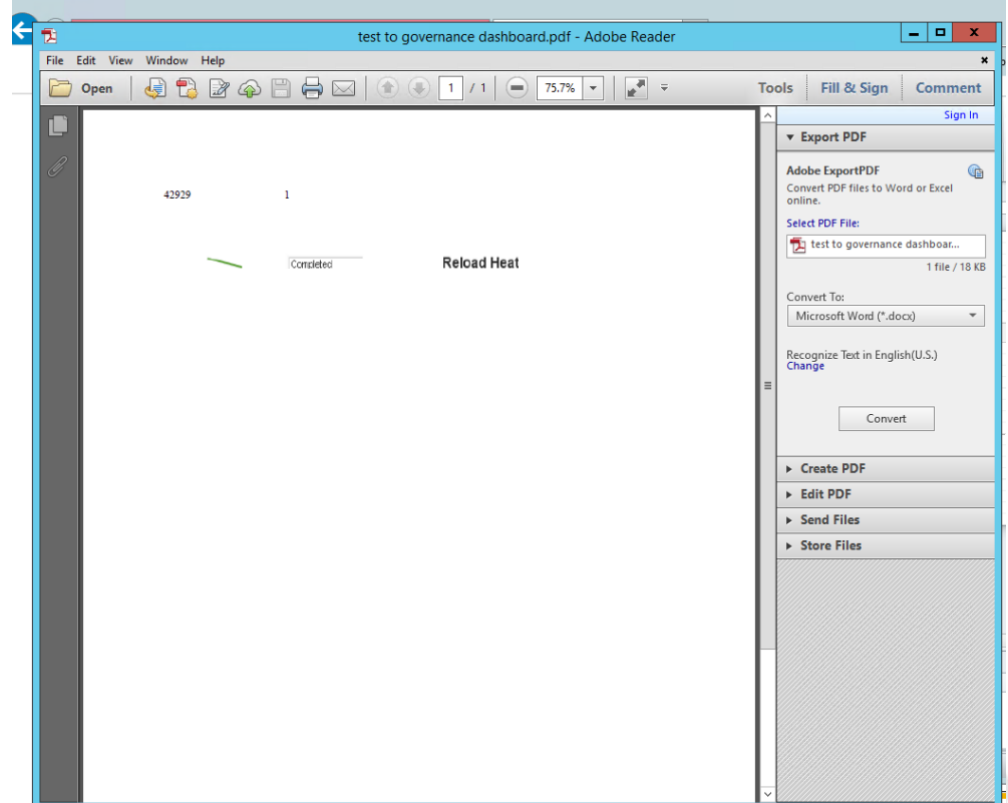


The screenshot shows the 'Reports' section of the Qlik interface. At the top, there are navigation tabs for 'NewsStand', 'Reports', and 'Subscriptions', and a user profile 'NprintingAdmin'. Below the 'Reports' heading, there are filters for 'View:' (All reports), 'Date range:' (Created, All time), and a search box. A table lists the reports:

Starred	Preview	Report	Format	Created
★		test to governance dashboard	PDF	July 14, 2017 9:25 AM View history
★		Demo Report 2 Demo to try to get a .pdf format	PDF	July 13, 2017 3:46 PM View history
★		Demo 3 another html report using the Demo app	HTML	July 13, 2017 3:46 PM View history

At the bottom of the list, there are pagination controls showing '10', '25', '50', and '100' items per page.

Resulting sample report



The screenshot shows a PDF viewer window titled 'test to governance dashboard.pdf - Adobe Reader'. The main content area displays a chart with the following data:

43929	1
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Below the chart, there is a green progress bar labeled 'Completed' and a button labeled 'Reload Heat'. On the right side, there is a 'Tools' panel with options like 'Export PDF', 'Fill & Sign', and 'Comment'. The 'Export PDF' section is expanded, showing options to convert the PDF to Microsoft Word (.docx) or other formats.



Additional Steps or Information

Repository

During the installation of the Server, the repository is asking for a password, we use the same password than the service account.

Additional Links

NPrinting videos

<http://help.qlik.com/en-US/nprinting/17.0/Content/Videos/Intro-Videos.htm>

<http://help.qlik.com/en-US/nprinting/17.1/Content/Videos/Intro-Videos.htm>

