



USA Staffing

Reporting & Analytics

Cognos Report Authors Training

Virtual Training for Advanced Users

Created by the OPM Federal Staffing Center

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Instructor Introductions





Agenda

Day 1

- **Overview of USA Staffing Reporting and Analytics**
- **USA Staffing Data Structure**
 - Data Packages
 - Staffing Reports Data Package
- **Cognos and Reports Module Refresher**
 - List reports
 - Sorting and grouping
 - Filtering
 - Functions and Calculations
 - Aggregation
 - Prompts
 - Copy Report To/From XML
- **Brainstorm ideas for Workshop**

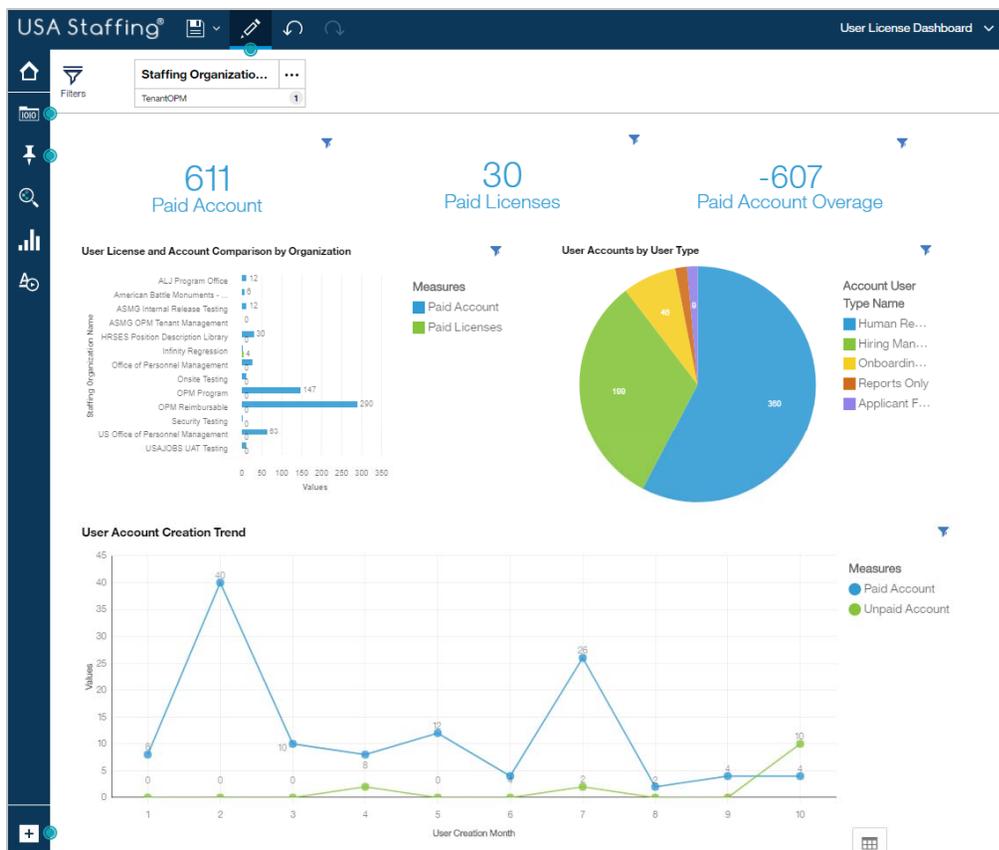
Day 2

- **Advanced Topics**
 - In-page Prompts
 - Joins
 - Report Scheduling
 - Subscriptions
 - Visualizations in Reports
 - Drill-through Reports
- **Custom Report-Building Workshop**
- **Open Q&A and Demo**



Data to Drive Decisions

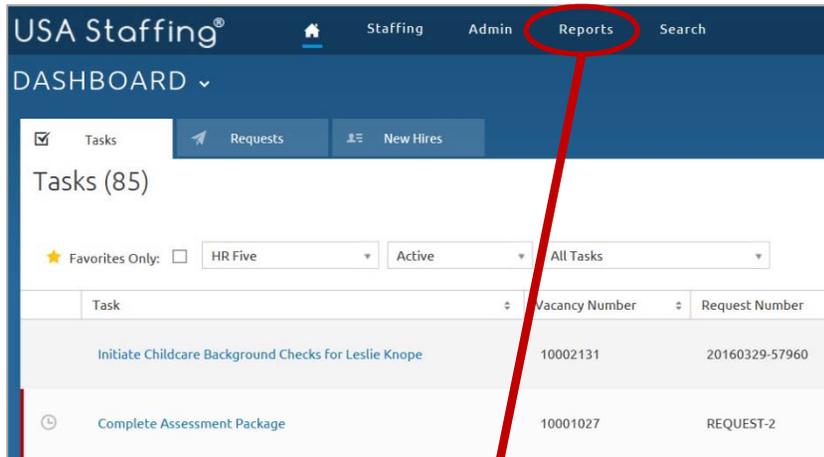
USA Staffing is strengthening its reporting and analytics capabilities to **ensure decision makers have easy access to high quality hiring data**



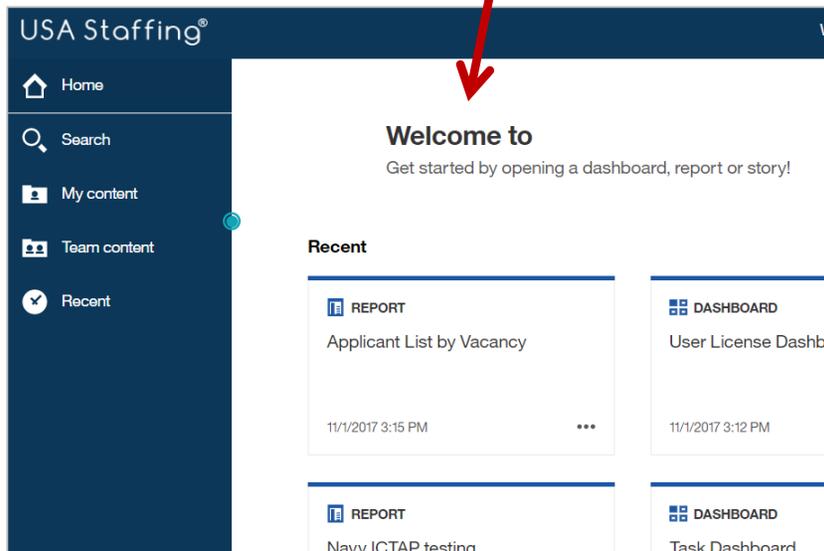
- High quality data that you can trust
- Iterative development to respond quickly to agency needs
- Analytical support and training
- Direct access to data covering the full hiring process for custom reporting
- Interactive dashboarding and visual reports displaying the most important hiring metrics



Navigating to Standard Reports



Direct access to Cognos standard reports in the interface via single sign-on

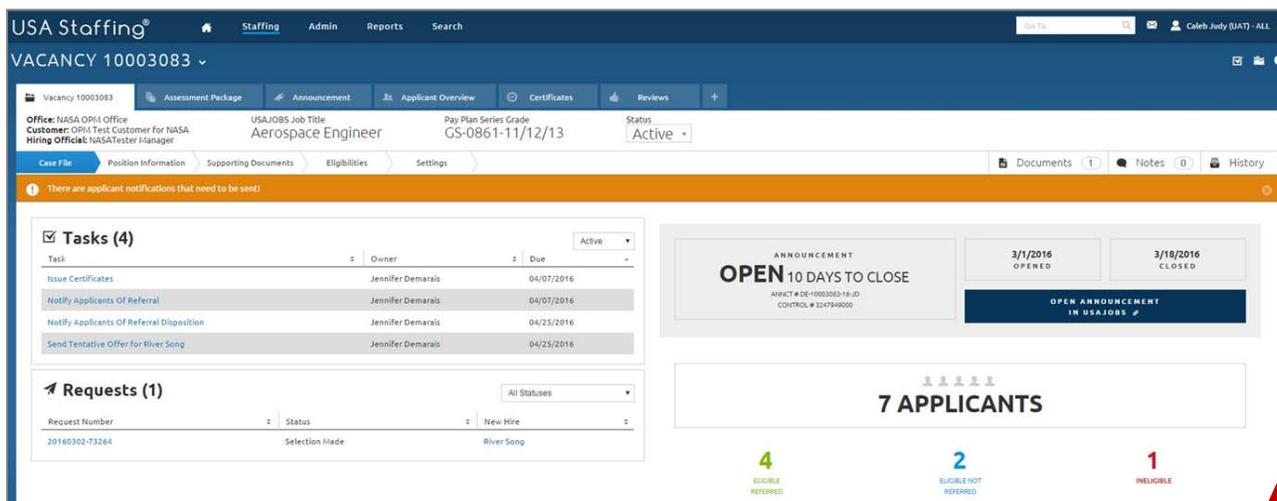


Staffing Organization	Staffing Office	Customer Name	Vacancy Number	Announcement Number	Open Date
ASMG Internal Release Testing	Matt's House	Clash of Clans - Fan Club	10015977	ST-10015977-17-TA	02/17/2017
			10051843	ST-10051843-18-TA	10/12/2017
Infinity Regression	Cleveland Staffing Office	Bourbon Distillery	10015514	DE-10015514-17-IO	02/14/2017
OPM Program	Program Office	Account Management Branch \	10021066	DE-10021066-17-TH	03/05/2017
			10021662	IMP-10021662-17-TH	03/06/2017



Navigating to Standard Reports

Future: Access to **certain standard reports** directly from the USA Staffing interface via **report buttons** on select pages.



Report Button

Reports are filtered based on page content

Examples:

- Applicant List by Vacancy
- Vacancy Overview
- Certificate Overview
- Applicant Overview

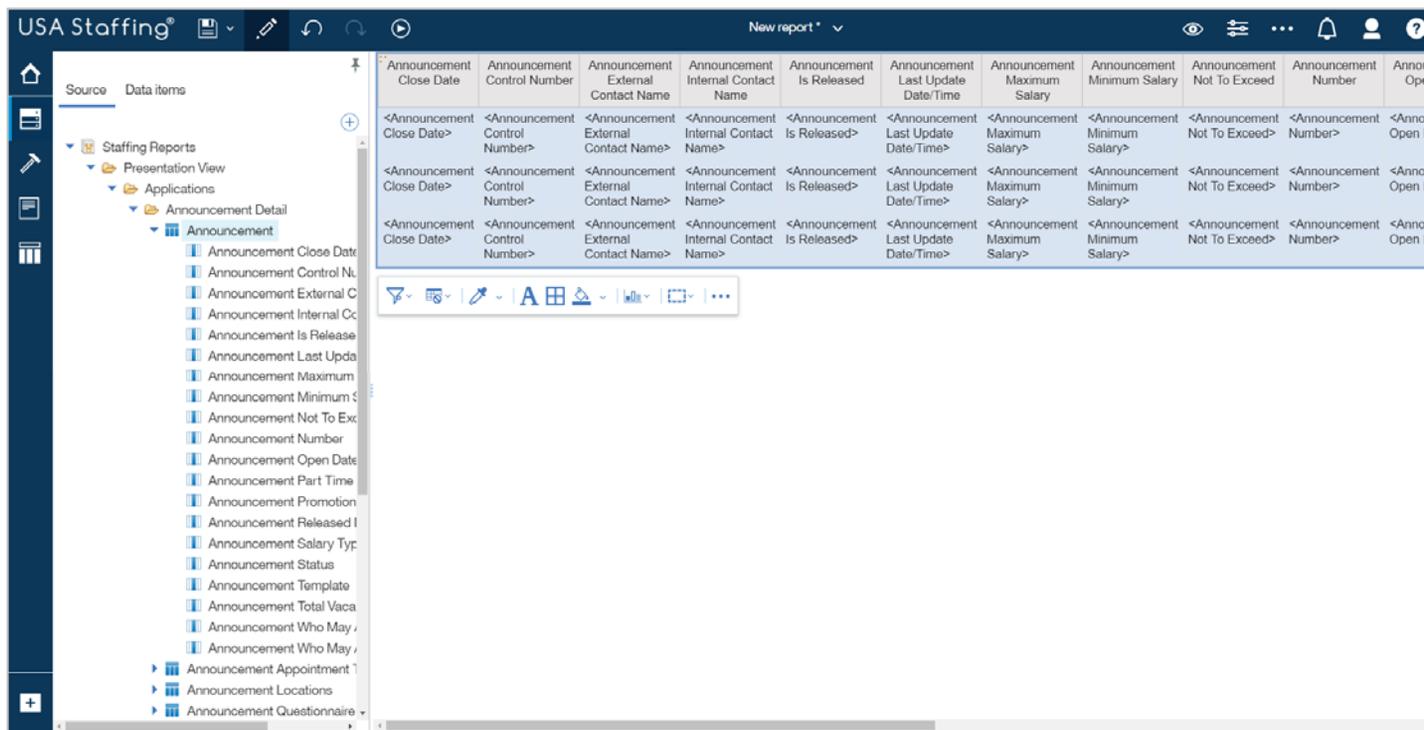
Applicant List by Vacancy

Organization	Office	Vacancy Number	Applicant Last Name	Applicant First Name	Applicant Middle Name	Applicant Email	Record Status Code
			Applicant	Fantastic		jsciarillo@icloud.com	AC
			Bluth	George		georgebluthtest@gmail.com	AA
			Bluth	Lucille		lucillebluthtest@gmail.com	AA
			Dan	Doctor		ddan@gmail.com	AA
			Eriksen	Marshall		marshall.eriksen.staffing@gmail.com	AC
			Hanks	Tom		jsciar1+2@gmail.com	AA



Custom Reporting

Ability to **modify existing reports and develop custom reports** based on USA Staffing data models



Cognos Report Elements:

- List
- Crosstab
- Charts
- Visualizations

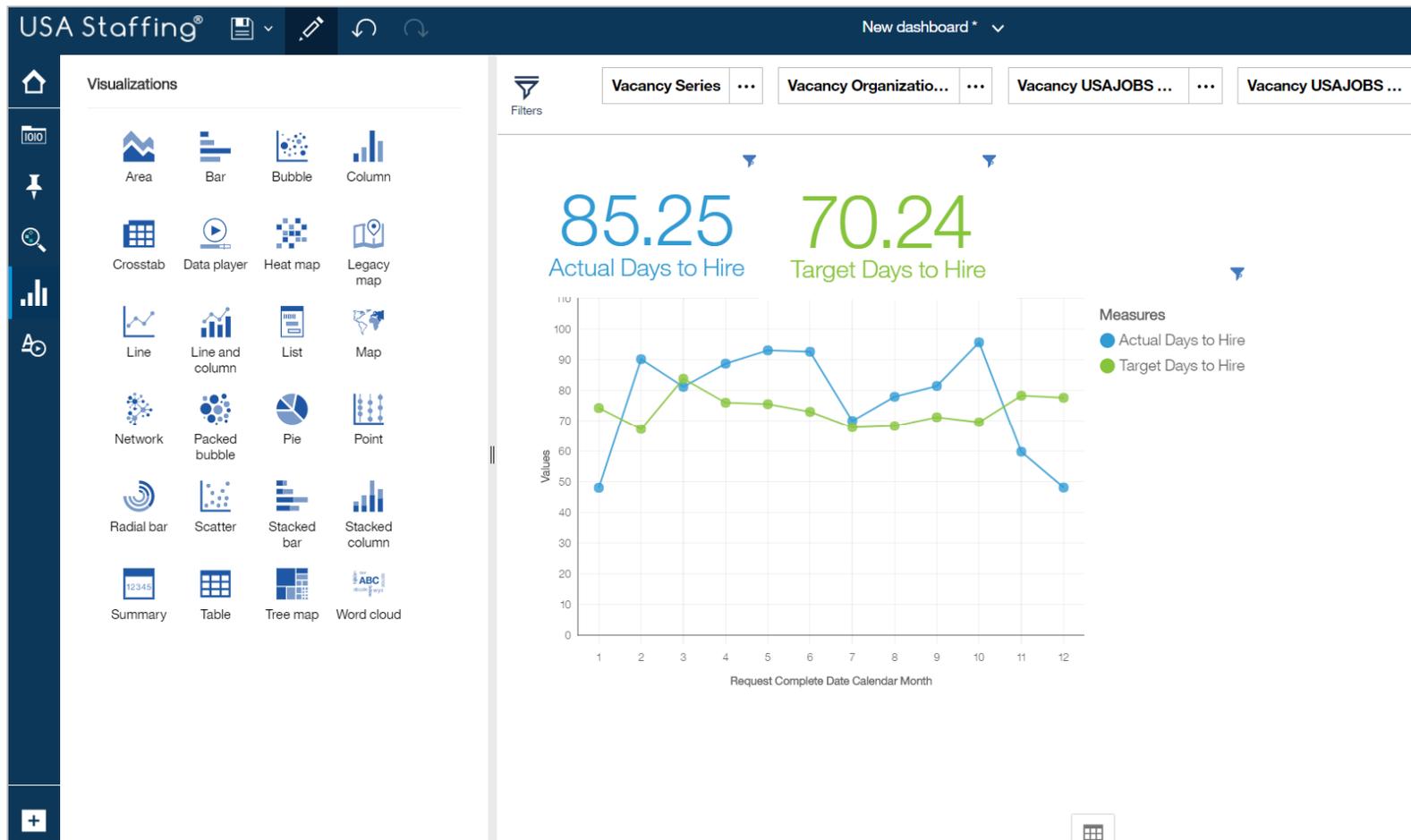
Output to:

- PDF
- Excel
- Excel Data
- HTML
- CSV
- XML



Custom Dashboards

All users have the ability to **build and interact with dashboards based on USA Staffing data**





Cognos Reports List

The **Cognos Reports List** provides the location, title, and description for each report a user has access to, including standard reports and custom reports for offices and organizations to which they have permissions.

Cognos Reports List

Package	Name	Description	Path
Applicant Flow Data Analytics	Vacancy Application Detail Report	The Vacancy Application Detail Report displays application demographic responses and hiring milestone data at the application level.	USA Staffing Packages and Folders > Applicant Flow Data > Applicant Flow Data Analytics > Vacancy Application Detail Report
	Vacancy Number Summary Report	The Vacancy Application Detail Report displays application demographic responses and hiring milestone data at the application level.	USA Staffing Packages and Folders > Applicant Flow Data > Applicant Flow Data Analytics > Vacancy Number Summary Report
	Vacancy Office Summary Report	The Vacancy Office Summary Report displays application demographic responses and hiring milestone data summarized by Office	USA Staffing Packages and Folders > Applicant Flow Data > Applicant Flow Data Analytics > Vacancy Office Summary Report
	Vacancy Organization Summary Report	The Vacancy Organization Summary Report displays application demographic responses and hiring milestone data summarized by Organization	USA Staffing Packages and Folders > Applicant Flow Data > Applicant Flow Data Analytics > Vacancy Organization Summary Report
Data Dictionary	Cognos Package Outline Report	The Cognos Package Outline Report provides a list of all data fields with descriptions and datatype for each Cognos package	USA Staffing Packages and Folders > Cognos Package Outline Report
Interim Upgrade AFD	Interim MD-715 A7 Report		USA Staffing Packages and Folders > Applicant Flow Data > Interim Upgrade AFD > Interim MD-715 A7 Report
Staffing Administration	Cognos Report Author List	Lists basic user information for all Report Authors for a given Organization/Office.	USA Staffing Packages and Folders > Staffing Administration > Cognos Report Author List
	Customer List by Office Report	The Customer List by Office Report displays the list of customers associated with each office.	USA Staffing Packages and Folders > Staffing Administration > Customer List by Office Report
Staffing Analytics	All Stage User Accounts		USA Staffing Packages and Folders > VA > Office Shared > VA HQ Program Office > Users > All Stage User Accounts

Team Content > USA Staffing Packages and Folders > **Cognos Reports List**



USA Staffing Data Structure



Overview of Available Packages

Users have access to different data packages for specific analytical needs

Applicant Flow Data Analytics (DW)

- **Demographic information collected from job seekers** and combined with milestones in the hiring process
- Data is near real-time (nightly load) for vacancies that meet certain criteria
- Data is optimized for metrics and aggregate data and trend reporting

Hiring Data Warehouse

- **Data sourced from the Recruitment Data Warehouse**, currently in the process of being developed
- Data is near real-time (nightly load)
- Data will eventually cover all subject areas

New Hire (End of Day)

- **Data sourced from a data warehouse**, covering data specific to new hires
- Data is near real-time (nightly load)
- Data intended to supplement or replace the New Hire namespace in the Staffing Reports (Transactional) package



Overview of Available Packages

Users have access to different data packages for specific analytical needs

Staffing Administration

- **Real-time data sourced directly from the USA Staffing database** covering administrative content

Staffing Analytics (DW)

- **Data sourced from the Recruitment Data Warehouse**, currently covering User License data
- Data is near real-time (nightly load)
- Data is optimized for metrics and aggregate data and trend reporting

Staffing Reports (Transactional)

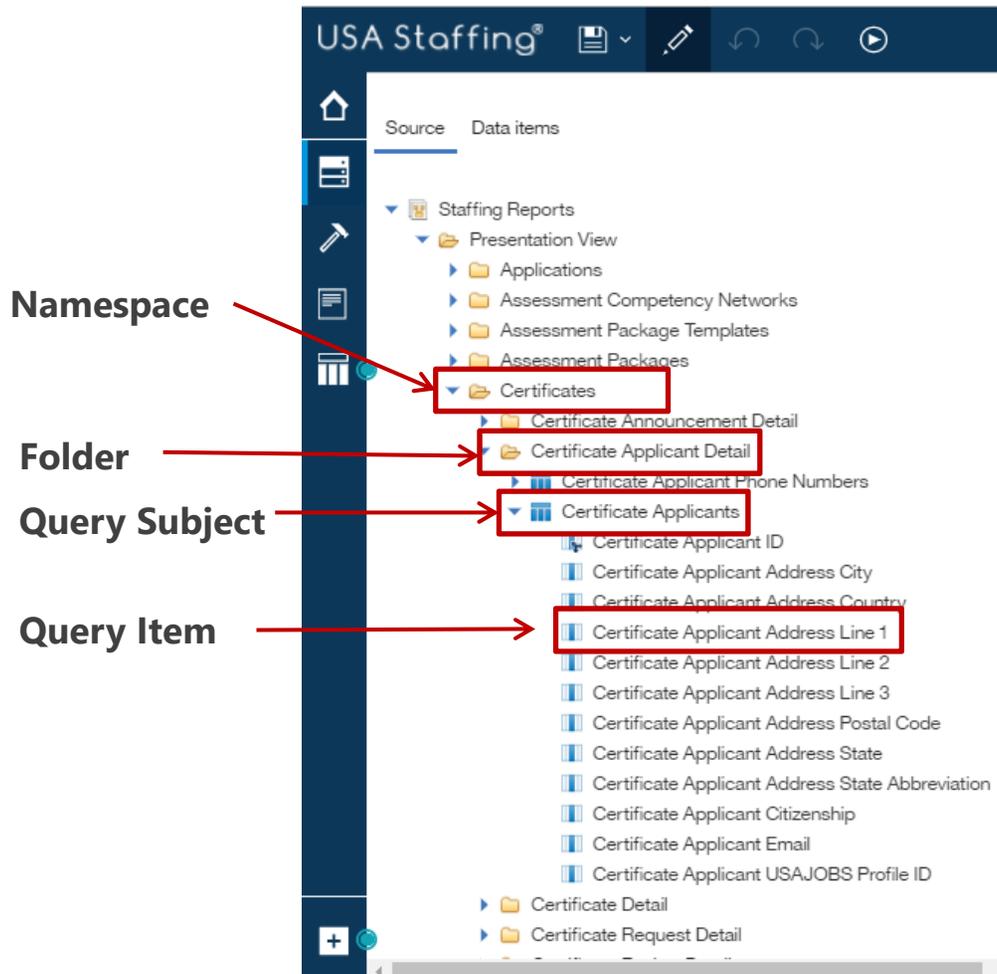
- **Real-time data sourced directly from the USA Staffing database** covering all subject areas

★ Most reports currently based on this package



Data Package Structure

Data packages are separated into distinct namespaces; each namespace is designed to capture all data needed for analysis on a specific topic



- **Namespaces divide data into analytical areas** to ensure links between data elements are optimized for reporting
- **Folders** are used to organize query subjects
- **New query subjects and items are regularly added** to namespaces to ensure users can build reports in one namespace at a time
- **Query items from more than one namespace cannot be added to the same report object**
- If data from more than one namespace is needed in a report, **the individual queries must be joined**



Cognos Package Outline Report

The **Cognos Package Outline report** provides the location, description, and data type for each data item in the each data package available in Cognos

Cognos Package Outline Report

Model Name	Namespace	Folder	Query Subject	Query Item	Description	Data Type
Staffing Reports	Applications	Announcement Detail	Announcement	Announcement Close Date	The calendar date that an announcement is closed.	date
				Announcement Control Number	The USAJOBS provided control number.	int64
				Announcement External Contact Name	The first and last name, email address and phone number of the point of contact responsible for answering questions about the announcement outside the organization. angular Snip	characterLength16
				Announcement Internal Contact Name	The first and last name, email address and phone number of the point of contact responsible for answering questions about the announcement inside the organization.	characterLength16
				Announcement Is Released	Flag indicating if the Announcement is currently released.	characterLength16
				Announcement Last Update Date/Time	The timestamp of the last time the announcement was modified.	dateTime
				Announcement Maximum Salary	Maximum salary associated with the position being posted to USAJOBS.	decimal
				Announcement Minimum Salary	Minimum salary associated with the position being posted to USAJOBS.	decimal
				Announcement Not To Exceed	Description of the appointment type, superficially the special duration.	characterLength16
				Announcement Number	Identification number assigned to the job announcement by the TAS (also known as Requisition Number for some vendors).	characterLength16

Team Content > USA Staffing Packages and Folders > **Cognos Package Outline Report**

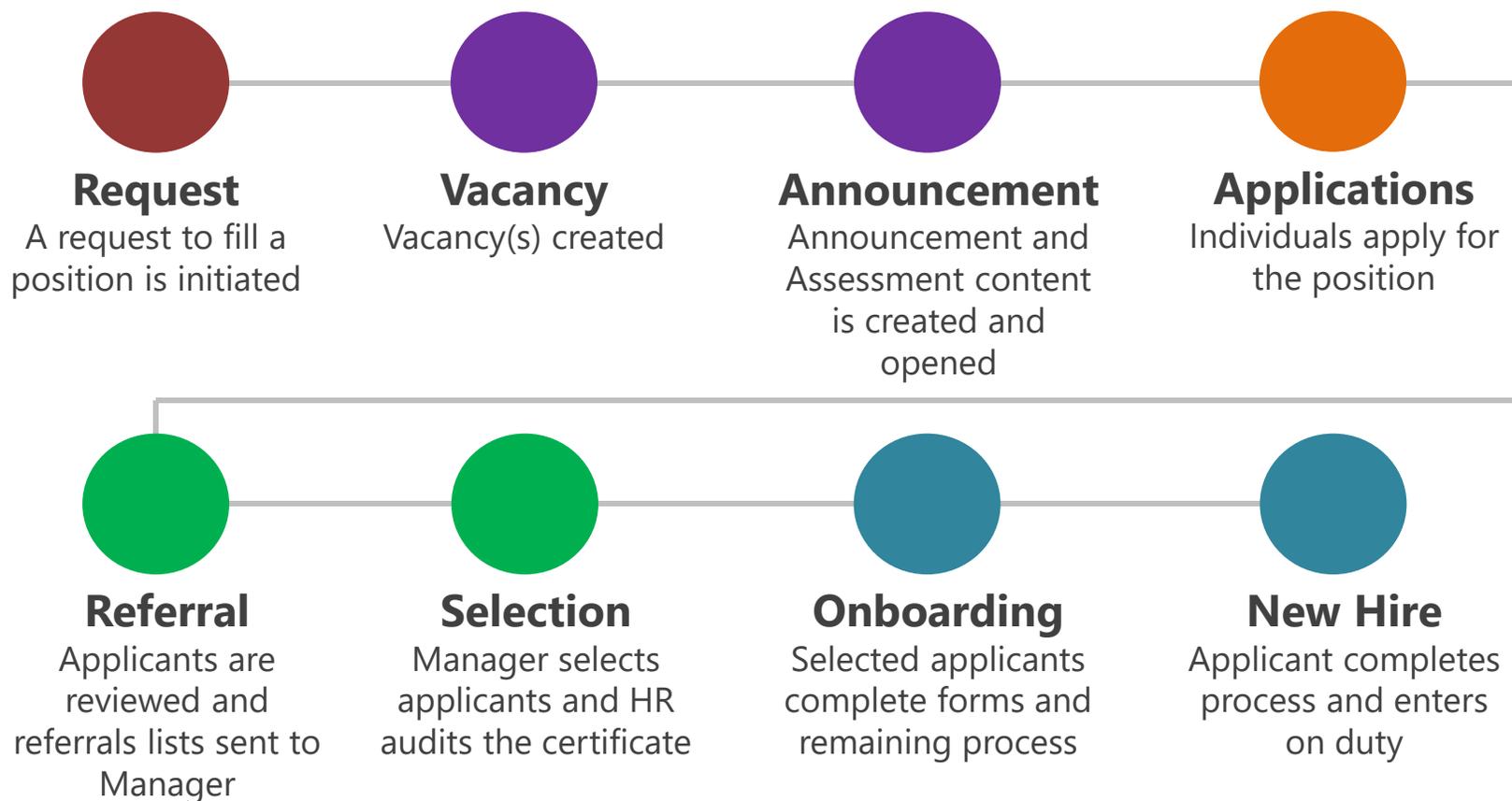


Staffing Reports Data Package



Overview of the Staffing Process

USA Staffing is the U.S. Office of Personnel Management's talent acquisition system; it is organized around the staffing process





Applications

Data related to **applications** as well as the **development of requests, vacancies, and announcements**



Key Query Items:

- Request Number
- Vacancy Number
- Announcement Number
- Applicant ID
- Application Number
- Assessment ID



When to use this Namespace

- Creating Lists of Applicants, Applications, Requests, Vacancies, Announcements
- Analyzing data related to all applications, including responses to assessment items

Data Relationships

One **Request** may be related to more than one **Vacancy**

One **Vacancy** may be related to more than one **Request**

One **Vacancy** = One **Announcement**

One **Applicant** may be related to more than one **Vacancy, Announcement, and/or Application**

One **Application** = One **Vacancy**



Assessment Competency Networks

Data on **the content of competency networks** (the structure of competencies and associated assessment items used in assessments for particular positions)



Key Query Items:

- Competency ID
- Item ID



When to use this Namespace

- Reporting on the content of Competency Networks (not usage)

Namespace is designed to support administrative content management

Data Relationships

One **Competency Network** may be related to more than one **Competency** and/or **Item**

One **Competency** may be related to more than one **Competency Network**

One **Competency** may be related to more than one **Item**

One **Item** = One **Competency**



Assessment Package Templates

Data on **the content of assessment package templates** (assessment packages that are shared and re-used across an organization)



Key Query Items:

- Assessment ID
- Competency ID
- Item ID



When to use this Namespace

- Reporting on the content of Assessment Package Templates (not usage)

Namespace is designed to support administrative content management

Data Relationships

One **Assessment Package Template** may be related to more than one **Assessment**

One **Assessment** may be related to more than one **Competency** and/or **Item**

One **Competency** may be related to more than one **Assessment** and/or **Item**

One **Item** = One **Competency**



Assessment Packages

Data related to the **content and use of assessment packages** (a package of one or more assessments)



Key Query Items:

- Request Number
- Vacancy Number
- Assessment ID
- Competency ID
- Item ID



When to use this Namespace

- Reporting on assessment content (not applicant responses)
- Tracking the frequency of use of assessment packages or content

Data Relationships

For a Vacancy, an Assessment Template is assigned or a new Assessment Package is developed

Assessment Template
Assessment package that is shared across offices and frequently re-used

Assessment Package
Identifies the assessment(s) to be used in the selection process

Assessment Name
Assessment Questionnaire or External Assessment

Competency
Skills/abilities needed to perform work roles

Items
Questions/tasks related to work



Certificates

Data related to **referred applications** and the **use and development of certificates/ranking lists**



Key Query Items:

- Request Number
- Vacancy Number
- Announcement Number
- Certificate Number
- Applicant ID
- Application Number
- Assessment ID
- Selectee Request Number



When to use this Namespace

- Tracking the creation, issuance, review, and audit of certificates/ranking lists
- Analyzing data related to referred or selected applicants (does not include individuals who do not make it to the referral stage)

Data Relationships

One **Request** may be related to more than one **Certificate**

One **Vacancy** = One **Announcement**

One **Vacancy** may be related to more than one **Assessment** and/or **Certificate**

One **Certificate** may be related to more than one **Request**

One **Applicant** may be related to more than one **Vacancy, Announcement, Certificate,** and/or **Application**

One **Application** = One **Vacancy**



New Hires

Data related to the **onboarding process**, including New Hires and the transmission of forms and documents



Key Query Items:

- Request Number
- Vacancy Number
- Applicant ID
- Application Number
- New Hire Number



When to use this Namespace

- Reporting on selected applications during the onboarding process and actual new hires
- Tracking the completion and transmission of onboarding forms and documents

Data Relationships

One **Request** = One **New Hire**

One **New Hire** = One **Vacancy, Applicant,** and/or **Application Number**

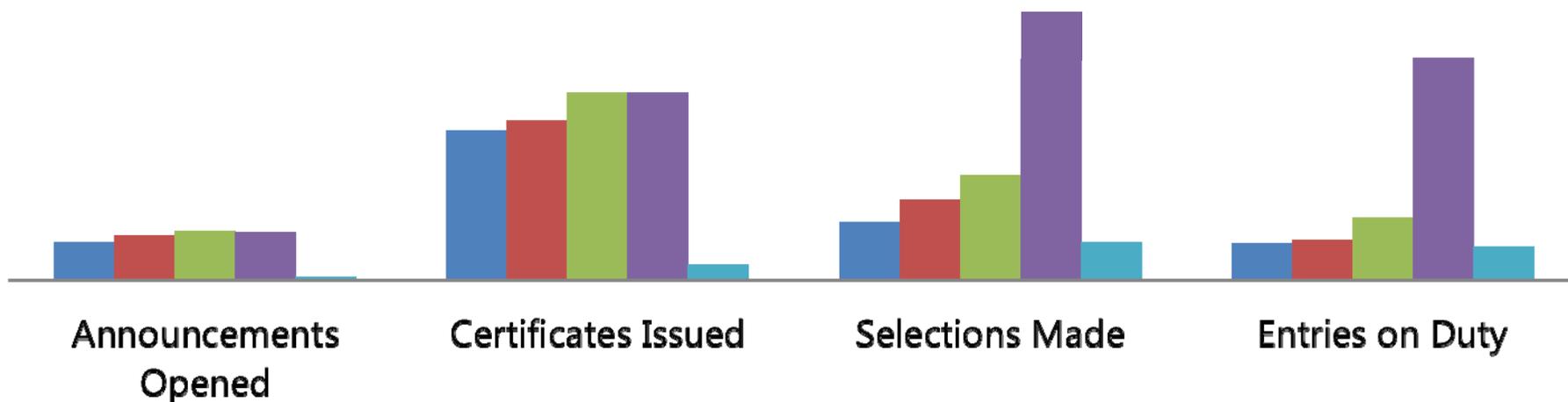


Production Statistics

Data to facilitate reporting on **common production statistics** by week, month, quarter, and/or year.

* When to use this Namespace

- Reporting on high level production statistics over time, including counts of:
 - Announcements Opened
 - Applications Submitted
 - Certificates Issued
 - Selections Made
 - Entries on Duty





Reviews



Data related to the **communication between HR and hiring managers** on assessment and announcement content and the certificate review/selection process



Key Query Items:

- Request Number
- Vacancy Number



When to use this Namespace

- Tracking the overall Review process

Data Relationships

One **Request** and/or **Vacancy** can have multiple **Reviews**

One **Review** may have multiple **Reviewers** and/or **Review Assignments**



Tags

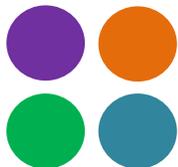
Data related to tags used in USA Staffing to **grant permissions to content** and to **describe vacancies**, including mission critical occupation and appointing authority tags

* When to use this Namespace

- Reporting on system and custom tags used/developed by agencies

Namespace is designed to support administrative content management





Tasks

Data related to the **completion of tasks** throughout the staffing and onboarding process



Key Query Items:

- Request Number
- Vacancy Number
- Task ID



When to use this Namespace

- Reporting on the completion of tasks
- Reporting on Time to Hire metrics

Data Relationships

One **Task ID** = One **Request** and/or **Vacancy**

One **Request** and/or **Vacancy** may have more than one **Task**



- Use **Task Type** when comparing results across Organizations and/or Offices
- **Task Actual Days to Complete** is the number of days between **Task Activation Date** and **Task Completion Date**
- **Task Days to Complete** is the number of days the task was/is expected to take, as set up when creating the task and/or workflow



USAJOBS

Data related to **incomplete applications**



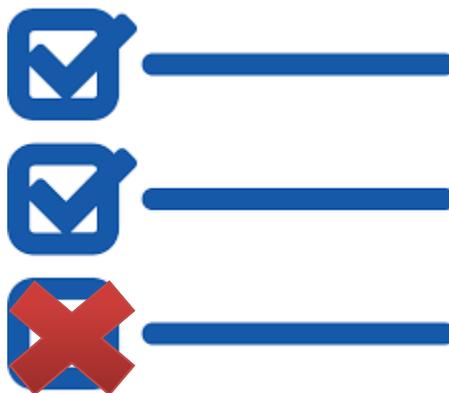
Key Query Items:

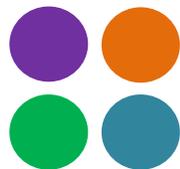
- Vacancy Number
- Announcement Number



When to use this Namespace

- Reporting on incomplete applications





Workflows

Data related to **the development of workflows and tasks**

* When to use this Namespace

- Reporting on the development of Workflows (not usage)

Namespace is designed to support administrative content management



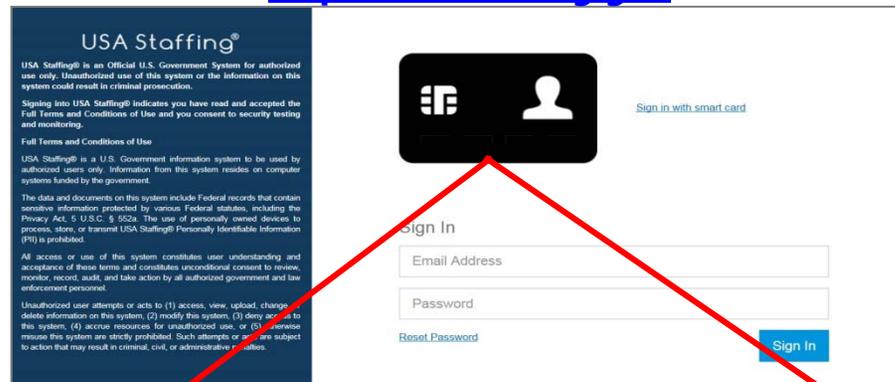


Cognos and Reports Module Refresher



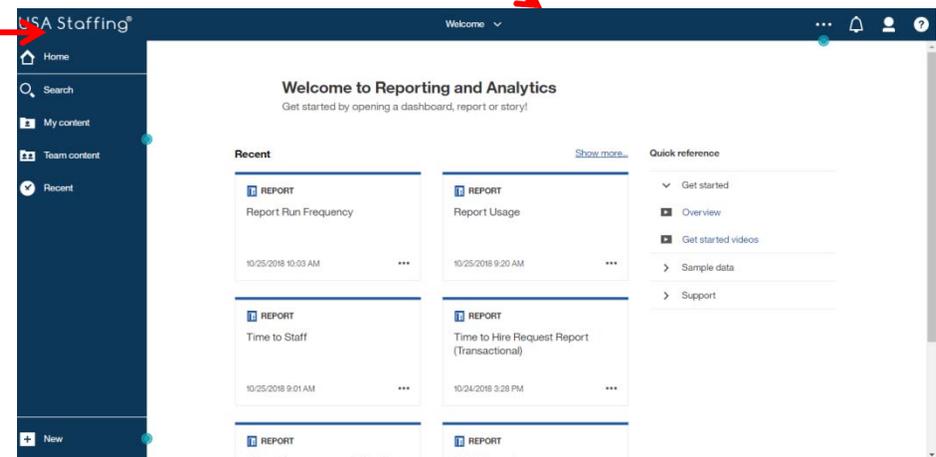
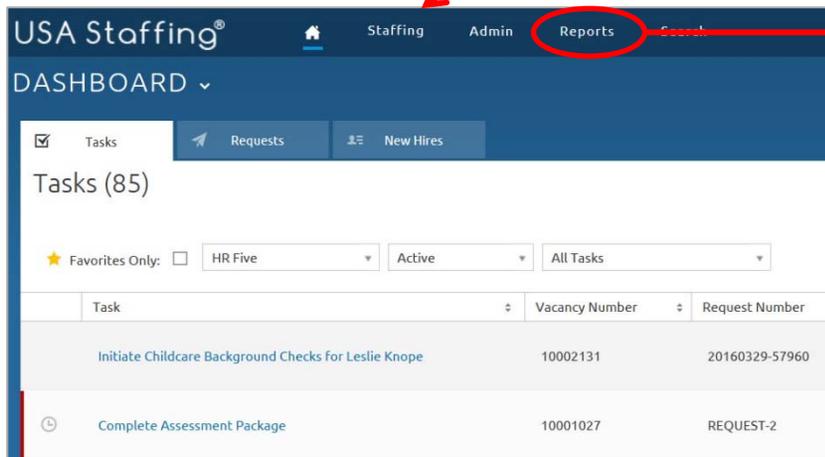
Accessing Cognos

USA Staffing Login
<https://usastaffing.gov>



Staffing User Access

Report Author Only Access





Navigating the Welcome Page

The Welcome Page allows users to **navigate and search for reporting content**

The screenshot shows the USA Staffing interface. On the left is a dark blue navigation sidebar with the following items: Home, Search, My content, Team content, Recent, Report, Dashboard, Story, Data module, Other, Upload files, and New. On the right is the main content area titled 'Welcome to Reporting and Analytics' with a 'Recent' section containing four report cards. A callout box labeled 'Recent' points to the report cards with the text 'View recently accessed reports'.

Search
Search for reports and models

My Content
Formerly "My Folders"

Team Content
Formerly "Public Folders"

New
Report Authors can create new Reports, Dashboards, and Stories

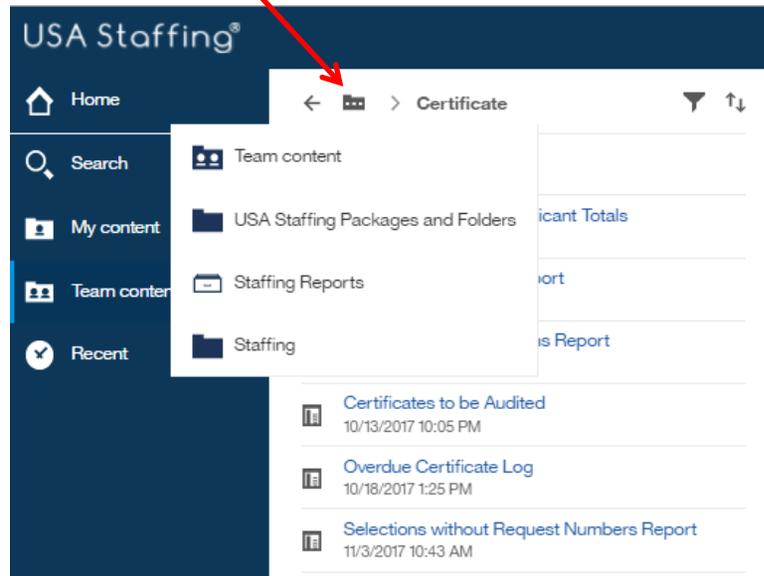
Recent
View recently accessed reports



Running an Existing Report

1. Locate Report

Navigate to the desired report through Team Content



3. Export Report

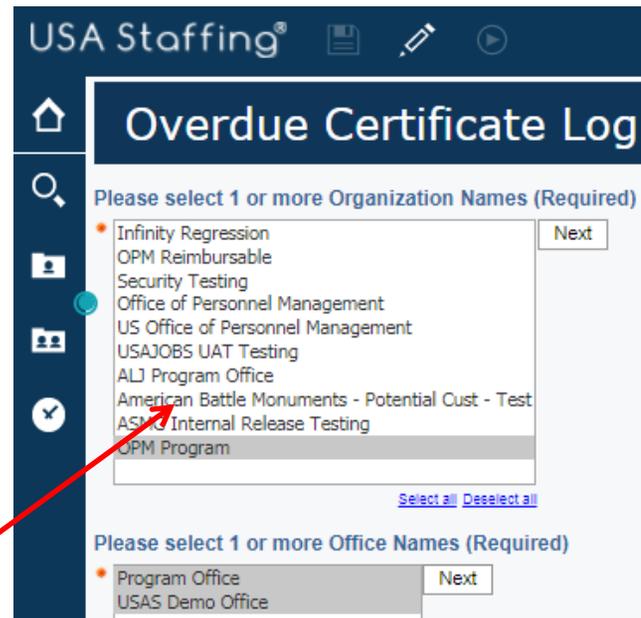
Reports can be run and exported as HTML, PDF, Excel, CSV, or XML



- Run HTML
- Run PDF
- Run Excel
- Run Excel data
- Run CSV
- Run XML

2. Run Report

Enter prompt values and run the report



Show run options



Running Reports Live vs. In the Background

Users can run reports live or set a report to run in the background and receive a notification when the report has completed.

Live Reports

- Run immediately
- Allow a single output format to be selected for each run
- Allow a single report to be run at a time

Background Reports

- Can be run immediately or scheduled to run at a certain time
- Allow multiple output formats to be selected for each run
- Creates a queue of reports to be run; reports may run simultaneously

Run as

Run in background

Excel

Excel Data

PDF

HTML

CSV

XML

Prompt me



Click the toggle to run a report in the background

Run



Running a Report in the Background

1. Locate Report

Navigate to the desired report through Team Content

2. Click the ... and select Run as

3. Click Run in background toggle

The screenshot shows a web interface for OPM reports. At the top, there is a breadcrumb trail: < > Announcement. Below this is a list of reports, including 'Closed Announcements Pending Certificates', 'Incomplete Applications Report', 'Open Announcements', and 'Open Announcements Not Released'. A red arrow points from the '1. Locate Report' box to the 'Announcement' breadcrumb. Another red arrow points from the '2. Click the ... and select Run as' box to the three-dot menu icon next to the first report. A third red arrow points from the '3. Click Run in background toggle' box to the 'Run in background' toggle switch in the 'Run as' settings panel. The 'Run as' panel includes options for 'Run in background' (a toggle switch), 'Excel', 'Excel Data', 'PDF', 'HTML' (selected), 'CSV', 'XML', and 'Prompt me' (checked). A 'Run' button is located at the bottom right of the interface.



Running a Report in the Background

4. Select report output(s)

Run as

Run in background

Excel

Excel Data

PDF

HTML

CSV

XML

Prompt me

Advanced

Run

5. Set Advanced Options Run the report immediately or at a specific time and choose Delivery options

Advanced

Now Later

Languages >

Delivery >

Run

6. Set Delivery method(s) and click "Done" If the report includes prompts, they will be presented

< Back Delivery

Send report by email

Print report

Save report

Done

< Back Delivery

Send report by email

Attach the report

To: >

Subject:

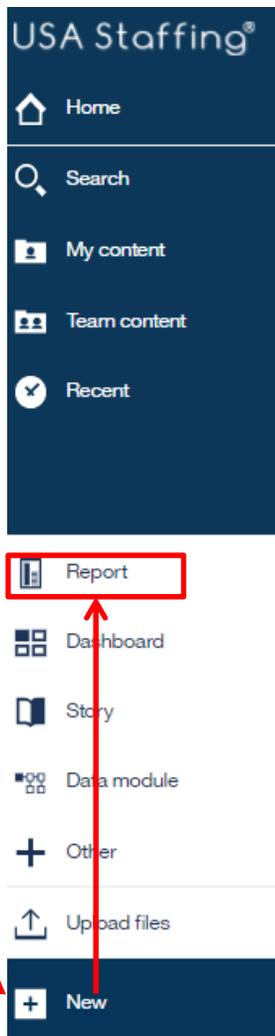
A new version of Closed Announcements Penc

cc: bcc:

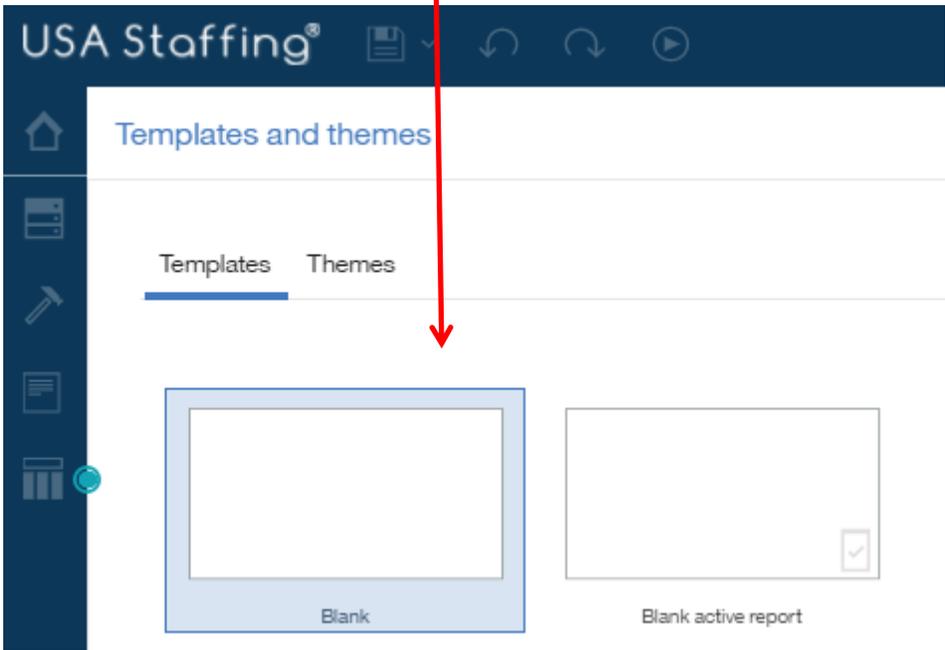


Creating a New Report

1. Create a new report
Create a new Report directly from the Welcome Page



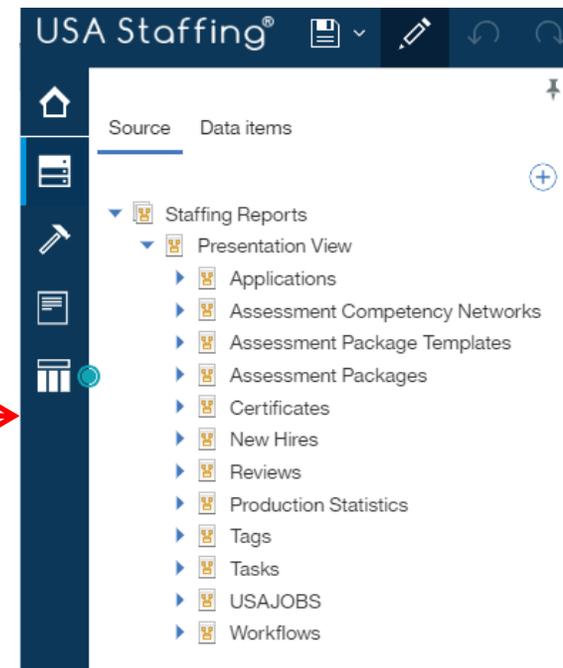
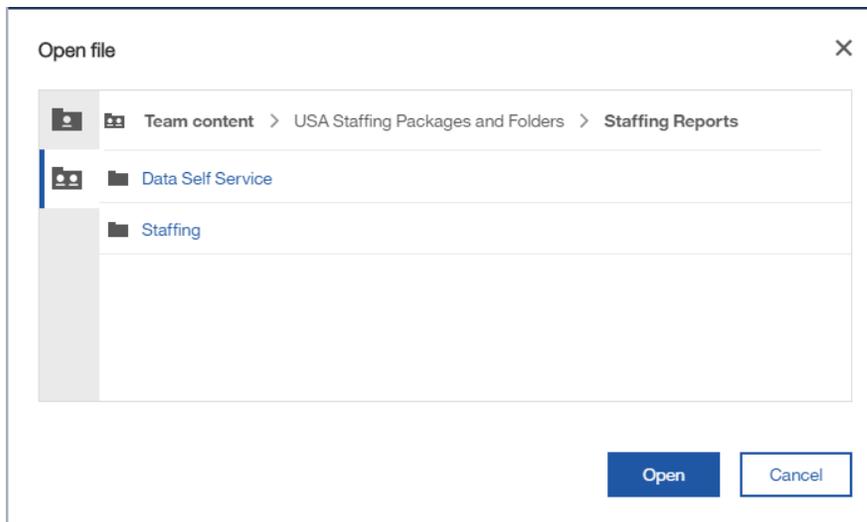
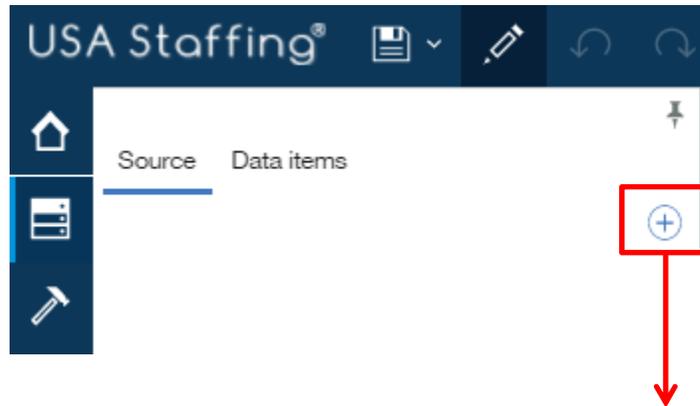
2. Select a Template
Select a Blank template





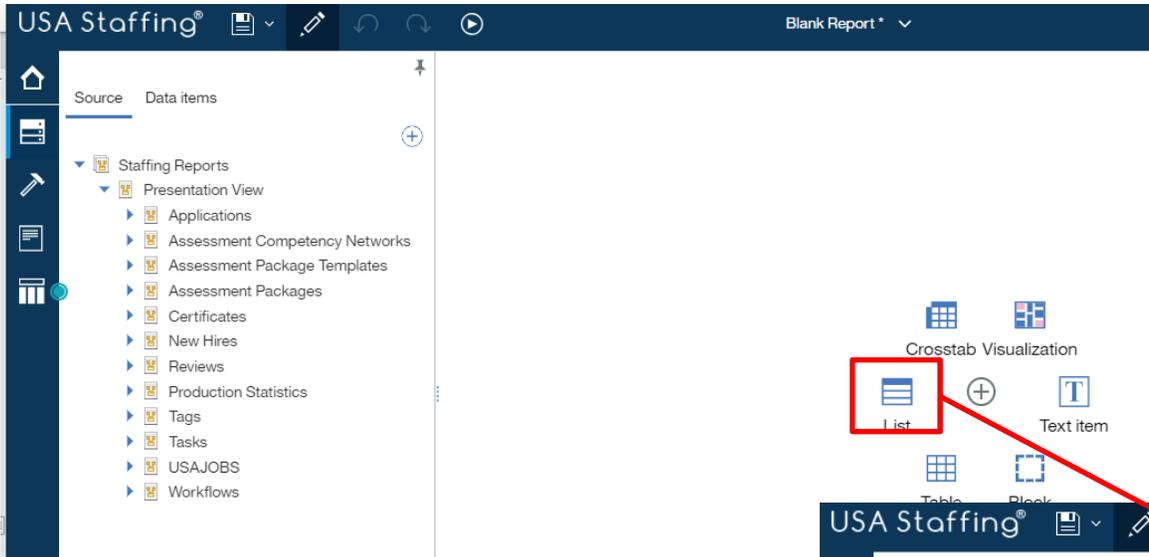
Creating a New Report

3. Add a Data Source
Add a data source by navigating to the desired package

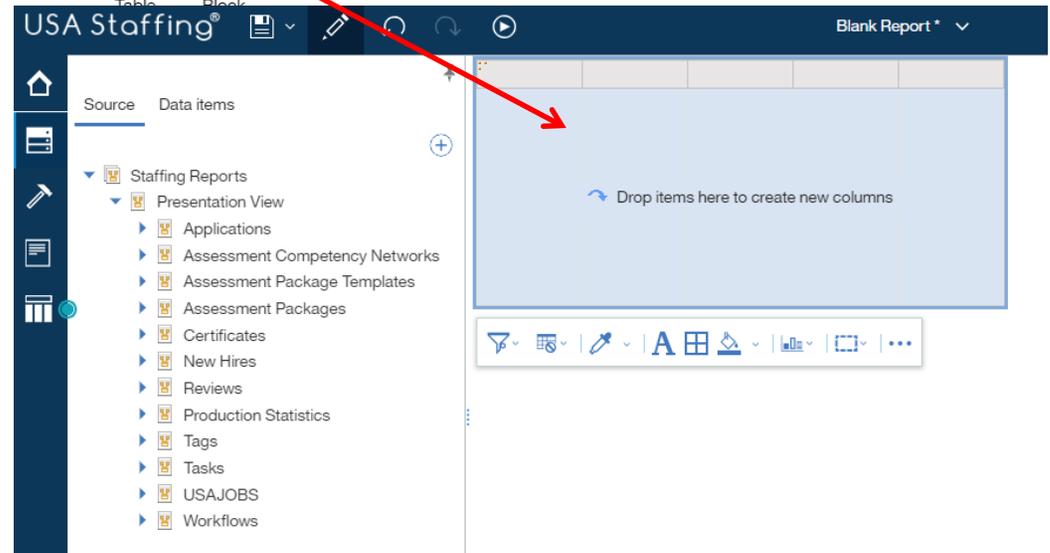




Creating a New Report



4. Select a Report Object
Select a list, crosstab, visualization, text item, table, or block object to display query results





Navigating the Report Module

Data

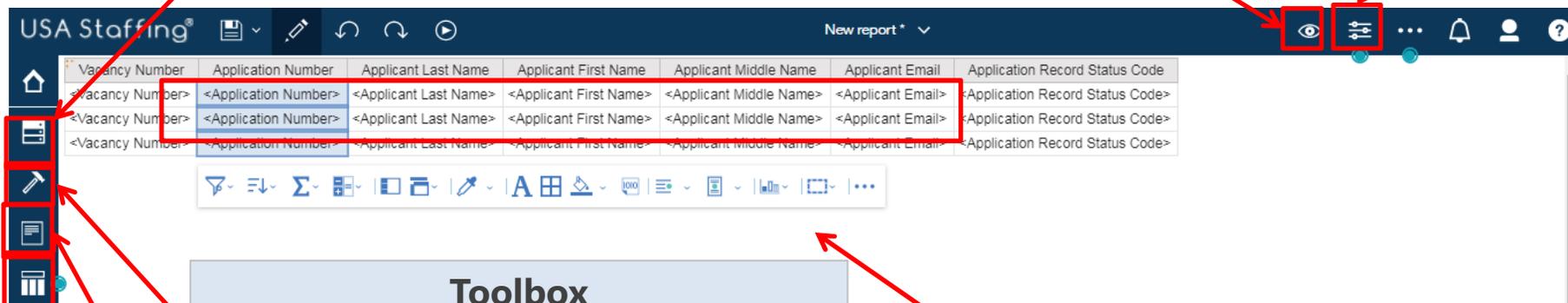
Select query items from the data package

Page Views

View the Page Design, Page Preview, or Page Structure

Show Properties

Display properties for the selected object



Toolbox

Select report elements that can be utilized in the report (text, charts, calculations, etc.)

Page

Navigate to Report and Prompt Pages

Queries

Navigate to Queries and associated report objects

Toolbar

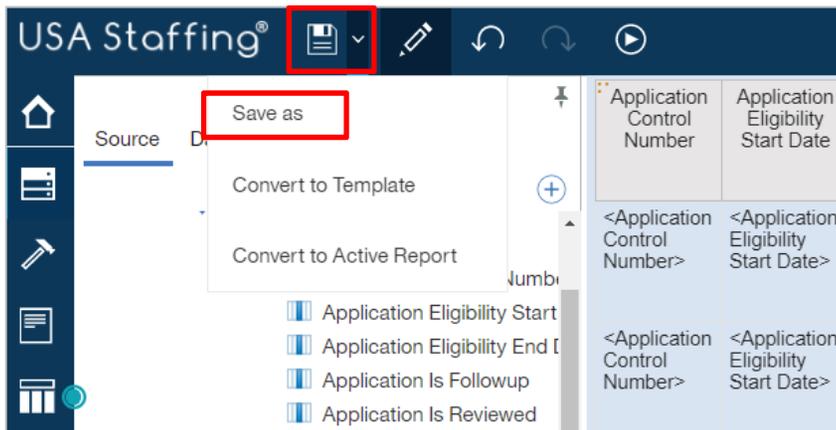
On-demand and customized toolbar that appears when an object is selected

Users can hover over any report element to view a brief description of the element

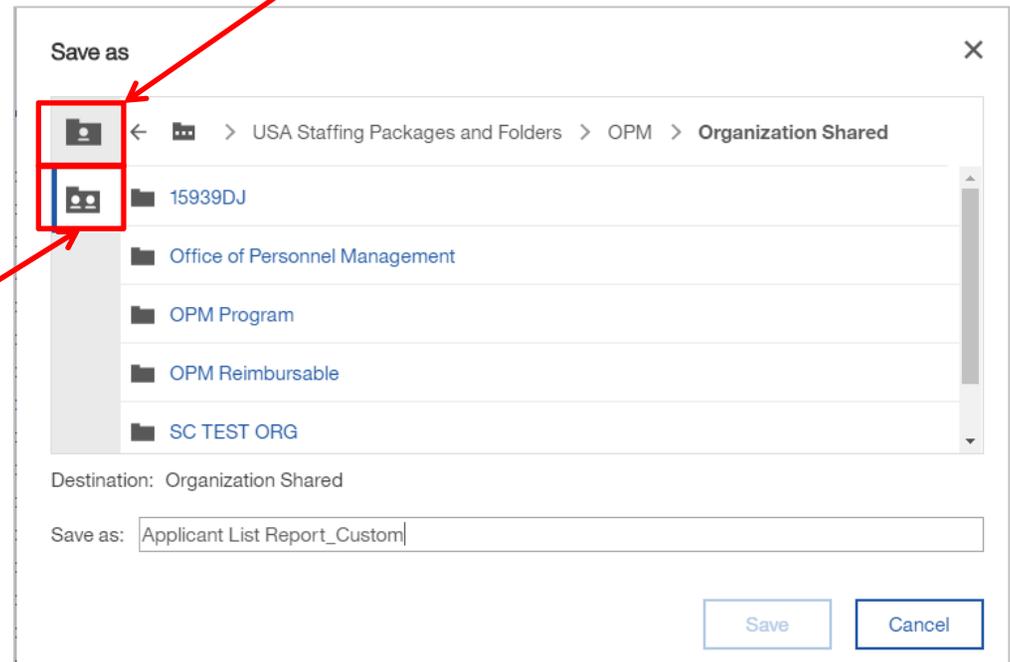


Saving a Report

Report Authors can save custom reports for future use in My Content or Team Content.



My Content
 Reports saved in My Content are only viewable by the user



Team Content
 Reports can also be saved in the Tenant (OPM, DOD, HHS, etc) folders in Team Content. Users can only save reports in folders in which they have access. Only users in that specific organization or office will be able to access the reports.



List Reports

A report that displays data as a series of columns; the most commonly used report type

The screenshot shows a configuration interface for a report. On the left, a 'Source' pane displays a tree view of data items under 'Staffing Reports'. On the right, a report table is shown with four columns. Red boxes highlight specific data items in the source pane, and red arrows indicate their placement into the report columns.

Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Internal Contact Name
<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Internal Contact Name>
<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Internal Contact Name>
<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Internal Contact Name>

Source pane items (highlighted with red boxes):

- Announcement Close Date
- Announcement Control Number
- Announcement External Contact Name
- Announcement Internal Contact Name
- Announcement Is Released
- Announcement Last Update Date/Time
- Announcement Maximum Salary
- Announcement Minimum Salary
- Announcement Not To Exceed
- Announcement Number
- Announcement Open Date

Drag data items from the Source pane and drop them into the list object to populate the report or double-click

Columns can be reordered, sorted, formatted, and grouped



Sorting and Grouping

Sorting

Columns can be easily sorted in ascending or descending order

Sort by a single column only

Sort by multiple columns

Drag and drop or double click on the columns in the order you want the report to sort by

The screenshot shows a report interface with columns: Announcement Number, Announcement Open Date, Announcement Close Date, and Announcement Status. A dropdown menu is open for the 'Announcement Number' column, showing options: Ascending, Descending, and Don't sort. A dialog box titled 'Grouping & sorting - Query1' is open, showing 'Data items' (Announcement Number, Announcement Open Date, Announcement Close Date, Announcement Status, Announcement Is Released) and 'Groups' (Overall, Detail Sort List with sub-items for Announcement Open Date and Announcement Number). Red boxes and arrows highlight the sorting options and the 'Edit Layout Sorting...' button.



Sorting and Grouping

Grouping **eliminates duplicates within a column** and instead displays the data item value one time for each possible value.

Grouping

List reports can be grouped by one or more columns

Indicates Grouped Columns

Announcement Status	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Is Released
<Announcement Status>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Is Released>

Announcement Status	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Is Released
Closed	DE-10000068-14-TA	09/03/2014	10/31/2014	Yes
Announcement 10000148	DE-10000006-14-TH	09/10/2014	10/21/2014	Yes
DE-10000011-14-TH	DE-10000006-14-TH	09/17/2014	10/31/2014	Yes
DE-10000011-14-TH	DE-10000011-14-TH	09/17/2014	10/31/2014	Yes
DEST-10000002-14-TH	DEST-10000002-14-TH	09/17/2014	11/28/2014	Yes
DEST-10000007-14-TH	DEST-10000007-14-TH	09/17/2014	10/31/2014	Yes
DE-10000004-14-TA	DE-10000004-14-TA	09/18/2014	01/31/2015	Yes
DEST-10000014-14-TH	DEST-10000014-14-TH	09/18/2014	10/31/2014	Yes
DEST-10000017-14-TH	DEST-10000017-14-TH	09/19/2014	10/31/2014	Yes
DEST-10000018-14-TH	DEST-10000018-14-TH	09/19/2014	10/31/2014	Yes

Grouping formatting will appear in all report output formats, with the exception of Excel Data.



Filtering

Filters **reduce data returned in the report based on specific criteria;**
includes a data item, operator, and criteria

Vacancy Number

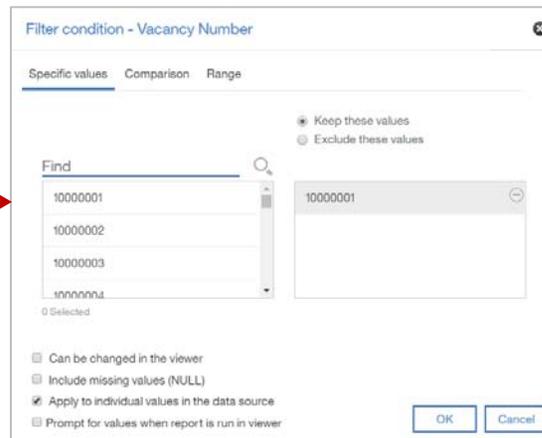
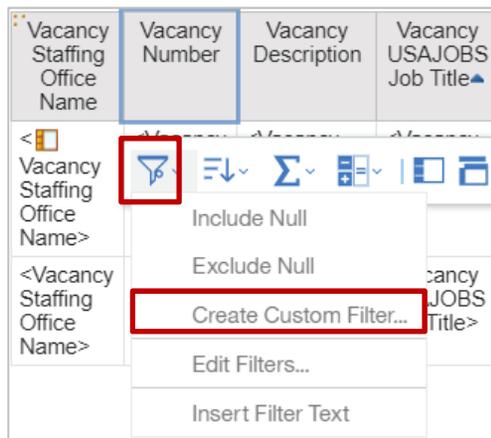
Data Item

=

Operator

10000001

Criteria

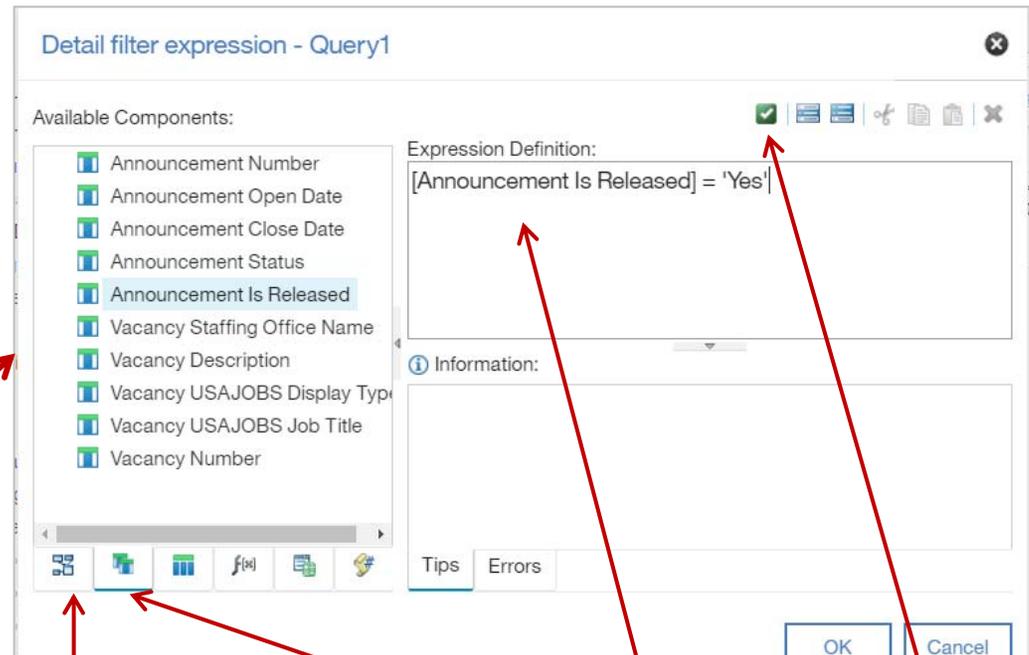
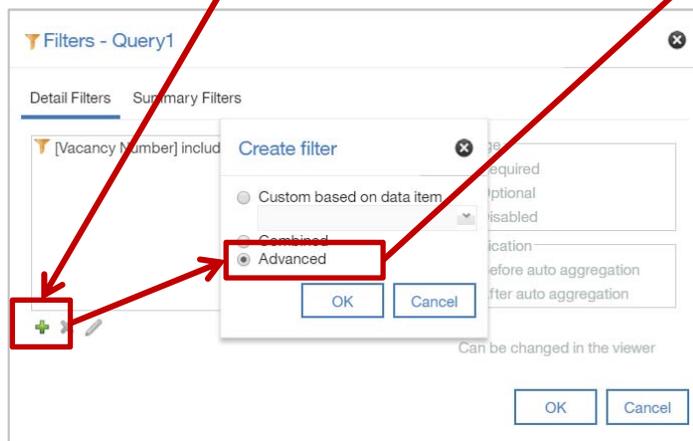
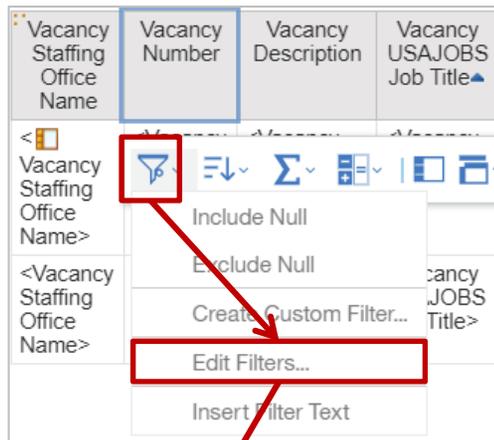


Always check active filters prior to running a report to ensure the correct filters are applied



Advanced Filtering

Report Authors can use **custom expressions** to develop more advanced filters



- Source**
Filter on any data item in the Namespace
- Data Items**
Filter on any data items in the query
- Filter Expression**
Use a variety of expressions to build custom filters
- Validate**
Validates expression on the report server to identify errors



Functions and Calculations

Functions and calculations **transform and/or create** new data items using logic or mathematical functions

Add a Query Calculation

Data item expression - Data Item1

Name:

Available Components:

- Announcement Minimum Salary
- Announcement Not To Exceed
- Announcement Number
- Announcement Open Date
- Announcement Part Time Hours
- Announcement Promotion Potential
- Announcement Released Date/Time
- Announcement Salary Type
- Announcement Status

Expression Definition:

```
_days_between([Applications].[Announcement].[Announcement Close Date],[Applications].[Announcement].[Announcement Open Date])
```

Information:

_days_between (date_expression1 , date_expression2)
Returns a positive or negative number representing the number of days between "date_expression1" and "date_expression2". If "date_expression1" < "date_expression2", then the result will be a negative number.

Example: `_days_between (2002-04-30 , 2002-06-21)`
Result: 52

Tips Errors

OK Cancel

Data Item Expression
Use a variety of expressions to transform and develop new data items

Information Pane
Help text that provides information on how to build expressions

Source
Develop expressions based on data items in the data model

Data Items
Data items in the query

Functions
Listing of available functions to utilize for data expressions



Shortcut: Highlight two column headers, click Insert Calculation and choose "Days Between..."

For the Vendor Specific Functions available for the USA Staffing Upgrade, view SQL Server functions



Aggregation

Aggregation **summarizes data** within a data item **at the lowest level of detail in the report**

Available Aggregate Functions

Default summary

- Total
- Count
- Count distinct
- Average
- Minimum
- Maximum

Median

Standard deviation

Variance

Calculated

Custom...

Aggregated at the Office Level

Vacancy Staffing Office Name	Announcement Open Days
OPM HR Boyers	10.50
OPM HR TRB	5.50

Aggregated at the Announcement Level

Vacancy Staffing Office Name	Vacancy Number	Vacancy Description	Vacancy USAJOBS Job Title	Vacancy USAJOBS Display Type	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Open Days
OPM HR Boyers	10000842	GS-4742-11	Hello Kitty	DE	DE-10000842-16-TA	12/02/2015	12/16/2015	14
	10003550	GS-0301-9	Night's Watchman	DE	DE-10003550-16-STG	08/08/2016	08/15/2016	7
OPM HR TRB	10018524	GM-0007-6	Howdy Doody	IMP	Test Customer-17-10018524	08/09/2017	08/09/2017	0
	10019637	GS-0201-11	HR Specialist	DE, ST, IMP	17-10019637-DESTIMP	09/18/2017	09/18/2017	0
	10002093	GS-0201-9	Human Resource Specialist	DE	DE-10002093-16-TA	03/17/2016	03/31/2016	14
	10011162	GS-0343-9/11	Program Analyst	DE, ST	TC-17-10011162-DEST	03/23/2017	03/31/2017	8



Parameterized Filters

Parameterized Filters allow report users to **easily filter reports** using standard filters and criteria **specific for a single run** of the report **without modifying the report**

The user is prompted to provide information to use in the parameterized filter

Please select one or more Organization Names:

Organization A

Organization B

Organization C

Parameterized Filter

[Task Vacancy Staffing Organization Name]

Data Item

in

Operator

?Organization Name?

Parameter

Report Output

Organization Name	Task Name	Days Late
Organization B	Review Applicants	6
Organization C	Issue Certificates	0
Organization C	Issue Certificates	15



Prompt Page Options

Users can create **prompt pages** to **provide more structure and customization to parameterized filters**, including the order in which prompts are presented, dependencies between parameterized filters, and alphabetization of listed options. Users can select from a **variety of prompt types**.

Please select 1 or more Organization Names (Required)

- ALJ Program Office
- American Battle Monuments - Potential Cust - Test
- ASMG Internal Release Testing
- Infinity Regression
- Office of Personnel Management
- OPM Program
- OPM Reimbursable
- Security Testing
- US Office of Personnel Management
- USAJOBS UAT Testing

[Select all](#) [Deselect all](#)

Next

Value Prompt

Allows user to pick from a list of values

Please select an Announcement Close Date Range (Required)

From:

Dec 20, 2016

12 : 00 AM

To:

Dec 20, 2016

11 : 59 PM

Date Prompt

Users select a date range

Please enter 1 or more Announcement Control Numbers (Required)

Keywords:

Input keywords here

Select all

Choices:

Select and Search Prompt

Allows user to search from a list of values in the database and select criteria

Please enter 1 or more Announcement Control Numbers (Required)

Choices:

Insert

Remove

[Select all](#) [Deselect all](#)

Text Box Prompt

Users directly enter the filter criteria

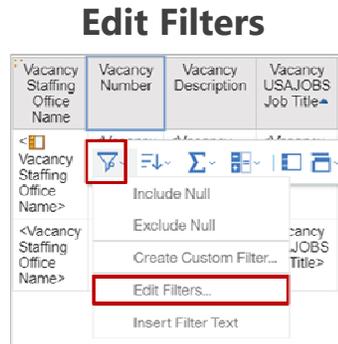


Prompt Page Design

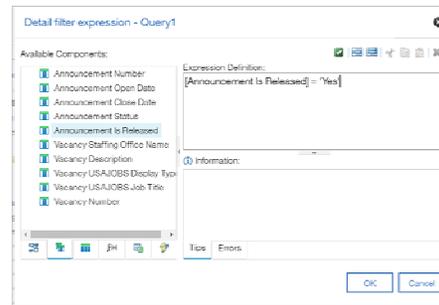
Users can design a prompt page or develop custom parameterized filters

Custom Parameterized Filter

The user writes Filter Expressions and Prompts are available on a basic page



Advanced Filter

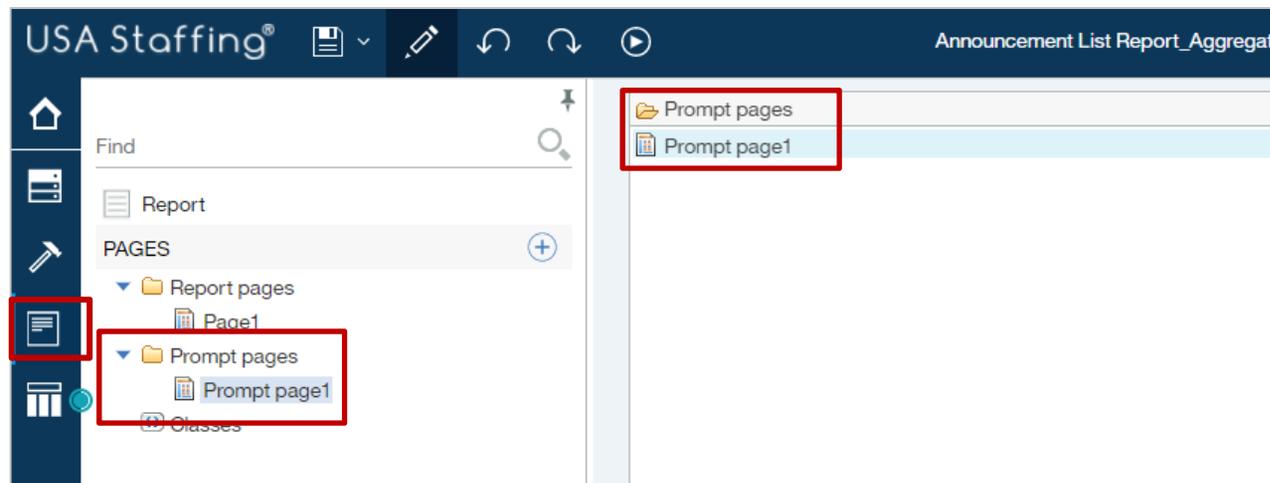


Write the Filter Expression

[Task Vacancy Staffing Organization Name] in ?Organization?

Prompt Page Design

The Cognos wizard drives the process of creating prompts

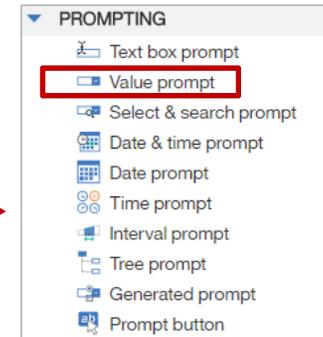
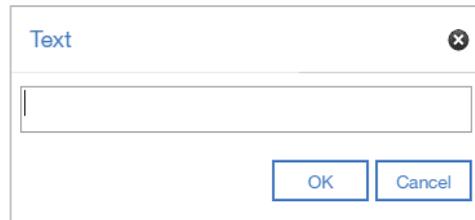
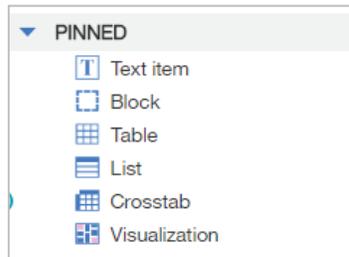


- Click on the Pages Icon
- Click on the Prompt Pages Folder and Click the Plus Button to add a Prompt Page
- Click on Prompt Page 1 to start creating prompts



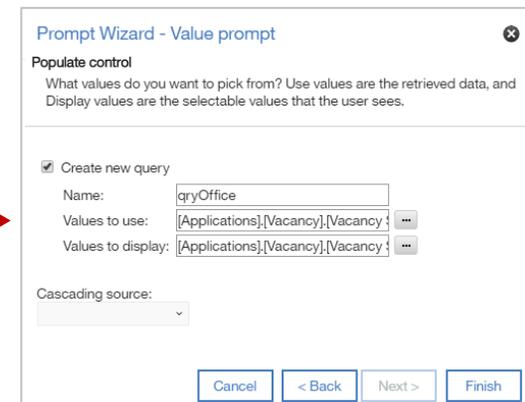
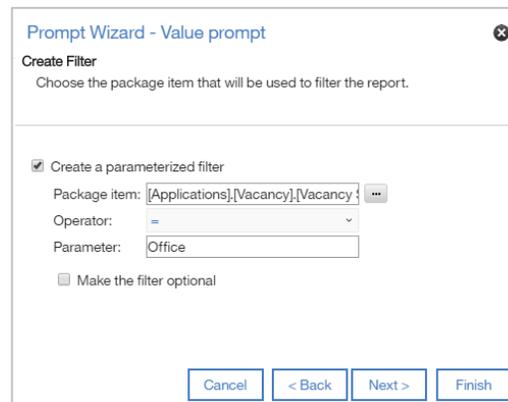
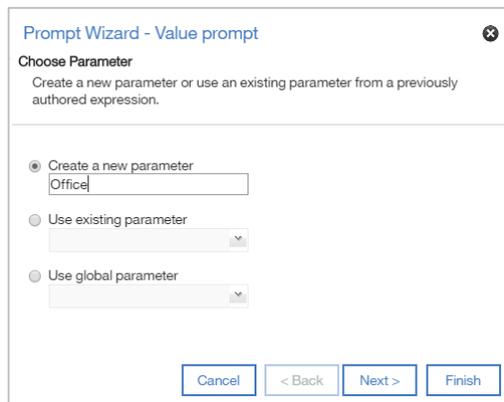
Prompt Page Design

On a prompt page, select a Table to serve as the container for Instructions and Tools



Drag over a Text Item into the table create parameter instructions

Drag a Value Prompt into a table cell



Create a Parameter

Create a new parameter or use an existing one. This is what the user will use to filter the report

Create the Filter

Select the data item to be used for the filter. The "In" operator allows for multi-select; the "=" operator is single-select

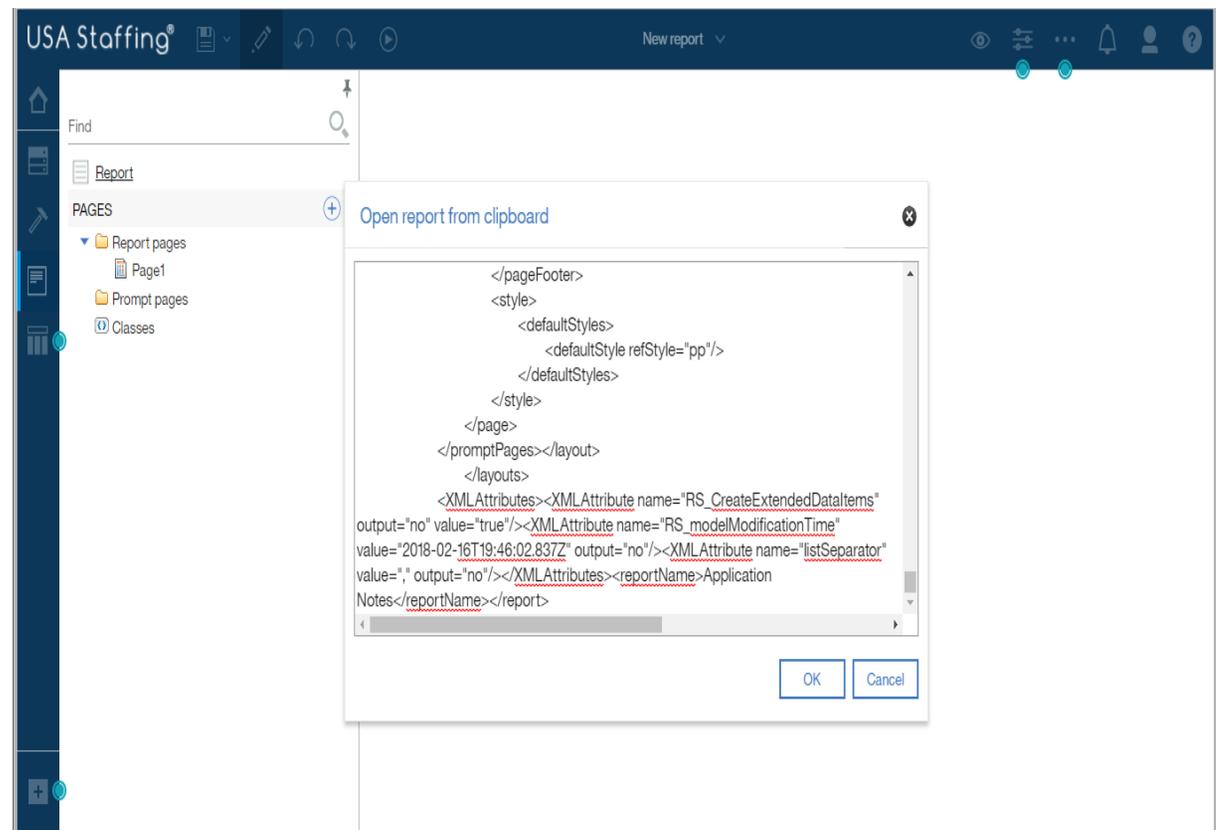
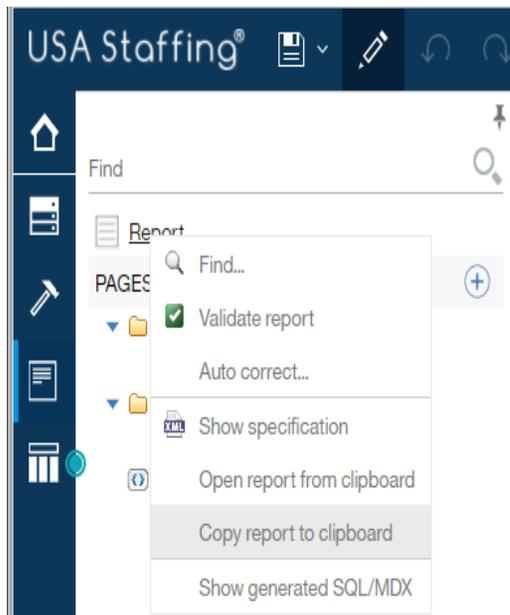
Decide what data to display

Name the new query the same as the parameter; "Values to use" is the data used to filter; "Values to display" is what the user will select from



Copy Report To/From XML

Cognos allows users to **save report specifications in XML** format and **reconstitute the report in another location** (e.g., Stage, Production, another office) using the XML specifications.





Advanced Topics



In-page Prompts

Users can build **prompts in the report** so that users can **re-prompt reports in HTML output**

The screenshot shows the USA Staffing interface. At the top, there is a navigation bar with the text 'USA Staffing' and several icons. Below this, a prompt is displayed: 'Please select a Customer Name: Please select an Announcement Status:'. This prompt contains two dropdown menus: 'Customer A' and 'Closed'. A 'Next' button is located below the dropdowns. The prompt area is highlighted with a red border. Below the prompt is a table with the following columns: Vacancy, Customer Name, Vacancy Number, Announcement Number, Announcement Open Date, Announcement Close Date, and Announcement Status. The table contains 15 rows of data, all with 'Closed' status.

Vacancy	Customer Name	Vacancy Number	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Status
Customer A	Customer A	10000002	DEST-10000002-14-TH	09/17/2014	11/28/2014	Closed
Customer A	Customer A	10000004	DE-10000004-14-TA	09/18/2014	01/31/2015	Closed
Customer A	Customer A	10000023	DE-10000023-14-TA	03/01/2016	03/31/2016	Closed
Customer A	Customer A	10000035	Onboarding9921	09/19/2014	09/23/2014	Closed
Customer A	Customer A	10000053	US-Demo	09/24/2014	09/30/2014	Closed
Customer A	Customer A	10000064	US Demo JOA1	09/25/2014	09/30/2014	Closed
Customer A	Customer A	10000067	ST-10000067-14-BKC	09/26/2014	10/31/2014	Closed
Customer A	Customer A	10000068	DE-10000068-14-TA	09/03/2014	10/31/2014	Closed
Customer A	Customer A	10000070	ST-10000070-14-BKC	09/29/2014	10/31/2014	Closed
Customer A	Customer A	10000072	DESTIMP-10000072-14-TH	09/30/2014	10/10/2014	Closed
Customer A	Customer A	10000075	ST-10000075-14-BKC	09/30/2014	10/31/2014	Closed
Customer A	Customer A	10000087	DEIMP-10000087-15-TH	10/01/2014	10/31/2014	Closed
Customer A	Customer A	10000115	DEST-10000115-15-ST	10/14/2014	10/31/2014	Closed

- In-page prompts can be used in conjunction with Prompt Pages
- In-page prompts only work when running HTML output



Exercise 9: Create In-page Prompts

Create a new report that includes in-page prompts

1. Click on the *New* Icon (+ button) in the bottom left corner of the Welcome screen. Select *Report*
2. Select a Blank Template. Click OK
3. In the Source pane, click on the *Add Report Data* Icon (+ button). Select *USA Staffing Packages and Folders, Staffing Reports*. Click *Open*
4. In the Report presentation area, click on the + button icon. Select *List*. Click OK in the Object and Query Name box.
5. In the Source pane, expand *Presentation View, Applications Namespace, Announcement Detail* Folder, *Announcement* Query Subject
6. Drag (or double-click) the following Query Items into the List object:
 - *Announcement Number*
 - *Announcement Close Date*
 - *Announcement Open Date*
 - *Announcement Status*
7. Click on the Toolbox Icon, then drag and drop a table into the report page, above the List object. Specify that the table should contain 3 columns and 2 rows.



Exercise 9: Create In-page Prompts

Create a new report that includes in-page prompts

8. In the Source pane, *Applications* Namespace, expand *Vacancy Detail* Folder, *Vacancy Query* Subject. Drag (or double-click) the *Vacancy Number* Query Item into the List object
9. In the Source pane, *Applications* Namespace, *Vacancy Detail* Folder, expand the *Vacancy Customers* Query Subject. Drag (or double-click) the *Vacancy Customer Name* Query Item into the List object
10. Add prompt instructions in the top row of the table by clicking on the *Toolbox* then dragging and dropping *Text items* into the top cell of the first two columns. Text in the 1st column should read **Please select a Customer Name**. Text in the 2nd column should read **Please select an Announcement Status**.
11. From the *Toolbox*, drag and drop a *Value prompt* into the cell beneath the instructions for the *Vacancy Customer* prompt. Use the *Prompt Wizard* to create the in-page prompt for *Vacancy Customer Name*.
 - Create a new parameter = Customer Name
 - Create a parameterized filter
 - Package item = *Applications* → *Vacancy Detail* → *Vacancy Customers* → *Vacancy Customer Name*
 - Operator = in
 - Make the filter optional = checked/yes
 - Create a new query = yes; name = Customer Name



Exercise 9: Create In-page Prompts

Create a new report that includes in-page prompts

12. From the *Toolbox*, drag and drop a *Value prompt* into the cell beneath the instructions for the *Announcement Status* prompt. Use the *Prompt Wizard* to create the in-page prompt for *Announcement Status*.
 - Create a new parameter = *Announcement Status*
 - Create a parameterized filter
 - Package item = *Applications* → *Announcement Detail* → *Announcement* → *Announcement Status*
 - Operator = in
 - Make the filter optional = checked/yes
 - Apply filter = *Query1*
 - Create a new query = yes; name = *Announcement Status*
13. From the *Toolbox*, drag and drop a *Prompt button* into the bottom cell of the third column of the in-page prompt table
14. With the newly created *Prompt button* selected, click the *Show properties* button in the top right of the page. Change the *Type* of the *Prompt button* to *Reprompt*.



Exercise 9: Create In-page Prompts

Create a new report that includes in-page prompts

13. Click the *Run Options* Icon. Select *Run HTML* to view the report. Select one or more of the options for Office Name and a range of dates for Announcement Open Date Range. Click OK.
14. On the report output page, the prompts are populated with the available options. Make selections in each prompt, then click *Reprompt* to update the report output.
15. Close the Cognos Viewer browser window to return to your report. Save the report in My Content as *Announcement Status Report_In-page Prompts* and close the report.



Exercise 9: Create In-page Prompts

Steps 1 - 10

USA Staffing® New report *

Please select a Customer Name: Please select an Announcement Status:

Vacancy Customer Name	Vacancy Number	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Status
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>

Find

- Text item
- Block
- Table
- List
- Crosstab
- Visualization

TEXTUAL

LAYOUT

DATA CONTAINER

PROMPTING

ADVANCED



Exercise 9: Create In-page Prompts

Steps 11 - 12

USA Staffing® New report *

Find

- PINNED
 - Text item
 - Block
 - Table
 - List
 - Crosstab
 - Visualization
- TEXTUAL
- LAYOUT
- DATA CONTAINER
- PROMPTING
 - Text box prompt
 - Value prompt**
 - Select & search prompt
 - Date & time prompt
 - Date prompt
 - Time prompt
 - Interval prompt
 - Tree prompt
 - Generated prompt
 - Prompt button

Please select a Customer Name:

Please select an Announcement Status:

Vacancy Customer Name	Vacancy Number	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Status
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>



Exercise 9: Create In-page Prompts

Step 13

USA Staffing® New report * ▾

Find

- PINNED
 - Text item
 - Block
 - Table
 - List
 - Crosstab
 - Visualization
- TEXTUAL
- LAYOUT
- DATA CONTAINER
- PROMPTING
 - Text box prompt
 - Value prompt
 - Select & search prompt
 - Date & time prompt
 - Date prompt
 - Time prompt
 - Interval prompt
 - Tree prompt
 - Generated prompt
 - Prompt button**

Please select a Customer Name:

Please select an Announcement Status:

Vacancy Customer Name	Vacancy Number	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Status
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>

Next >



Exercise 9: Create In-page Prompts

Step 14

The screenshot shows the USA Staffing report design tool. The main workspace contains two prompts: "Please select a Customer Name:" and "Please select an Announcement Status:". A "Reprompt" button is visible on the right. The configuration panel on the right is open, showing the "Prompt button" settings. Red boxes highlight the "Type" dropdown menu, the "Reprompt" option within it, and the "Reprompt" button in the workspace. The configuration panel includes sections for CONDITIONAL, COLOR & BACKGROUND, FONT & TEXT, POSITIONING, and MISCELLANEOUS.

Vacancy Customer Name	Vacancy Number	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Status
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>
<Vacancy Customer Name>	<Vacancy Number>	<Announcement Number>	<Announcement Open Date>	<Announcement Close Date>	<Announcement Status>



Exercise 9: Create In-page Prompts

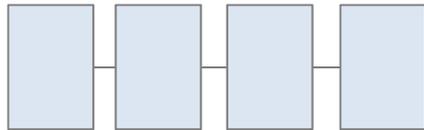
Steps 15 - 17

The screenshot shows the USA Staffing application interface. At the top, there is a dark blue header with the USA Staffing logo and a 'New report' dropdown menu. Below the header, there are two panels. The top panel shows a search interface with two dropdown menus: 'Please select a Customer Name:' and 'Please select an Announcement Status:'. The 'Customer Name' dropdown is open, showing a list of options including 'Account Management Branch', 'Admin Office ASMG -A1', 'Air Force NAF', 'ALJ Exam', and 'AM Team - 2,'. The 'Announcement Status' dropdown is also open, showing options like 'Closed', 'Closed - Never Released', 'Open', 'Open - Pending Release', and 'Pending Open Date'. A red box highlights the 'Open' option in the status dropdown, and a red arrow points from this box to a 'Reprompt' button. Another red arrow points from the 'Account Management Branch' option in the customer name dropdown to the same 'Reprompt' button. Below these dropdowns is a table with columns: 'Vacancy Customer Name', 'Vacancy Number', 'Announcement Number', 'Announcement Open Date', 'Announcement Close Date', and 'Announcement Status'. The table contains several rows of data, including one with 'Account Management Branch \ 10001886' and 'TEST-10001886-RJ'. The bottom panel shows a similar search interface, but with the 'Open' option in the status dropdown highlighted in blue. A red arrow points from the 'Reprompt' button in the top panel to this 'Open' option. Below this panel is a table with one row: 'Account Management Branch \ 10073899' and '19-10073899-DE'.



Joins

A join **defines the relationship** between two queries that contain **information from different database tables** and enables data to be **combined into one dataset**



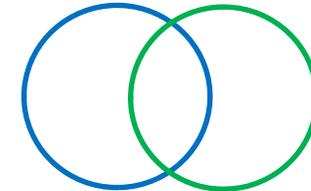
Tables

In a relational database, data items are organized in distinct tables



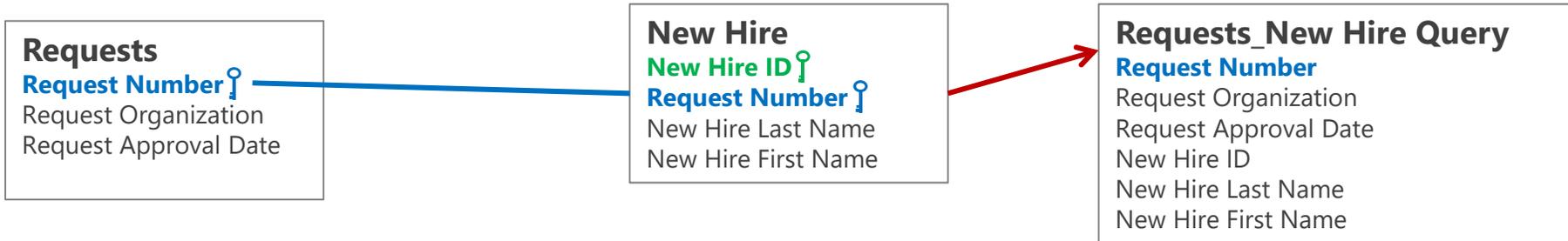
Keys

Keys are unique data items that can be used to connect tables to retrieve common data items



Joins

Statements used to combine data from different tables into one consolidated dataset



In a query, the **Request Number Key** can be used to **Join** the Requests and New Hire Tables.

- Inner Join – Will only return data when Request Number exists in both tables
- Left Outer Join – Will return all Request data even if matching Request Number doesn't exist in the New Hire table

As a result of the Join, data items from both tables can be combined into one dataset



Exercise 10: Create a Join

Create a new report that uses a join to combine data from the Certificates and New Hires namespaces

1. Click on the New Icon (+ button) in the bottom left corner of the Welcome screen. Select *Report*
2. Select a Blank Template. Click OK
3. In the Source pane, click on the Add Report Data Icon (+ button). Select *USA Staffing Packages and Folders, Staffing Reports*. Click *Open*
4. Click on the *Queries* icon, click the *Queries* folder, then click the + icon to create *Query1*. Right-click on *Query1*, select *Rename query*, and rename the query as **CertificatesData**.
5. Double-click on the *CertificatesData* to view the query, then click the *Source* icon. Expand the *Presentation View, Certificates* Namespace. Double-click or drag and drop the following query items into the list of *Data Items* in the query.

Folder	Query Subject	Query Item
Certificate Detail	Certificate	Certificate Number
		Certificate Issue Date
	Certificate Applications	Certificate Application Number

6. Click on the *Queries* icon, click the *Queries* folder, then click the + icon to create a new *Query1*. Right-click on *Query1*, select *Rename query*, and rename the query as **NewHiresData**.



Exercise 10: Create a Join

Create a new report that uses a join to combine data from the Certificates and New Hires namespaces

- 7. Double-click on the *NewHiresData* to view the query, then click the *Source* icon. Expand the *Presentation View, New Hires Namespace*. Double-click or drag and drop the following query items into the list of *Data Items* in the query.

Folder	Query Subject	Query Item
<i>New Hire Detail</i>	<i>New Hire</i>	<i>New Hire Application Number</i>
		<i>New Hire Name</i>
		<i>New Hire Number</i>
		<i>New Hire Position Title</i>
		<i>New Hire Series</i>

- 8. Click on the *Queries* icon, click the *Queries* folder, then click on the *Toolbox* icon. Drag and drop a *Join* below the two existing queries.
- 9. In the dotted boxes that appear with the *Join*, drag and drop the *CertificatesData* and *NewHiresData* queries.
- 10. Double-click on the *Join* (two yellow boxes connected by a black line) to define the relationship between the *CertificatesData* and *NewHiresData* queries.



Exercise 10: Create a Join

Create a new report that uses a join to combine data from the Certificates and New Hires namespaces

11. Click *New Link*, then click on *Certificate Application Number* in the *CertificatesData* query and *New Hire Application Number* in the *NewHiresData* query. Ensure there is a line connecting the two data items in the separate queries.
12. Define the *Cardinality* and *Operator* of the *Join*. The *Relationship impact* is described below the *Cardinality* and *Operator*. Ensure the relationship is as follows, then click OK
 - Each "NewHiresData" has one or more "CertificatesData".
 - Each "CertificatesData" has zero or more "NewHiresData" (outer join).
13. Right-click on Query1 (the new query on the left side of the join), select *Rename query*, and rename the query **CertificatesNewHiresData**. Once renamed, double click the query to open it.
14. Click the *Source* icon. Now, instead of the *Staffing Reports* data model, the two queries that are being joined are shown as the data source. From the list of available data items, drag and drop (or double-click) the following data items to add them to the *CertificatesNewHiresData* query:
 - *Certificate Number*
 - *Certificate Issue Date*
 - *Certificate Application Number*
 - *New Hire Number*
 - *New Hire Name*
 - *New Hire Series*
 - *New Hire Position Title*



Exercise 10: Create a Join

Create a new report that uses a join to combine data from the Certificates and New Hires namespaces

15. Click the *Pages* icon, then click *Page1* to view the report page. From the *Toolbox*, add a *List* to the report page. Name the list **List1** and select the **CertificatesNewHiresData** query as the *Query Name*. Click OK
16. Click on the *Source* icon, then click on *Data items* to view the data items in the available queries. From the **CertificatesNewHiresData** query, drag and drop (or double-click) the following data items into the *List*.
 - *Certificate Number*
 - *Certificate Issue Date*
 - *Certificate Application Number*
 - *New Hire Number*
 - *New Hire Name*
 - *New Hire Series*
 - *New Hire Position Title*
17. Sort the report by *Certificate Number* (ascending).
18. Click the *Run Options* Icon. Select *Run HTML* to view the report
20. Close the Cognos Viewer browser window to return to your report. Save the report in My Content as *Certificates with New Hire Data_Join*



Exercise 10: Create a Join

Steps 1 - 5

The image shows two screenshots of the USA Staffing software interface. The left screenshot shows the 'Queries' section with 'Query1' selected. A red box highlights the 'Query1' icon in the 'QUERIES' list, and another red box highlights the 'Query1' icon in the top toolbar. A red arrow points from the toolbar icon to the 'Query1' icon in the list. A context menu is open over 'Query1', with a red box highlighting the 'Rename query' option. The right screenshot shows the 'Data items' section. A red box highlights the 'Data items' header, and another red box highlights the 'Certificate Number', 'Certificate Issue Date', and 'Certificate Application Number' items. A red arrow points from the 'Certificate Issue Date' item in the list to the 'Data items' header.



Exercise 10: Create a Join

Steps 6 - 7

The screenshot illustrates the steps to create a join in the USA Staffing application. The main interface shows a report titled 'CertificatesData'. In the 'QUERIES' pane, a '+' icon is used to add a new query. A dialog box prompts for a 'Name' and 'Value'. The 'Value' field is populated with 'NewHiresData'. Below the dialog, a tree view shows the data source structure, with 'New Hire' expanded to show various fields. On the right, the 'Data Items' pane lists the fields from the joined data source, including 'New Hire Application Number', 'New Hire Name', 'New Hire Number', 'New Hire Position Title', and 'New Hire Series'.



Exercise 10: Create a Join

Steps 8 - 9

The screenshot shows the USA Staffing software interface. On the left, a vertical navigation bar contains icons for Home, Reports, and a highlighted Hammer icon. The main area is divided into a 'Queries' pane on the left and a data model diagram on the right. The 'Queries' pane lists options: Query, Join, Union, Intersect, Except, SQL, and MDX. The 'Join' option is highlighted with a red box, and a red arrow points from it to a join symbol in the data model diagram. The data model diagram shows three tables: 'CertificatesData' (top left), 'NewHiresData' (middle left), and another 'CertificatesData' (right). Arrows indicate relationships between these tables. A 'Query1' table is also shown, connected to the join symbol. A red box highlights the 'Join' option in the menu, and another red box highlights the join symbol in the diagram. A third red box highlights the 'CertificatesData' table on the right, and a fourth red box highlights the 'CertificatesData' table at the bottom right of the diagram.



Exercise 10: Create a Join

Steps 10 - 13

CertificatesData

NewHiresData

Query1

Join relationships

CertificatesData

- Certificate Number
- Certificate Issue Date
- Certificate Application Number

NewHiresData

- New Hire Application Number
- New Hire Name
- New Hire Number
- New Hire Position Title
- New Hire Series

Cardinality: 1.n Operator: = Cardinality: 0..n

Relationship impact: Each "NewHiresData" has one or more "CertificatesData".
Each "CertificatesData" has zero or more "NewHiresData" (outer join).

Convert to expression... OK Cancel



Exercise 10: Create a Join

Step 14

The screenshot shows the USA Staffing software interface during the configuration of a data join. The top navigation bar includes the USA Staffing logo and a 'New report *' dropdown. The left sidebar contains navigation icons. The main workspace is divided into a 'Source' tab and a 'Data items' pane. The 'Source' tab shows a 'Join' operation with two data sources: 'CertificatesData' and 'NewHiresData'. The 'CertificatesData' source includes the following fields: Certificate Number, Certificate Issue Date, and Certificate Application Number. The 'NewHiresData' source includes the following fields: New Hire Application Number, New Hire Name, New Hire Number, New Hire Position Title, and New Hire Series. The 'Data items' pane on the right lists the selected fields: Certificate Number, Certificate Issue Date, Certificate Application Number, New Hire Number, New Hire Name, New Hire Series, and New Hire Position Title. Red boxes and arrows highlight the configuration steps.



Exercise 10: Create a Join

Step 15

The screenshot shows the USA Staffing software interface. The top navigation bar includes the OPM logo, 'OPM.GOV', and 'USA Staffing'. The main area is divided into a left sidebar, a central workspace, and a right-hand 'Data Items' panel.

Left Sidebar: Contains navigation icons for Home, Report, and Pages. The 'Pages' icon is highlighted with a red box. Below it, a tree view shows 'Report pages' expanded, with 'Page1' highlighted by a red box. A red arrow points from 'Page1' to the 'List' widget in the workspace.

Central Workspace: Shows a 'PINNED' section with a list of widget types: Text item, Block, Table, List, Crosstab, and Visualization. The 'List' widget is highlighted with a red box. A red arrow points from the 'List' widget to the 'Object and query name' dialog.

Right Panel (Data Items): Lists several data items: Certificate Number, Certificate Issue Date, Certificate Application Number, New Hire Number, New Hire Name, New Hire Series, and New Hire Position Title.

Object and query name Dialog: A small window with the title 'Object and query name'. It contains fields for 'Name' (List1), 'Query Name' (Query1), and a list of data items. 'CertificatesNewHiresData' is highlighted with a red box. A red arrow points from the 'List' widget to this highlighted item.



Exercise 10: Create a Join

Steps 16 - 17

The screenshot shows the USA Staffing interface with a data table and a sorting menu. Red boxes and arrows highlight the 'Data items' section in the left sidebar, the 'Certificate Number' field in the table, and the 'Sort in Output' dropdown menu.

Data items list:

- CertificatesData
 - Certificate Number
 - Certificate Issue Date
 - Certificate Application Number
- NewHiresData
 - New Hire Application Number
 - New Hire Name
 - New Hire Number
 - New Hire Position Title
 - New Hire Series
- CertificatesNewHiresData
 - Certificate Number
 - Certificate Issue Date
 - Certificate Application Number
 - New Hire Number
 - New Hire Name
 - New Hire Series
 - New Hire Position Title

Table Data:

Certificate Number	Certificate Issue Date	Certificate Application Number	New Hire Number	New Hire Name	New Hire Series	New Hire Position Title
<Certificate Number>	<Certificate Issue Date>	<Certificate Application Number>	<New Hire Number>	<New Hire Name>	<New Hire Series>	<New Hire Position Title>
<Certificate Number>	<Certificate Issue Date>	<Certificate Application Number>	<New Hire Number>	<New Hire Name>	<New Hire Series>	<New Hire Position Title>
<Certificate Number>	<Certificate Issue Date>	<Certificate Application Number>	<New Hire Number>	<New Hire Name>	<New Hire Series>	<New Hire Position Title>

Sort Options:

- Sort in Output
- Ascending
- Descending
- Don't sort
- Other Sort Options
- Edit Layout Sorting...



Exercise 10: Create a Join

Steps 18 - 20

USA Staffing® New report ▾

Certificate Number	Certificate Issue Date	Certificate Application Number	New Hire Number	New Hire Name	New Hire Series	New Hire Position Title
20140621-NW-001	06/21/2014	A5362-6098				
20140621-NW-001	06/21/2014	A0198-5005				
20140625-WB-001	06/25/2014	A9481-2520				
20140625-WB-001	06/25/2014	A5273-8460	HK3Z9-ZOGA	May, Lilly	1810	Background Investigator
20140625-WB-002	06/25/2014	A4X1Y-N9CO				
20140625-WB-003	06/25/2014	A4X1Y-N9CO				
20140625-WB-003	06/25/2014	A1321-5162				
20140625-WB-003	06/25/2014	A5674-6175				
20140703-NW-001	07/03/2014	A0198-5005				
20140703-NW-001	07/03/2014	A5362-6098				
20140703-NW-001	07/03/2014	A4716-3682				
20140708-WA-001	07/08/2014	A9534-1247	H9I7Z-XPAV	Rabbiton, Alice	0343	Program Analyst
20140708-WA-001	07/08/2014	A9534-1247	HD3J6-9DZG	Rabbiton, Alice	0343	Program Analyst
20140708-WA-002	07/08/2014	A4341-3650				
20140708-WA-002	07/08/2014	A3385-5955	H9D7S-CLE1	Montara, Lola	0201	HR Specialist
20140708-WA-002	07/08/2014	A8933-7881				
20140708-WA-003	07/08/2014	A4954-1683	HHDWO-Z7KU	Brewster, Malcom	0201	HR Specialist
20140708-WA-003	07/08/2014	A4698-0994				
20140708-WA-004	07/08/2014	A8391-5813				
20140708-WA-004	07/08/2014	A5106-3051				



Report Schedules

Cognos allows users to **schedule custom reports to run at specified intervals**

Report Scheduling

The user creates the report schedule from the report's Properties

Home

Search

My content

Team content

Recent

Program Office

- Applicant List by Vaca ... Rating & Eligibilities
10/23/2018 5:43 PM
- Total Selections by Eligibility Status**
5/31/2016 10:31 AM
- User License Dashboard
11/29/2017 9:19 AM

Run as

Edit report

Create report view

View versions

Properties

Copy or move

Create shortcut

Embed

Total Selections by Eligibility Status

Owner: Unknown

Created: 3/11/2016 10:17 AM

Modified: 5/31/2016 10:31 AM

Type: Report

General Report **Schedule**

+ New

Navigate to the desired report, click on the ellipses and select Properties

From Properties, click Schedule, then New

A report can only have one schedule, and only custom reports can be scheduled. If multiple schedules are needed or users want to schedule a standard report, create a report view and set up a schedule for the report view.



Report Schedules

Cognos allows users to **schedule custom reports to run at specified intervals**

Users specify the frequency, period of time the schedule is active, format, and delivery options.

If the report includes prompts, the user must specify the values to use.

Prompts Set values >

Languages English (United States) >

PDF Select

Create Cancel

< Back Create schedule

Schedule

Period

Start 2018-10-30

End 2019-01-30

No end date

Run every 1 week(s)

On day(s) M T W T F S S

Options

Format HTML >

Delivery Save >

Format

HTML

PDF

Excel

Excel Data

CSV

XML

Users can specify to receive an email notification when the scheduled report completes in the Delivery options



Report Schedules

Cognos allows users to **schedule custom reports to run at specified intervals**

Saved Report Outputs

To view saved report outputs, locate the report then choose View versions

- ▶ Run as
- ✎ Edit report
- 📄 Create report view
- 📄 View versions**
- ⚙️ Properties
- 📄 Copy or move
- 📄 Create shortcut
- ⌂ Embed
- 🔗 Share
- 🗑️ Delete

The screenshot shows the 'Versions' panel in Cognos. It has tabs for 'Versions' and 'Archives'. Below the tabs is a 'Show all history' checkbox. A list of report versions is displayed, with one entry highlighted in a red box: 'Oct 30, 2018 10:57 AM'. Below this entry is the text 'EN-US' and a globe icon. To the right of the entry are an information icon and a right arrow icon. A red arrow points from the 'View versions' menu item to this highlighted entry.

A list of dates run will appear. Click on the desired run dates, then click the report output to open



Report Subscriptions

Cognos allows users to **subscribe to any report** to have report **output delivered** at specified intervals

The screenshot shows the 'Cognos Reports List' interface with a 'Subscribe' dialog box open. The dialog has a title bar 'Cognos Reports List' and navigation icons. The main content area is titled 'Subscribe' and contains the following fields:

- When do you want to receive this report?
- On day(s): A row of seven buttons labeled M, T, W, T, F, S, S. The 'W' button is highlighted.
- Time: A dropdown menu showing '3:13 PM'.
- Format: A dropdown menu showing 'HTML'.
- Delivery: A dropdown menu showing 'Save'.
- Prompts: A dropdown menu showing '4 schedule prompt values'.

At the bottom of the dialog are two buttons: 'Create' (in blue) and 'Cancel' (in white with a blue border).

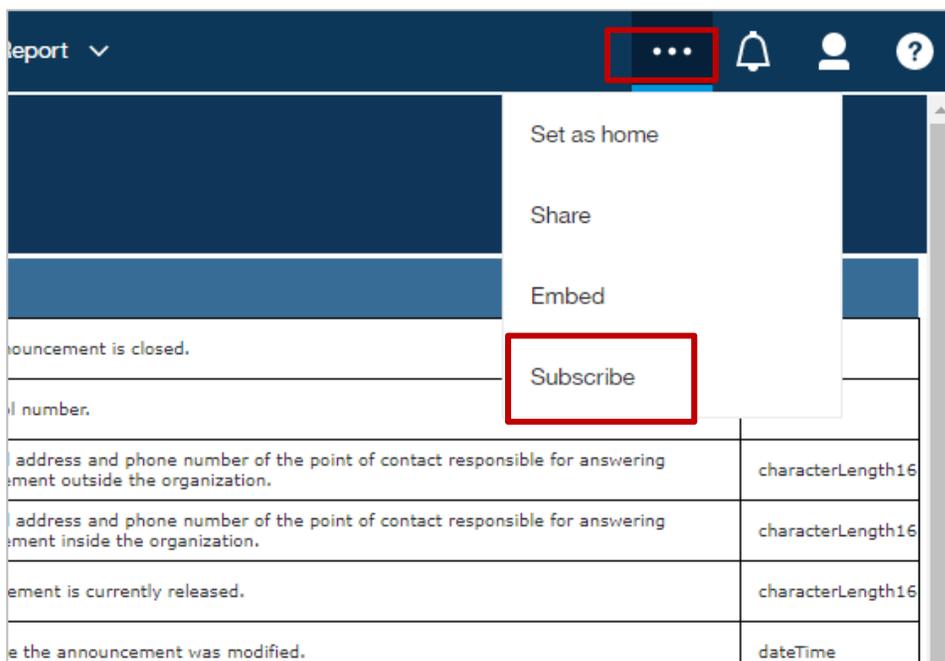
- Report subscriptions save report output in your My Content
- Users first have to run the report before subscribing; Cognos saves the parameter values
- After a report is scheduled, users are notified each time the report is run

The use of Subscriptions is recommended rather than Scheduling as it provides greater flexibility and minimizes the potential that report output will be saved over the report itself.



Report Subscriptions

Cognos allows users to **subscribe to any report** to have report **output delivered** at specified intervals



- To subscribe to a report, first run the report.
- If the report has prompts the prompt values you select will be remembered in your subscription and used every time the report is run.
- From the report output click on the ellipsis, then click on Subscribe.



Report Subscriptions

Subscribe

When do you want to receive this report?

On day(s) M T W T F S S

Time 🕒 2:19 PM

Format 🌐 HTML >

Delivery 📄 Save >

Prompts 1 schedule prompt value >

Create Cancel

Users are unable to send reports via email due to current security settings

< Back Format

🌐 HTML

📄 PDF

📊 Excel

📊 Excel Data

📄 CSV

📄 XML

Done

< Back Delivery

✉️ Send report by email

🖨️ Print report

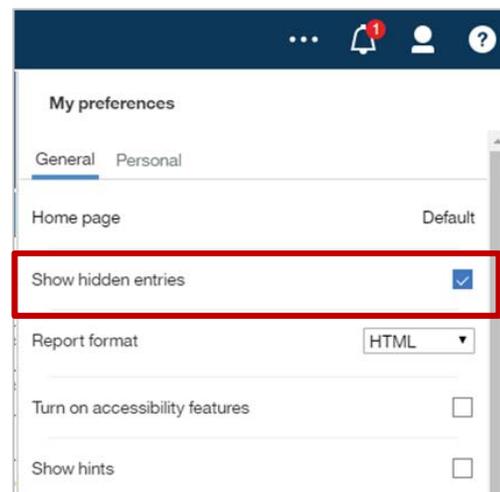
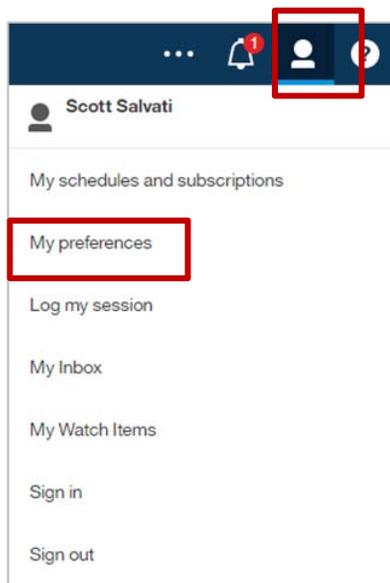
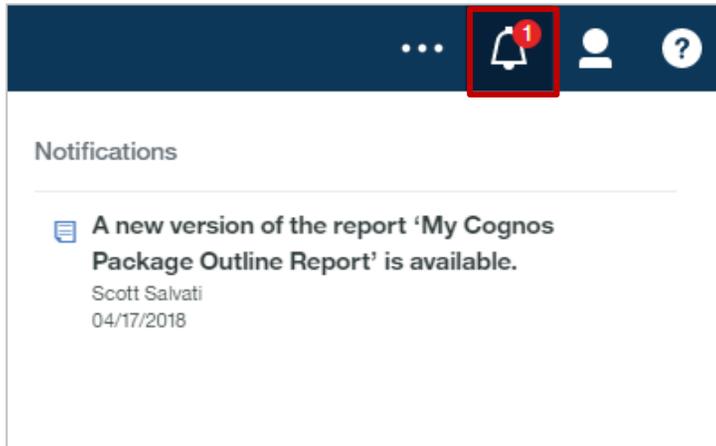
📄 Save report

Done

- A menu pops up allowing you to pick which day(s) of the week to run the report and what time to run it.
- If you choose Format you can pick one or more report output format(s)
- If you choose Delivery you can choose how to receive the report results
- Prompts will allow you to view the prompt values the report will run with, but you can't change them.



Report Subscriptions



- You will receive a notification in Cognos when the report you subscribed to runs.
- Click on the bell icon to see the notification
- Subscribed reports are stored in a hidden "Subscriptions" folder in My Content
- To display the hidden folder, click on the user icon, select My Preferences, and check the Show hidden entries option





Report Subscriptions

- To manage subscriptions, click on My schedules and subscriptions from the User icon
- Users can view Upcoming, Current, and Past subscriptions

Scott Salvati

- My schedules and subscriptions
- My preferences
- Log my session
- My Inbox
- My Watch Items
- Sign in
- Sign out

My schedules and subscriptions

Schedule

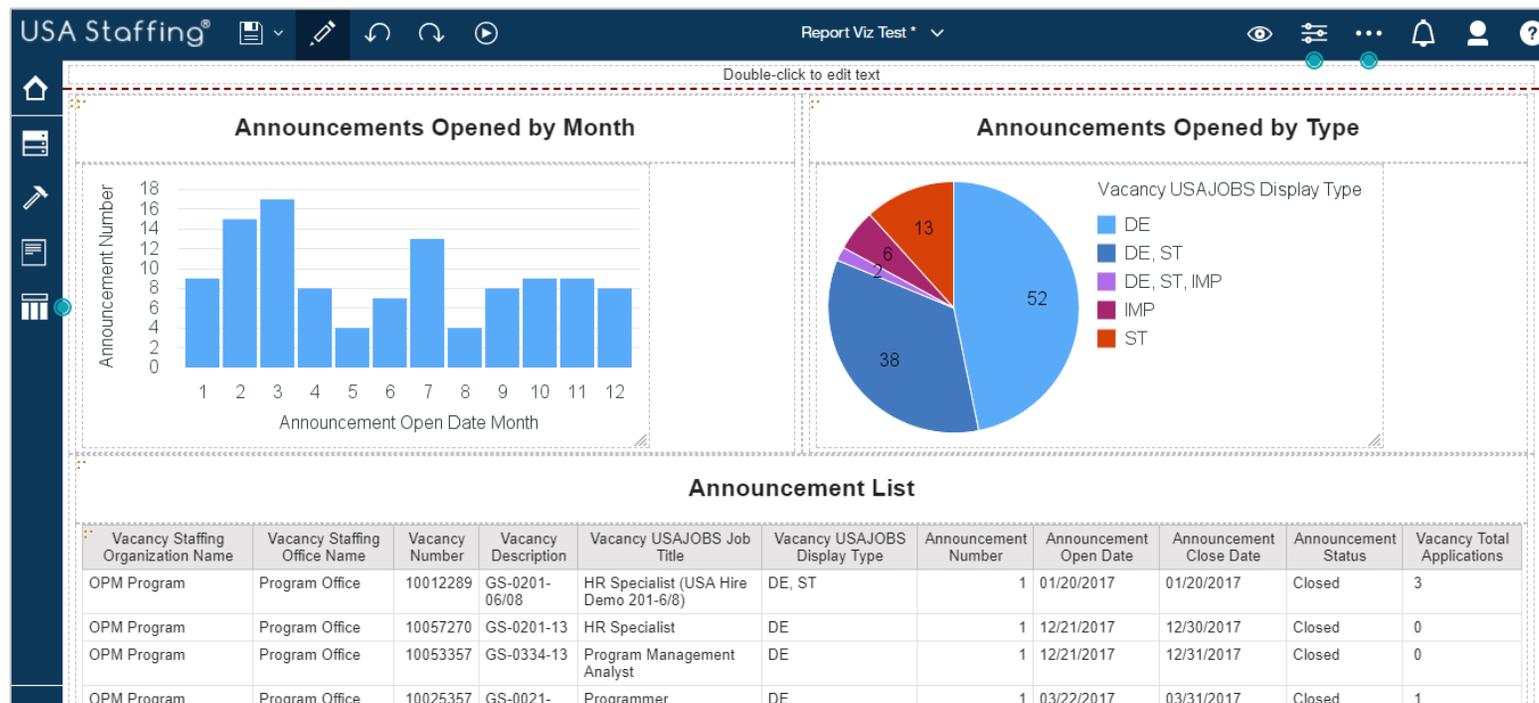
Enabled: 1
Disabled: 0

Name	Modified	Type	Scheduled by	Status	Priority
My Cognos Package Outline Report	4/17/2018 2:58 PM		Scott Salvati	Enabled	3



Visualizations in Reports

Similar to the Dashboard feature, **users can build reports with visualizations** to display summary data alongside detailed data



Unlike Dashboards, reports using visualizations can be exported into PDF, Excel, and other formats. Reports can also more easily drill-through from summary to detail reports.



Exercise 11: Create a Report with Visualizations

Create a new report that includes visualizations to display the number of announcements posted by month and type

1. Click on the *New* Icon (+ button) in the bottom left corner of the Welcome screen. Select *Report*
2. Select a 2 over 1 Template. Click OK
3. In the *Source* pane, click on the *Add report data* icon (+ button). Select *USA Staffing Packages and Folders, Staffing Reports*. Click *Open*
4. Click on the *Queries* icon and add a new query (+ button). Right-click on the newly created query and select *Rename query*. Rename the query **qry_visuals**



Exercise 11: Create a Report with Visualizations

Create a new report that includes visualizations to display the number of announcements posted by month and type

- 5. Double-click the query to open it, then click the Source icon. From the *Applications* namespace, drag and drop (or double-click the following query items into the query:

Folder	Query Subject	Query Item
Vacancy Detail	Vacancy	Vacancy Number
		Vacancy USAJOBS Display Type
		Vacancy USAJOBS Job Title
		Vacancy Staffing Office Name
		Vacancy Staffing Organization Name
	Vacancy Counts	Vacancy Total Applications
Announcement Detail	Announcement	Announcement Number
		Announcement Open Date



Exercise 11: Create a Report with Visualizations

Create a new report that includes visualizations to display the number of announcements posted by month and type

6. Identify the query items that will be used as metrics and change the aggregation properties appropriately. For this exercise, *Announcement Number* will be used as a metric.
 - Click on *Announcement Number*, then click on *Show properties*. Change the *Detail aggregation* and *Summary aggregation* to *Count distinct*.
 - Change the *Label* of *Announcement Number* to *Announcement Count*.
7. Create filters and modify query items to prepare to build visualizations.
 - *Announcement Open Date*
 - Double-click on *Announcement Open Date*
 - Modify the *Expression Definition* to:
month([Applications].[Announcement].[Announcement Open Date])
 - Modify the *Name* to: *Announcement Open Date Month*
 - *Announcement Is Released*
 - From the *Source* pane, drag and drop *Announcement Is Released* into *Detail Filters*
 - In the *Expression Definition*, modify the text to read:
[Applications].[Announcement].[Announcement Is Released] = 'Yes'



Exercise 11: Create a Report with Visualizations

Create a new report that includes visualizations to display the number of announcements posted by month and type

8. Click on the *Pages* icon and select *Page1* to navigate to the report page. Click the *Source* icon and select *Data items* to view the data items in the *qry_visuals* query
9. In the upper left area of the report page, click the + icon and select *Visualization*. Select the *Clustered column* visualization and click OK
10. In the *Object and query names* window, select the *qry_visuals* query and click OK
11. Add data items to the visualization by dragging and dropping *Announcement Number* to the *Values* section of the visualization and *Announcement Open Date Month* to the *X axis* section of the visualization.
12. Click on the *Page views* icon and select *Page preview* to view the visualization populated with data
13. In the upper right area of the report page, click the + icon and select *Visualization*. Select the *Pie* visualization and click OK
14. In the *Object and query names* window, select the *qry_visuals* query and click OK



Exercise 11: Create a Report with Visualizations

Create a new report that includes visualizations to display the number of announcements posted by month and type

15. Add data items to the visualization by dragging and dropping *Announcement Number* to the *Values* section of the visualization and *Vacancy USAJOBS Display Type* to the *Categories* section of the visualization.
16. Modify the size of the visualizations to fit the page. One at a time, select the visualization and click *Show properties*. Change the *Height* to 250
17. On the bottom of the report page, click the + icon and select *List*. In the *Object and query names* window, select the *qry_visuals* query and click OK
18. Add all of the data items from the *qry_visuals* query to the *List*, with the exception of *Announcement Number* and *Announcement Close Date*.
19. Click the *Run Options* Icon. Select *Run HTML* to view the report
20. Close the Cognos Viewer browser window to return to your report. Save the report in My Content as *Report with Visualizations*



Exercise 11: Create a Report with Visualizations

Steps 1 - 3

The screenshot illustrates the initial steps of creating a report with visualizations in the USA Staffing application. It is divided into two panels. The left panel, titled "Templates and themes", shows a grid of report templates. A red box highlights the "2 over 1" template. A red arrow points from this template to a red box containing a report icon in the top navigation bar of the right panel. The right panel, titled "USA Staffing", shows the "Source" and "Data items" tabs. A red box highlights a plus sign icon in the top right corner of the right panel. A second red arrow points from this plus sign to a red box highlighting the "Staffing Reports" folder in an "Open file" dialog. A third red arrow points from the "Staffing Reports" folder to a red box highlighting the "Open" button in the dialog. The "Open file" dialog shows a file tree with the following structure: Team content > USA Staffing Packages and Folders > Staffing Administration > Staffing Analytics > Staffing Integrations Reports > Staffing Reports > VA.



Exercise 11: Create a Report with Visualizations

Steps 4 - 5

The screenshot shows the USA Staffing application interface. In the top left, the 'USA Staffing' logo and a 'New report' button are visible. The main workspace is divided into several sections:

- Left Sidebar:** Contains navigation icons. A red box highlights the 'Queries' icon.
- Queries Panel:** Shows a list of queries under the heading 'QUERIES'. A red box highlights the 'Query1' entry, and a red arrow points from it to the 'Add' button.
- Add Button:** A red box highlights the '+' icon used to add a new query.
- Main Area:** A red box highlights the 'Query1' icon. A red arrow points from it to a 'Name' dialog box.
- Name Dialog Box:** A red box highlights the 'Value' field, which contains the text 'qry_visuals'. A red arrow points from this field to the 'OK' button.
- Right Panel:** A red box highlights the 'Data Items' list, which includes various fields such as 'Vacancy Number', 'Vacancy USAJOBS Display Type', 'Vacancy USAJOBS Job Title', 'Vacancy Staffing Office Name', 'Vacancy Staffing Organization Name', 'Vacancy Total Applications', 'Announcement Number', 'Announcement Open Date', and 'Announcement Close Date'. A red arrow points from the 'OK' button to this list.



Exercise 11: Create a Report with Visualizations

Step 6

The screenshot shows a report configuration interface with several panes. The 'Data Items' pane on the left lists various fields, with 'Announcement Number' highlighted. The 'Detail Filters' and 'Summary Filters' panes are currently empty. The 'Slicer' pane is also empty. The 'Data Item' configuration pane on the right shows the following properties:

DATA ITEM	
Type	Data Item
Name	Announcement Number
Label	Announcement Count
Expression	[Applications].[Announcem...
Detail aggregation	Count distinct
Summary aggregation	Count distinct
Pre-sort	Don't sort
Detail	Automatic
Calculation intersection	Show value
Solve order	

Red boxes and arrows highlight the configuration steps: 'Announcement Number' in the Data Items list, the configuration icon in the top toolbar, the 'Announcement Count' label, and the 'Count distinct' aggregation type.

Label
Specifies the label of the object.



Exercise 11: Create a Report with Visualizations

Step 7

Data item expression - Announcement Open Date Month

Name: **Announcement Open Date Month**

Expression Definition:
`month([Applications].[Announcement].[Announcement Open Date])`

Available Components:
Staffing Reports
Presentation View

OK Cancel

Announcement Detail

- Announcement
- Announcement Close Date
- Announcement Control Number
- Announcement External Contact Name
- Announcement Internal Contact Name
- Announcement Is Released**
- Announcement Last Update Date/Time
- Announcement Maximum Salary

Detail Filters

Detail filter expression - qry_visuals

Expression Definition:
`[Applications].[Announcement].[Announcement Is Released] = 'Yes'`

OK Cancel



Exercise 11: Create a Report with Visualizations

Steps 8 - 9

The screenshot shows the 'USA Staffing' report builder interface. On the left, a 'Source' pane lists 'Data items' and various fields like 'Vacancy Number' and 'Announcement Number'. A red box highlights the 'Data items' section. A red arrow points from this box to a '+' icon in the report canvas. Another red arrow points from the '+' icon to the 'Visualization gallery' pane. In the gallery, the 'Clustering column' visualization is highlighted with a red box. A final red arrow points from this box to the 'OK' button at the bottom right of the gallery. The gallery also includes a description for 'Clustering column' and an 'Author: IBM' note.



Exercise 11: Create a Report with Visualizations

Steps 10 - 12

Object and query names

Visualization name:
Clustered column

Data container name:
Clustered column: Tabular data set

Query name:
Query1
qry_visuals
Query1

OK Cancel

The screenshot shows the report builder interface with a bar chart visualization. The chart has a vertical axis and a horizontal axis. The configuration panel on the right shows the following settings:

- Clustered column: Tabular data set
- Value: <#Announcement Number#>
- Categories: X axis: <#Announcement Open Date Month#>
- Color: Drop item here

Red arrows indicate the following actions:

- From the 'Object and query names' dialog, an arrow points to the 'OK' button.
- From the 'OK' button, an arrow points to the 'Page preview' button in the top right toolbar.
- From the 'Page preview' button, an arrow points to the eye icon in the top right toolbar.
- From the 'Data items' list, an arrow points from 'Announcement Number' to the 'Value' field in the configuration panel.
- From the 'Data items' list, an arrow points from 'Announcement Open Date Month' to the 'X axis' field in the configuration panel.



Exercise 11: Create a Report with Visualizations

Step 12

The screenshot shows the USA Staffing report builder interface. On the left, a 'Data items' list includes: Vacancy Number, Vacancy USAJOBS Display Type, Vacancy USAJOBS Job Title, Vacancy Staffing Office Name, Vacancy Staffing Organization Name, Vacancy Total Applications, Announcement Number, Announcement Open Date Month, and Announcement Close Date. The main area displays a bar chart titled 'Announcement Count' with the Y-axis labeled 'Announcement Count' (0 to 300) and the X-axis labeled 'Announcement Open Date Month' (1 to 12). The chart shows a peak in month 8. A configuration panel on the right shows 'Clustering column: Tabular data set', 'Values: # <#Announcement Number#>', 'Categories: <#Announcement Open Date Month#>', and 'Color: Drop item here'. The interface includes a top navigation bar with 'New report *' and various icons, and a left sidebar with navigation icons.

Announcement Open Date Month	Announcement Count
1	120
2	160
3	130
4	120
5	150
6	150
7	150
8	295
9	155
10	135
11	110
12	105



Exercise 11: Create a Report with Visualizations

Steps 13 - 14

The screenshot illustrates the process of adding a pie chart visualization to a report. It shows the 'Data Items' list on the left, a bar chart visualization in the center, and the 'Object and query names' dialog box on the right. Red boxes and arrows highlight the selection of the 'Pie' visualization and the configuration of its name and query.

Data Items:

- Vacancy Number
- Vacancy USAJOBS Display Type
- Vacancy USAJOBS Job Title
- Vacancy Staffing Office Name
- Vacancy Staffing Organization Name
- Vacancy Total Applications
- Announcement Number
- Announcement Open Date Month
- Announcement Close Date

Visualization Name: Pie

Data container name: Pie: Tabular data set

Query name: qry_visualls

Show this dialog in the future

Visualization Description: Pie visualizations use segments to show the relationship of parts to the whole. You can use pie visualizations to highlight proportions.

Author: IBM

Data: Tabular data set, Categories (1), Values (1)



Exercise 11: Create a Report with Visualizations

Steps 15

The screenshot shows the USA Staffing report builder interface. On the left, a 'Data items' list includes 'Vacancy USAJOBS Display Type' and 'Announcement Number', both highlighted with red boxes. Red arrows point from these items to the 'Pie: Tabular data set' configuration box. The configuration box has a 'Values' field containing '<#Announcement Number#>' and a 'Categories' field containing '<#Vacancy USAJOBS Display Type#>'. To the right, a legend for 'Vacancy USAJOBS Display Type' lists categories with corresponding colors: DE (light blue), DE, IMP (dark blue), DE, ST (purple), DE, ST, IMP (maroon), IMP (orange), ST (yellow), and ST, IMP (yellow). A pie chart displays the following data:

Vacancy USAJOBS Display Type	Count
DE	908
DE, IMP	278
DE, ST	420
DE, ST, IMP	66
IMP	102
ST	0
ST, IMP	0



Exercise 11: Create a Report with Visualizations

Step 16

The screenshot shows a report editor interface. On the left, there is a clustered column chart with the y-axis labeled 'Announcement Count' ranging from 0 to 300. The x-axis is labeled 'Announcement Open Date Month#' with categories 1, 2, 3, and 4. The bars have heights of approximately 115, 160, 125, and 120 respectively. To the right of the column chart is a pie chart with four segments: orange (102), purple (66), blue (42), and a small grey segment. The configuration panel on the right is titled 'Clustered column' and has several sections: 'CONDITIONAL', 'DATA', 'GENERAL', 'MISCELLANEOUS', 'COMMON', 'COLUMN', and 'X-AXIS'. The 'COMMON' section is expanded, and the 'Height' property is highlighted with a red box, showing a value of 250. Below the configuration panel, there is a 'Height' label and a description: 'Specifies the height of the visualization, in pixels'.



Exercise 11: Create a Report with Visualizations

Step 17

The screenshot shows the USA Staffing report builder interface. On the left, the 'Data items' pane lists various fields. The main report area contains a bar chart of 'Announcement Count' by month, a pie chart of 'Vacancy USAJOBS Display Type', and a 'Crosstab Visualization' section. A dialog box titled 'Object and query name' is open, with 'List' in the 'Name' field and 'qry_visuals' selected in the 'Query Name' dropdown. Red boxes and arrows highlight the 'List' icon, the '+' icon, and the 'OK' button.

Announcement Open Date Month	Announcement Count
1	100
2	150
3	120
4	130
5	140
6	140
7	140
8	280
9	140
10	120
11	100
12	100

Display Type	Count
DE	908
DE, IMP	420
DE, ST	102
DE, ST, IMP	66
IMP	278
ST	0
ST, IMP	0



Exercise 11: Create a Report with Visualizations

Step 18

USA Staffing® New report * [Icons]

Source Data items

▼ qry_visuals

- Vacancy Number
- Vacancy USAJOBS Display Type
- Vacancy USAJOBS Job Title
- Vacancy Staffing Office Name
- Vacancy Staffing Organization Name
- Vacancy Total Applications
- Announcement Number
- Announcement Open Date Month
- Announcement Close Date

Double-click to edit text

Announcement Count

Announcement Open Date Month

Double-click to edit text

Vacancy USAJOBS Display Type

Double-click to edit text

Vacancy Staffing Organization Name	Vacancy Staffing Office Name	Vacancy Number	Announcement Open Date Month	Vacancy USAJOBS Display Type	Vacancy USAJOBS Job Title	Vacancy Total Applications
ASMG Internal Release Testing	Matt's House	10002218	11	ST	Program Analyst	0
ASMG Internal Release Testing	Matt's House	10005188	8	ST	Hand of the King	1
Office of Personnel Management	OPM HR Boyers	10000033	6	DE, ST	Support Services Specialist	1



Exercise 11: Create a Report with Visualizations

Steps 19 - 20

USA Staffing® New report

Announcement Open Date Month	Announcement Count
1	110
2	160
3	120
4	110
5	150
6	150
7	150
8	290
9	150
10	130
11	100
12	100

Display Type	Count
DE	909
DE, ST	421
ST	278
DE, ST, IMP	102
DE, ST, IMP	66

Vacancy Staffing Organization Name	Vacancy Staffing Office Name	Vacancy Number	Announcement Open Date Month	Vacancy USAJOBS Display Type	Vacancy USAJOBS Job Title	Vacancy Total Applications
ASMG Internal Release Testing	Matt's House	10002218	11	ST	Program Analyst	0
ASMG Internal Release Testing	Matt's House	10005188	8	ST	Hand of the King	1
Office of Personnel Management	OPM HR Boyers	10000033	6	DE, ST	Support Services Specialist	1
Office of Personnel Management	OPM HR TRB	10000240	2	DE	Computer Programmer	0
OPM Program	Program Office	10000011	6	DE, ST	Technical Advisor	0



Drill-through Reports

Two **reports can be linked** via a drill-through definition; when users click on a value in a report, that value can be passed to a second report as a parameter

Source Report

Vacancy Number	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Status	Vacancy Mission Critical Occupation
10017058	OHQ-10017058-17-DF-USAHIR-M	02/24/2017	02/27/2017	Closed	Program/Project Management
10035299	ST-10035299-17-LM	05/17/2017	05/18/2017	Closed	Cyber Security
10042509	DE-10042509-17-LJD	07/12/2017	07/13/2017	Closed	STEM
10037514	DEMO POINTS	05/30/2017	05/31/2017	Closed	Cyber Security
10041105	DE-10041105-17-MC	06/23/2017	06/22/2018	Open	STEM
10042505	DE-10042505-17-JLA	07/12/2017	07/13/2017	Closed	STEM
10041104	ST-10041104-17-MC	06/23/2017	06/22/2018	Open	STEM
10042497	DE-10042497-17-BR	07/12/2017	07/13/2017	Closed	STEM

Target Report

Vacancy Number	Application Number	Applicant Name	Application Record Status Code
10042497	AI457-2IEP	Hamilton, Alex	HH
	A8W6Q-ZULS	Burr, Aaron	AA
	AP152-5GFB	Wash, George	AA
	A4MYA-4ZDQ	Schyler, Liz	UN

Drill-through functionality only works in HTML output



Exercise 12: Create a Drill-Through Report

Create a new drill-through report

1. Open *Announcement List Report_Sort and Group* from My Content
 2. Click on the *Queries* icon and select *Query1* to open the query
 3. From the list of query items in the query, drag and drop *Vacancy Number* into the *Detail Filters* to create a parameterized filter. Modify the *Expression Definition* to read: [Vacancy Number] = ?Vacancy Number? Click OK
 4. Save the report as *Announcement Detail Report* in My Content and close the report
 5. Open *Report with Visualizations* from My Content
 6. Identify the query item that will be used to drill-through to the target report. For this exercise, *Vacancy Number* will be used.
 - Click on *Vacancy Number*, then click on *Show properties*. Locate *Drill-through definitions* and click on the ellipses to open the *Drill-through definitions* window
 - Click the + icon in the bottom left of the window to add a new drill-through definition
 - Under the *Report* area of the window, click the ellipses and navigate to the *Announcement Detail Report* in your My Content. Select the report and click Open
 - Under the *Action* area of the window, change the action from (*Default*) to *Run the report*
- (continued on next slide)



Exercise 12: Create a Drill-Through Report

Create a new drill-through report

6. (Continued)
 - Check the box next to *Open in new window*
 - Add a parameter by clicking the pencil icon. *Vacancy Number* will automatically populate because it's a parameterized filter on the target report. Change the *Method* to **Pass data item value** and change the *Value* to **Vacancy Number**
 - Click OK on both the *Parameters* window, then the *Drill-through definitions* windows
7. Click the *Run Options* icon. Select *Run HTML* to view the report.
8. From the report output page, click on a *Vacancy Number* to open/run the drill-through report.
9. Close the Cognos Viewer browser window to return to the report. Save the report in My Content as *Report with Visualizations_Drill-Through*



Exercise 12: Create a Drill-Through Report

Steps 1 - 4

The screenshot shows the USA Staffing software interface. The top navigation bar includes the USA Staffing logo, a search icon, and a title bar for the 'Announcement List Report_Sort and Group'. The left sidebar contains navigation icons and a 'QUERIES' section with 'Query1' selected. The main workspace is divided into several panels:

- Data Items:** A list of fields including 'Announcement Number', 'Announcement Open Date', 'Announcement Close Date', 'Announcement Status', 'Announcement Is Released', 'Vacancy Staffing Office Name', 'Vacancy Number', 'Vacancy Description', 'Vacancy USAJOBS Job Title', and 'Vacancy USAJOBS Display Type'. The 'Vacancy Number' field is highlighted with a red box.
- Detail Filters:** A panel on the right side of the workspace.
- Detail filter expression - Query1:** A dialog box is open, showing 'Available Components' on the left and an 'Expression Definition' field containing the text 'Vacancy Number] = ?Vacancy Number?'. The expression field is also highlighted with a red box.
- Buttons:** At the bottom of the dialog box, there are 'OK' and 'Cancel' buttons, both highlighted with red boxes.

Red arrows indicate the flow of the configuration process: from the 'Vacancy Number' field in the Data Items list to the 'Detail Filters' panel, then to the 'Expression Definition' field, and finally to the 'OK' button.



Exercise 12: Create a Drill-Through Report

Step 5 - 6

USA Staffing® Report with Visualizations_Drill-Through * ▾

Vacancy Staffing Organization Name	Vacancy Staffing Office Name	Vacancy Number	Announcement Open Date Month	Vacancy USAJOBS Display Type	Vacancy USAJOBS Job Title	Vacancy Total Applications
<Vacancy Staffing Organization Name>	<Vacancy Staffing Office Name>	<Vacancy Number>	<Announcement Open Date Month>	<Vacancy USAJOBS Display Type>	<Vacancy USAJOBS Job Title>	<Vacancy Total Applications>
<Vacancy Staffing Organization Name>	<Vacancy Staffing Office Name>	<Vacancy Number>	<Announcement Open Date Month>	<Vacancy USAJOBS Display Type>	<Vacancy USAJOBS Job Title>	<Vacancy Total Applications>
<Vacancy Staffing Organization Name>	<Vacancy Staffing Office Name>	<Vacancy Number>	<Announcement Open Date Month>	<Vacancy USAJOBS Display Type>	<Vacancy USAJOBS Job Title>	<Vacancy Total Applications>

Double-click to edit text

CONDITIONAL

Conditional styles

Style variable

Text source variable

TEXT SOURCE

Source type Data item value

Data item value Vacancy Number

DATA

Data format

Drill-through definitions

Group span

BOX

Border

Padding

Box type

COLOR & BACKGROUND

Background image

Background effects

Background color

Foreground color

FONT & TEXT

Drill-through definitions

Specifies report-to-report drill-through definitions, bookmarks, and drill-through text for the object.



Exercise 12: Create a Drill-Through Report

Step 6

The screenshot shows the 'Drill-through definitions' dialog box with the following configuration:

- Target report:** Announcement Detail Report
- Action:** Run the report
- Format:** (Default)
- Open in new window
- Parameters:**

Name	Type	Required	Multi-select	Method	Value	Property to pass
Vacancy Number	Number	✓		Pass data item value		(Default)

The 'Open file' dialog box shows the file 'Announcement Detail Report' selected in the 'Report Author Training' folder. The 'Open' button is highlighted.

A 'Parameters' dialog box is also shown, with 'Vacancy Number' selected in the list of properties to pass.



Exercise 12: Create a Drill-Through Report

Steps 7 - 9

USA Staffing® New report

Announcement Count

Announcement Open Date Month	Announcement Count
1	110
2	150
3	120
4	110
5	140
6	140
7	140
8	290
9	140
10	110
11	100
12	100

Vacancy USAJOBS Display Type

Display Type	Count
DE	918
DE, IMP	0
DE, ST	422
DE, ST, IMP	66
IMP	103
ST	278
ST, IMP	0

Vacancy Staffing Organization Name	Vacancy Staffing Office Name	Vacancy Number	Announcement Open Date Month	Vacancy USAJOBS Display Type	Vacancy USAJOBS Job Title	Vacancy Total Applications
ASMG Internal Release Testing	Matt's House	10002218	11	ST	Program Analyst	0
ASMG Internal Release Testing	Matt's House	10005188	8	ST	Hand of the King	1
Office of Personnel Management	OPM HR Boyers	10000033	6	DE, ST	Support Services Specialist	1
Office of Personnel Management	OPM HR TRB	10000240	2	DE	Computer Programmer	0
OPM Program	Program Office	10000011	6	DE, ST	Technical Advisor	0

USA Staffing® Announcement Detail Report

Vacancy Staffing Office Name	Vacancy Number	Vacancy Description	Vacancy USAJOBS Job Title	Vacancy USAJOBS Display Type	Announcement Number	Announcement Open Date	Announcement Close Date	Announcement Status	Announcement Is Released
OPM HR Boyers	10000033	GS-0342-11/12	Support Services Specialist	DE, ST	14-TEST-PSF	06/25/2014	07/07/2014	Closed	Yes



Custom Report-Building Workshop



Open Q&A and Demo



Resources and Contacts

Cognos Report Author Training Sessions

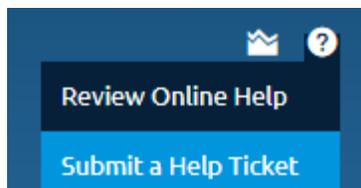
An overview of USA Staffing data with practical exercises in running standard reports and developing custom reports in Cognos. Contact your Account Manager if you are interested in scheduling a session for the report authors in your organization

Need Help?

If you are experiencing issues accessing Cognos or need help to create or troubleshoot a report, submit a HelpDesk ticket through USA Staffing.

HR Users

- Submit a ticket through the interface



Report Author Only and AFD Users

- Contact your internal USA Staffing Lead or Account Manager to submit a ticket on your behalf.

Still Need Help?

USASTaffingData@opm.gov