Preparing for Power BI Exam 70-778

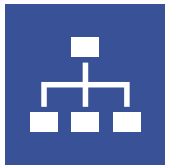
STRONG-BRIDGE ENVISION
EXPERIENCE MATTERS

Today's Agenda

Preparing for Power BI
Exam 70-778

01

Introduction and Overview
5 min

02 

Exam Structure
5 min

03

Exam Content
10 min

04

Preparation & Review
20 min

05

Tutorials
20 min

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ABOUT ME

HERE IS SOME INFO ABOUT ME

PAUL DELLAGROTTE

Senior Consultant at SBE

Personal Website

https://pdellagrotte.github.io/

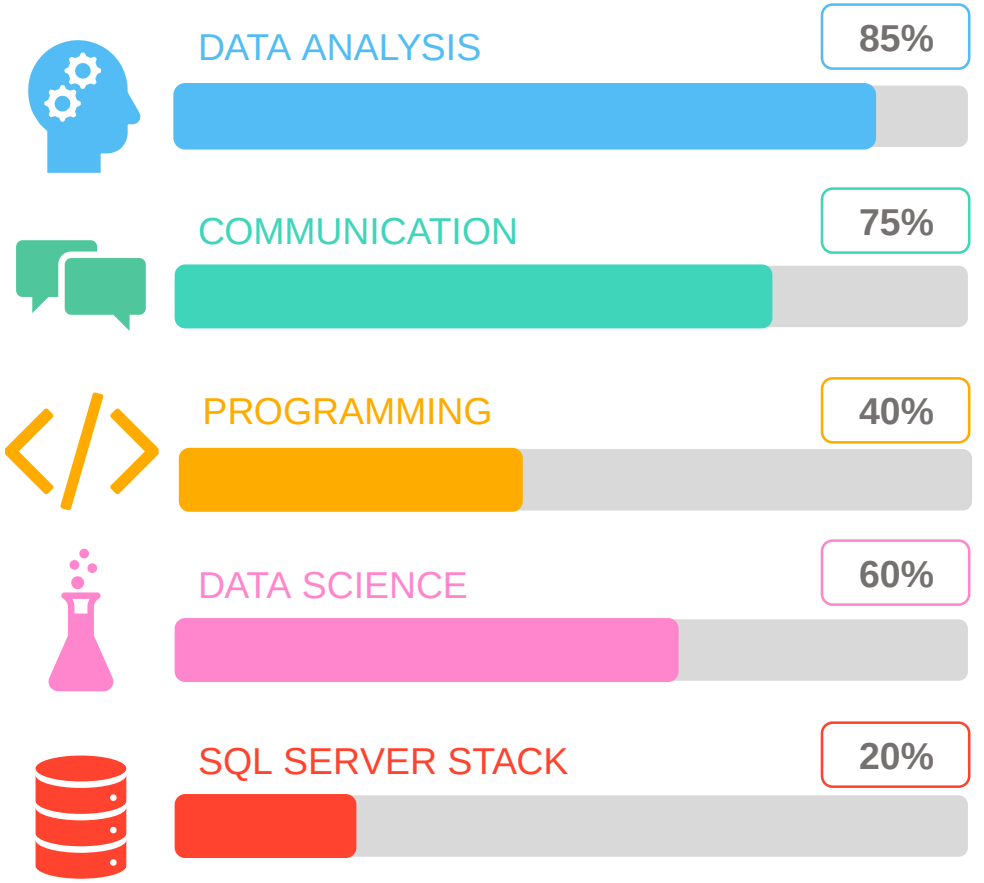
PROFILE

10+ years as an analytics professional in a variety of industries including Defense and Management Consulting. Began career in finance and quickly developed a passion for data. Experience in strategy development, data modeling, process improvement and financial analysis.

EDUCATION

Northwestern University (2016)
MS Predictive Analytics

Plymouth State University (2008)
BS Finance



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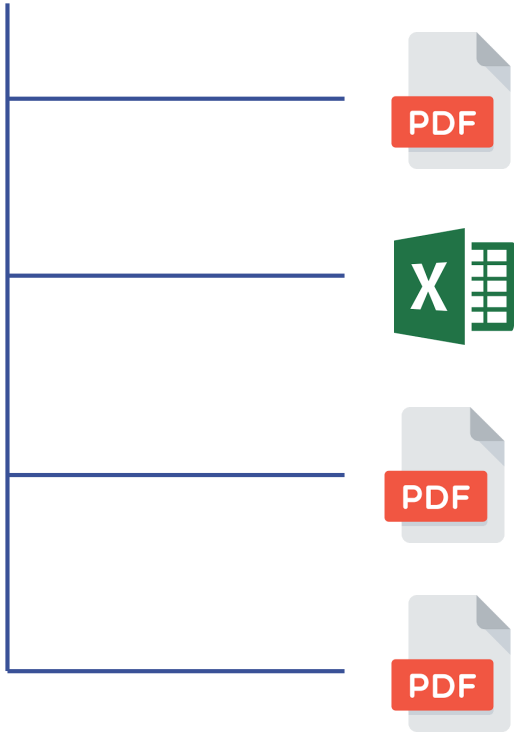
GitHub

https://github.com/pdellagrotte/

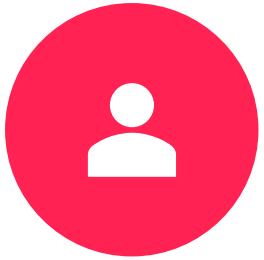
https://github.com/pdellagrotte/SQLSaturday-813-Boston



- This Presentation
- Sample Study Guide
- Resource List
- Preparation Checklist

Introduction and Overview

Who should take the Exam?



- Candidates should have a good understanding of how to perform data analysis
- Candidates should understand both Power BI Desktop and Services
- BI professionals, data analysts, and other roles responsible for creating reports by using Power BI

What does the Exam cover?

- Consuming and Transforming Data By Using Power BI Desktop
- Modeling and Visualizing Data
- Configure Dashboards, Reports and Apps in the Power BI Service

What are the preparation options?

- **Free** Resources
- Microsoft Course
- Books

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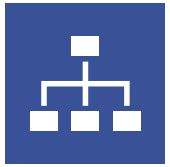
Today's Agenda

Preparing for Power BI
Exam 70-778

01 Introduction

02  **Exam Structure**

03 Exam Content

04 Preparation & Review

05 Tutorials

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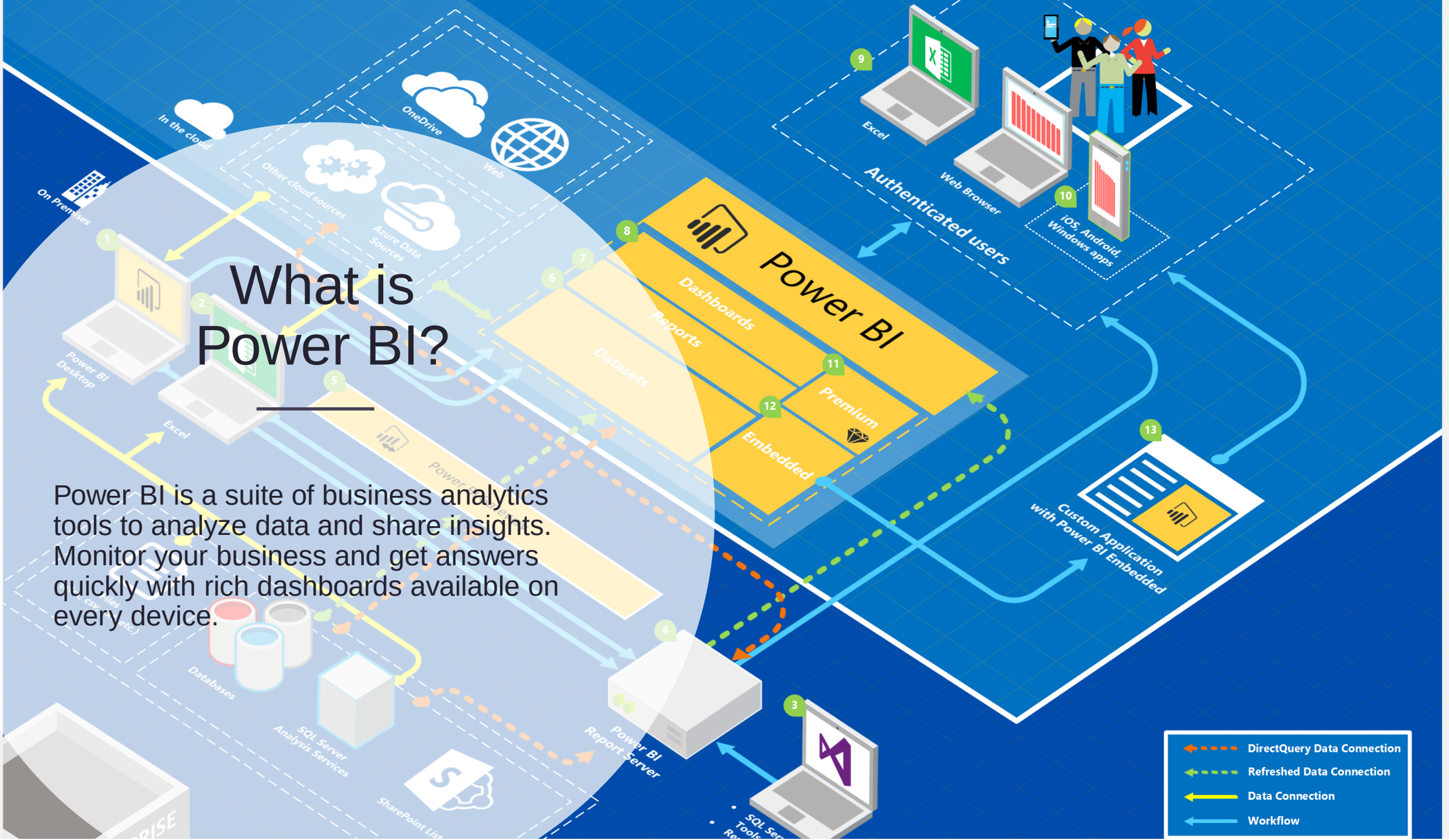
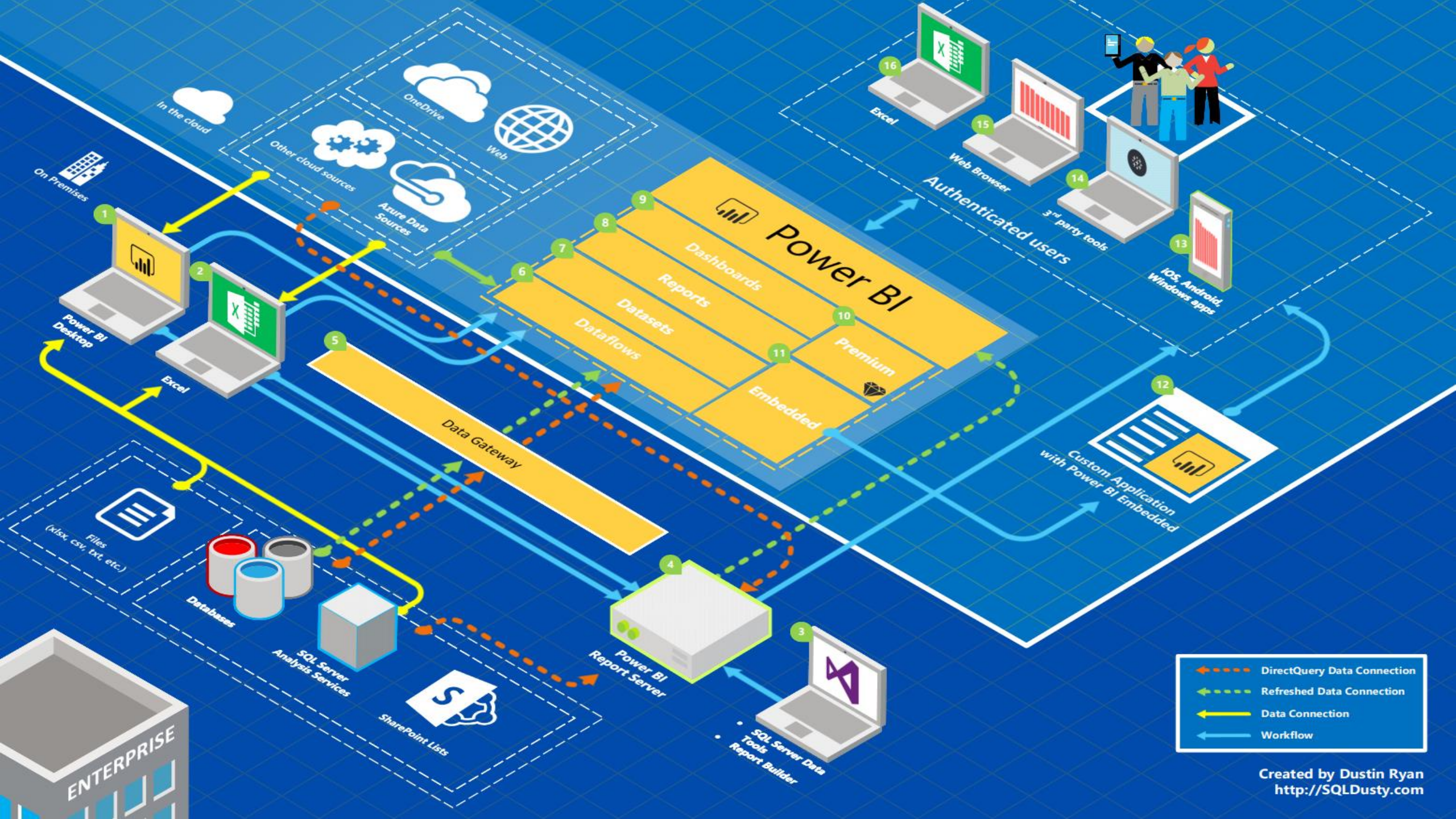

What is Power BI?
Power BI is a suite of business analytics tools to analyze data and share insights. Monitor your business and get answers quickly with rich dashboards available on every device.
In the cloud
On Premises
OneDrive
Web
Other cloud sources
Azure Data Sources
Power BI Desktop
Excel
Databases
SQL Server Analysis Services
SharePoint List
Power BI Report Server
Datasets
Power BI
Dashboards
Reports
Premium
Embedded
Excel
Web Browser
iOS, Android, Windows apps
Authenticated users
Custom Application with Power BI Embedded
DirectQuery Data Connection
Refreshed Data Connection
Data Connection
Workflow


In the cloud
OneDrive
Other cloud sources
Web
Azure Data Sources
On Premises
Power BI Desktop
Excel
Files (xlsx, csv, txt, etc.)
Databases
SQL Server Analysis Services
SharePoint Lists
Data Gateway
Power BI
Dashboards
Reports
Datasets
Dataflows
Premium
Embedded
Power BI Report Server
SQL Server Data Tools
Report Builder
Excel
Web Browser
3rd party tools
iOS, Android, Windows apps
Authenticated users
Custom Application with Power BI Embedded
ENTERPRISE
DirectQuery Data Connection
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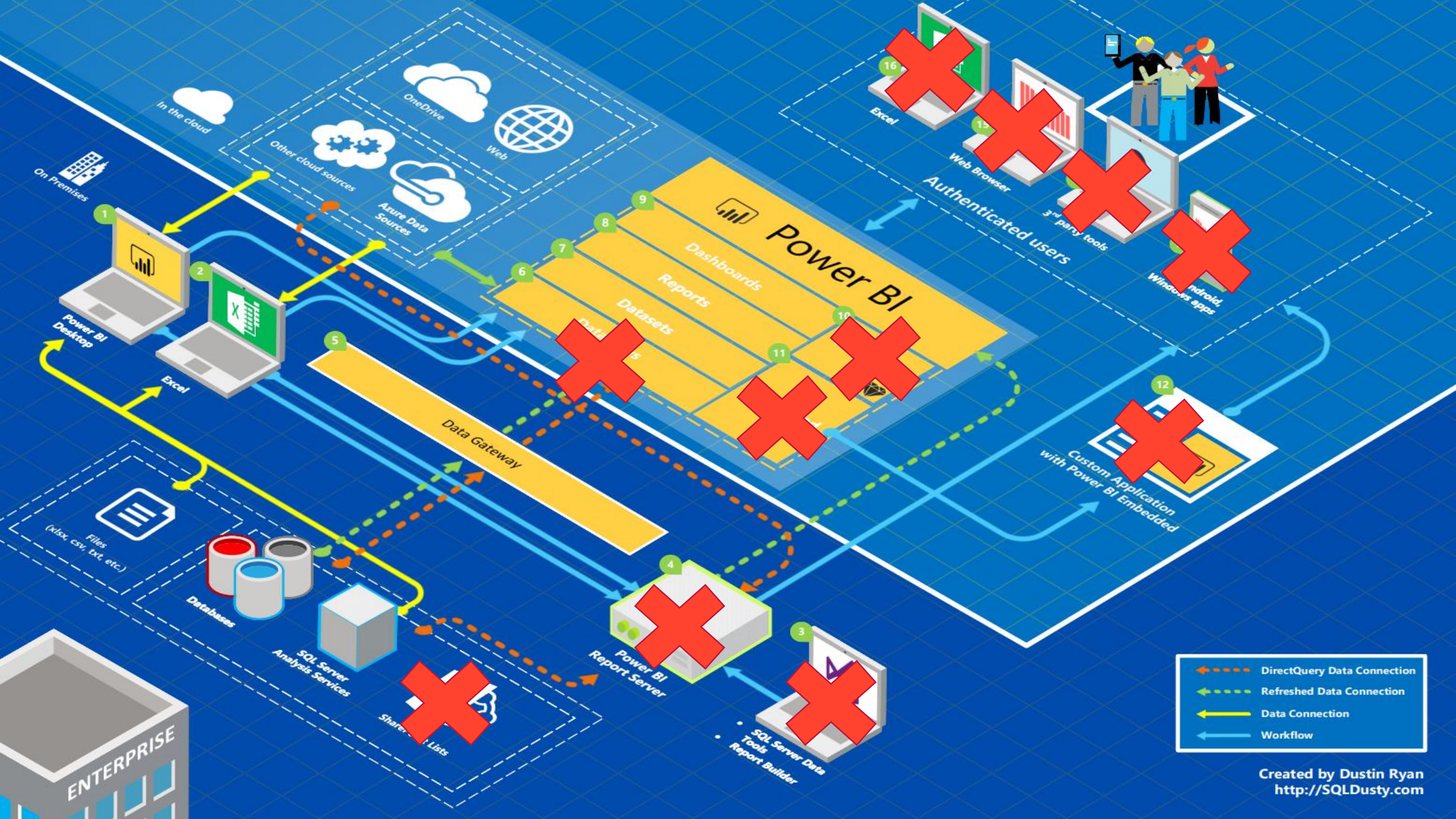
Workflow
Created by Dustin Ryan
http://SQLDusty.com


In the cloud
OneDrive
Other cloud sources
Web
Azure Data Sources
On Premises
Power BI Desktop
Excel
Files (xlsx, csv, txt, etc.)
Databases
SQL Server Analysis Services
Data Gateway
Power BI
Dashboards
Reports
Datasets
Power BI Report Server
SQL Server Data Tools
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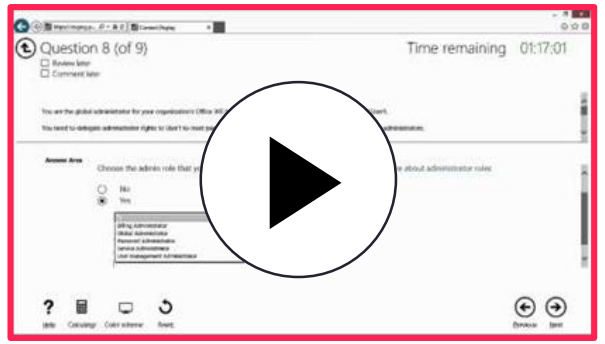
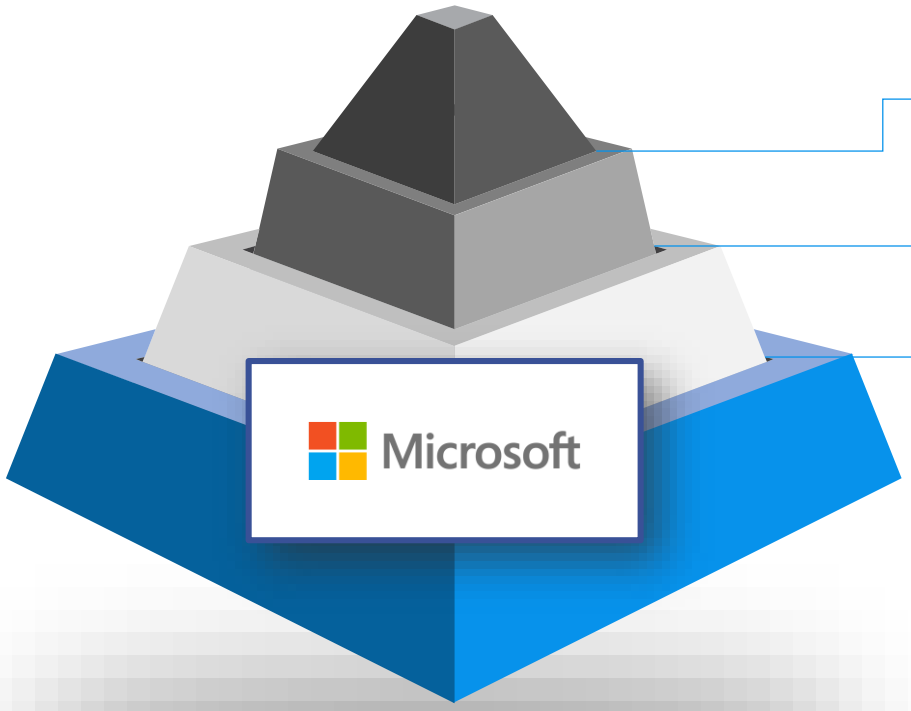
Exam Structure





Question Types
T / F, Multiple Choice, Drag & Drop

Best Answer Multiple Choice
Select the response that best fits when more than one is correct

Case Study
Presents a business case and multiple questions are presented that reference it

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Today's Agenda

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Exam 70-778

01 Introduction

02 Exam Structure

03 **Exam Content**

04 Preparation & Review

05 Tutorials

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Exam Content

Consuming and Transforming Data by Using Power BI Desktop

Modeling and Visualizing Data

Configure Dashboards, Reports, and Apps in the Power BI Service

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Consuming and Transforming Data by Using Power BI Desktop

- Connect to data sources
- Perform transformations
- Cleanse data

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Modeling and Visualizing Data

- Create and Optimize Data Models
- Calculated Columns, calculated tables, and measures
- Measure performance with KPI, gauges, and cards
- Create hierarchies
- Format interactive visualizations
- Manage custom reporting solutions

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Configure Dashboards, Reports, and Apps in the Power BI Service

- Create and optimize data models
- Create calculated columns, calculated tables, and measures
- Measure performance by using KPIs, gauges and cards
- Create hierarchies
- Create and format interactive visualizations
- Manage custom reporting solutions

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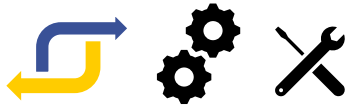
Power BI Desktop

CONNECT

Excel /CSV, SQL Server (SSAS)

TRANSFORM

- Apply Business Rules
- Manage incomplete Data



MODEL / DAX

- Measures and Calculated Columns
- Calculated Tables

SECURE DATA

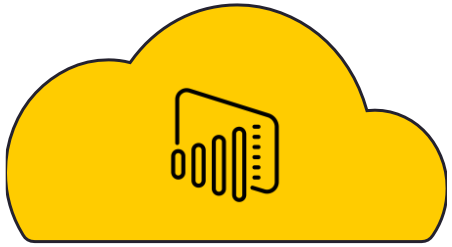
- RLS
- Security Groups
- User Access

REPORT FEATURES

- Visualizations
- KPIs
- Hierarchies

PUBLISH

- Upload Reports
- Edit in Service



Power BI Service

Today's Agenda

Preparing for Power BI
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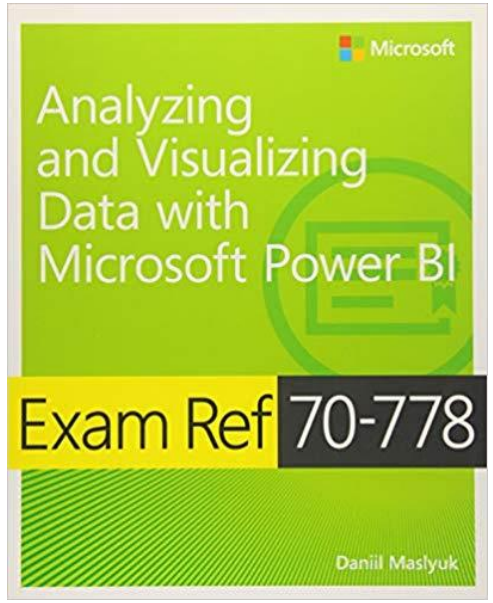
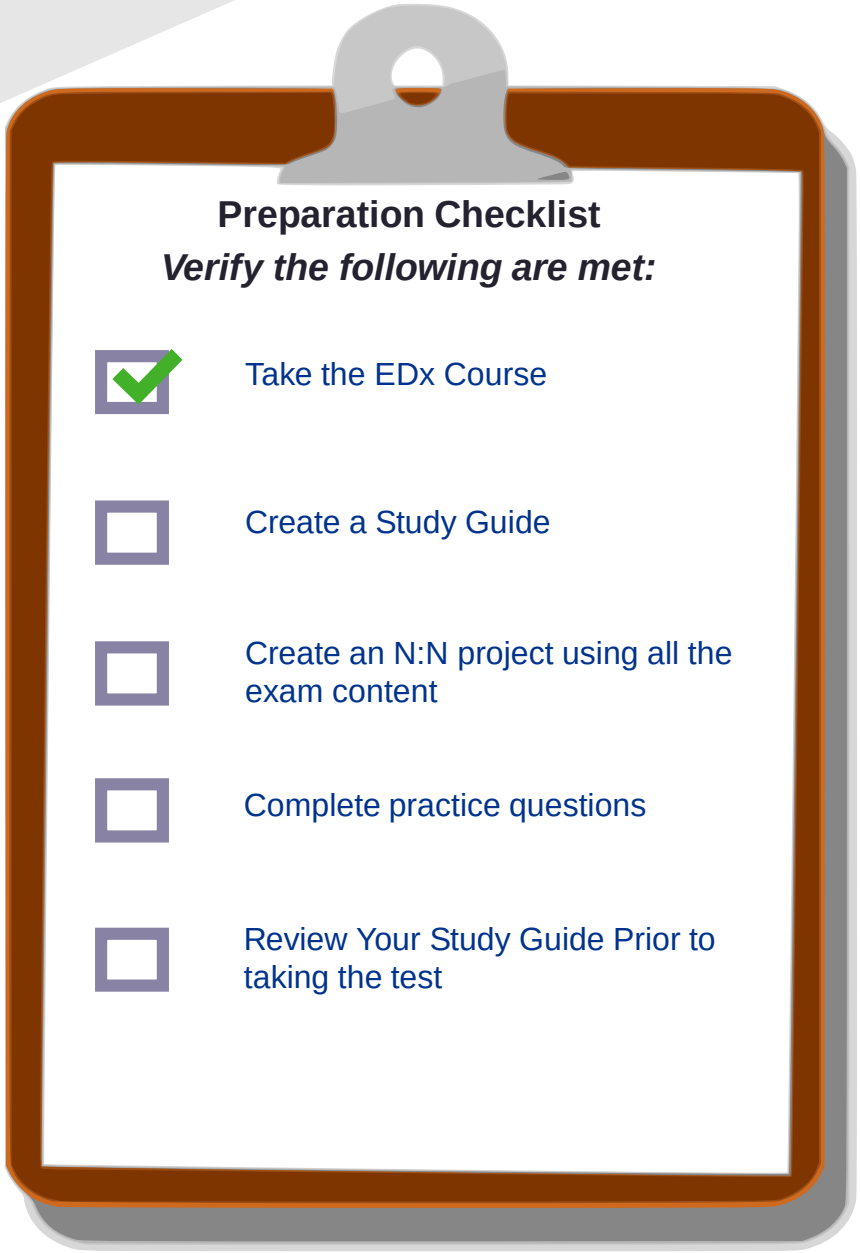
What are the Preparation Options?





Preparation Checklist

https://github.com/pdellagrotte/SQLSaturday-813-Boston

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Resources

Power BI Exam 70-778
Resources

Free Courses

- eDX Power BI Course

Practice Quizzes

- https://www.criticalpathtraining.com/testing-quiz-page/
- http://www.pbiquiz.moonfruit.com/
- http://www.accelerated-ideas.com/
- DAX Quiz

Video Guides

- Guy in a Cube Playlist
- Critical Path Training - Exam Video 1
- Critical Path Training - Exam Video 2

Blog

- Data and Analytics with Dustin Ryan

Book

- Exam Ref 70-778

* Some of the linked content may not reflect the latest version of the exam – be sure to check with the Microsoft Exam Page to verify the latest exam content

Create By: paul.dellagrotte@gmail.com

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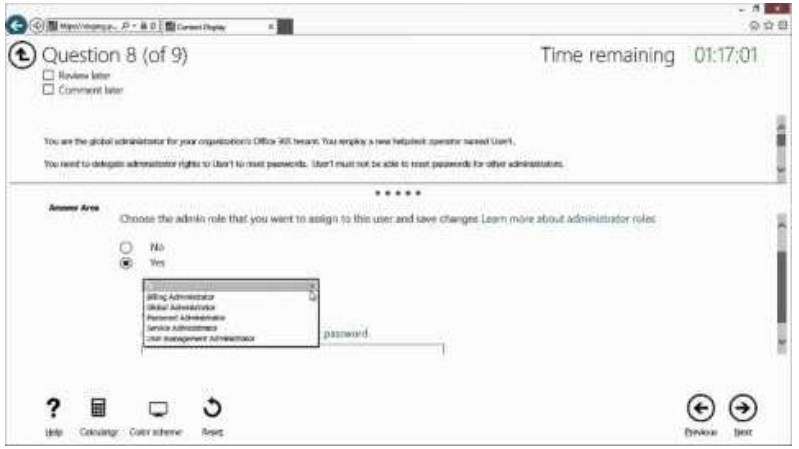
Microsoft Exam Structure

https://www.youtube.com/watch?v=7CvYGpSVbkA



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Review

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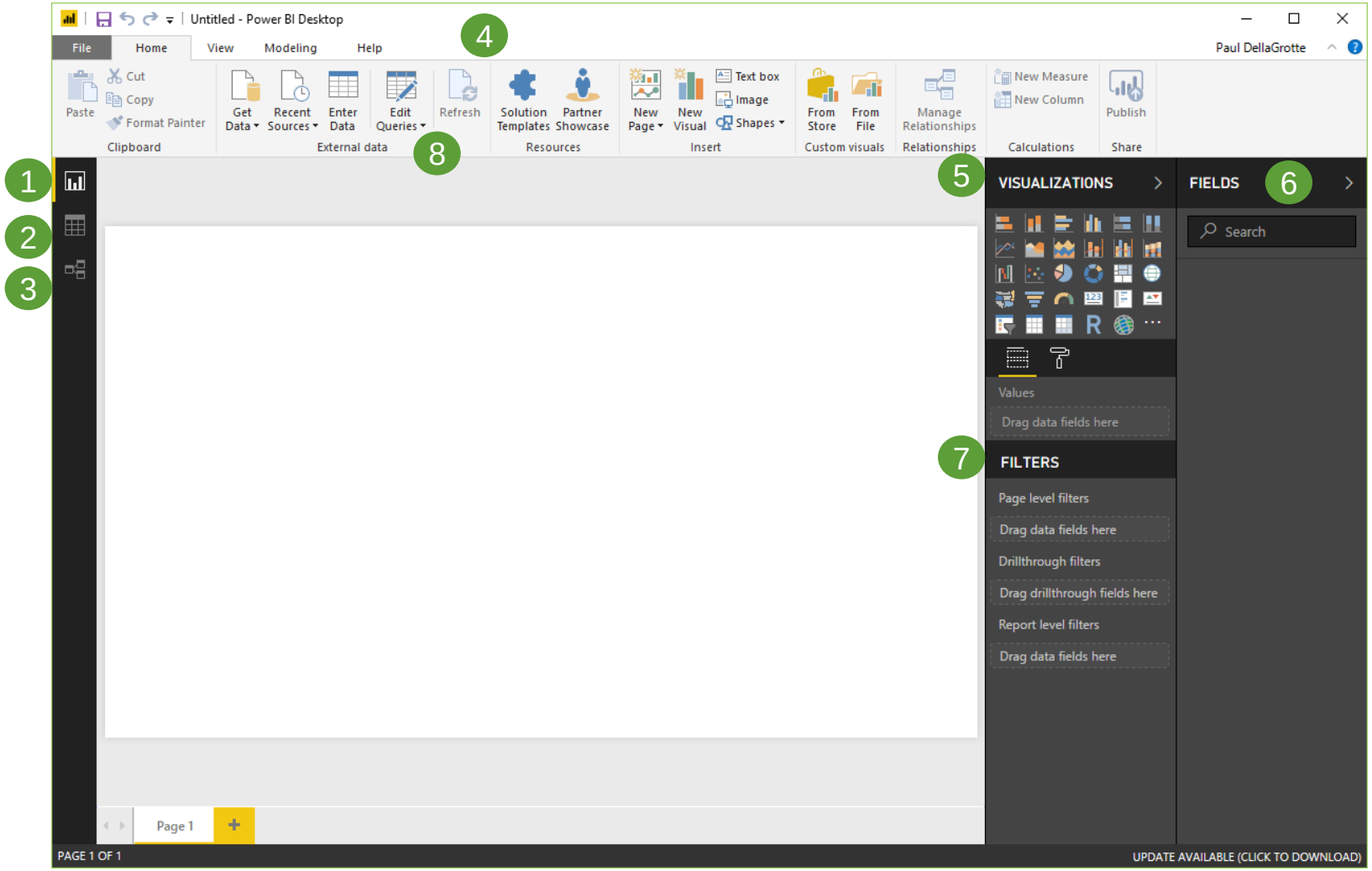
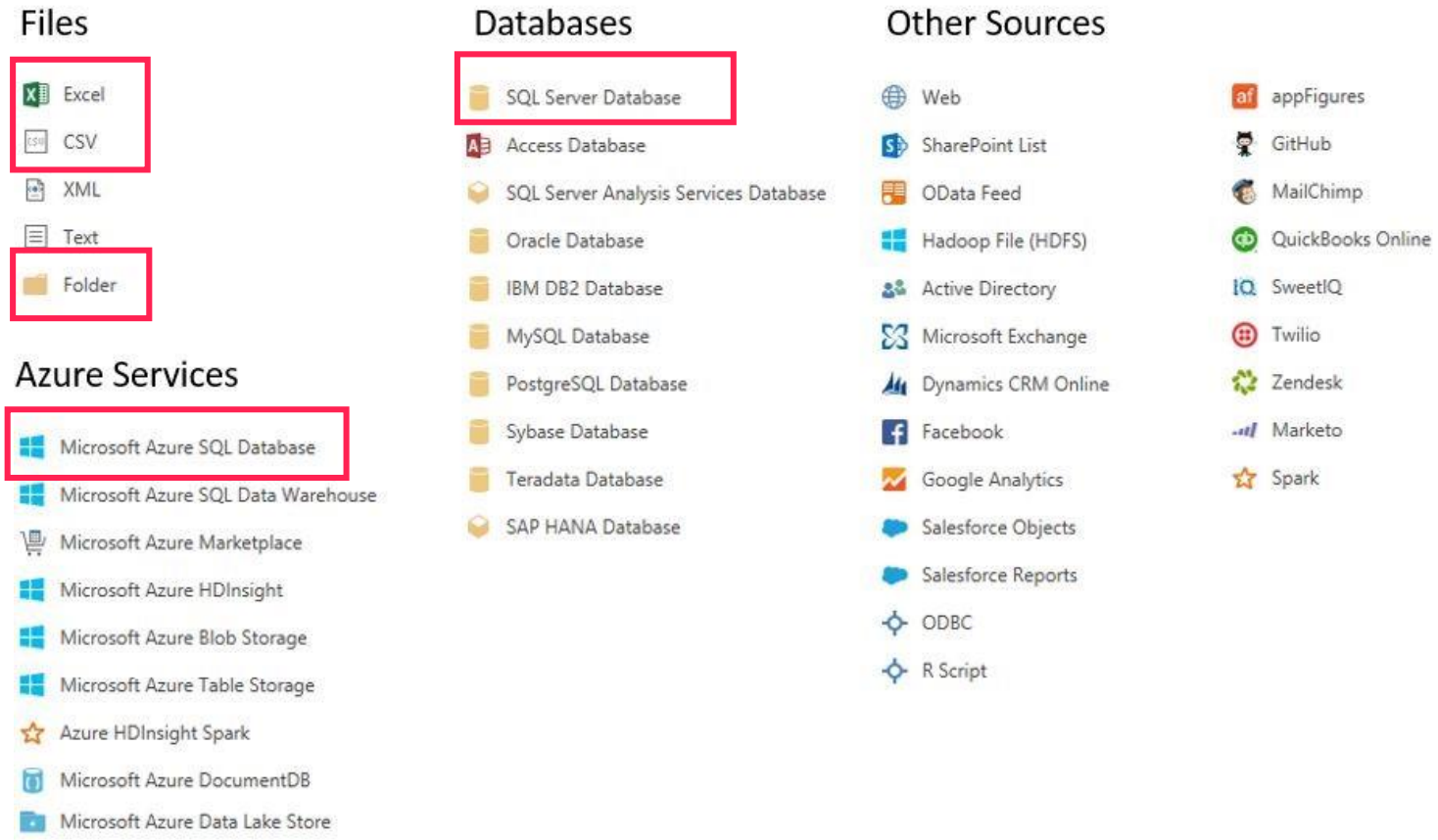
Navigation

1. Reports
2. Data View
3. Relationships
4. Ribbon
5. Visualizations
6. Fields
7. Filters
8. Launch Power Query



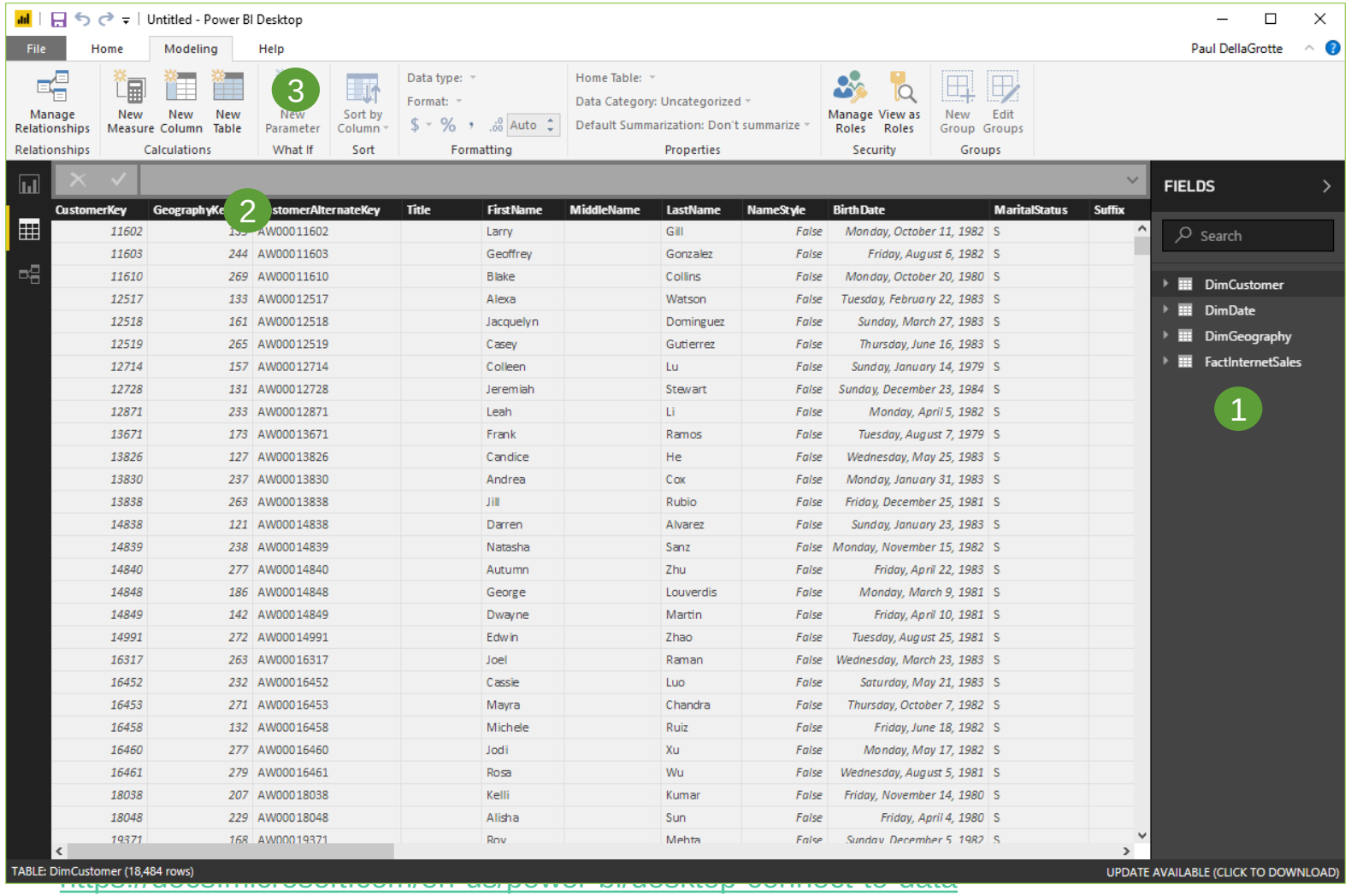
Connecting to Data



https://docs.microsoft.com/en-us/power-bi/desktop-connect-to-data

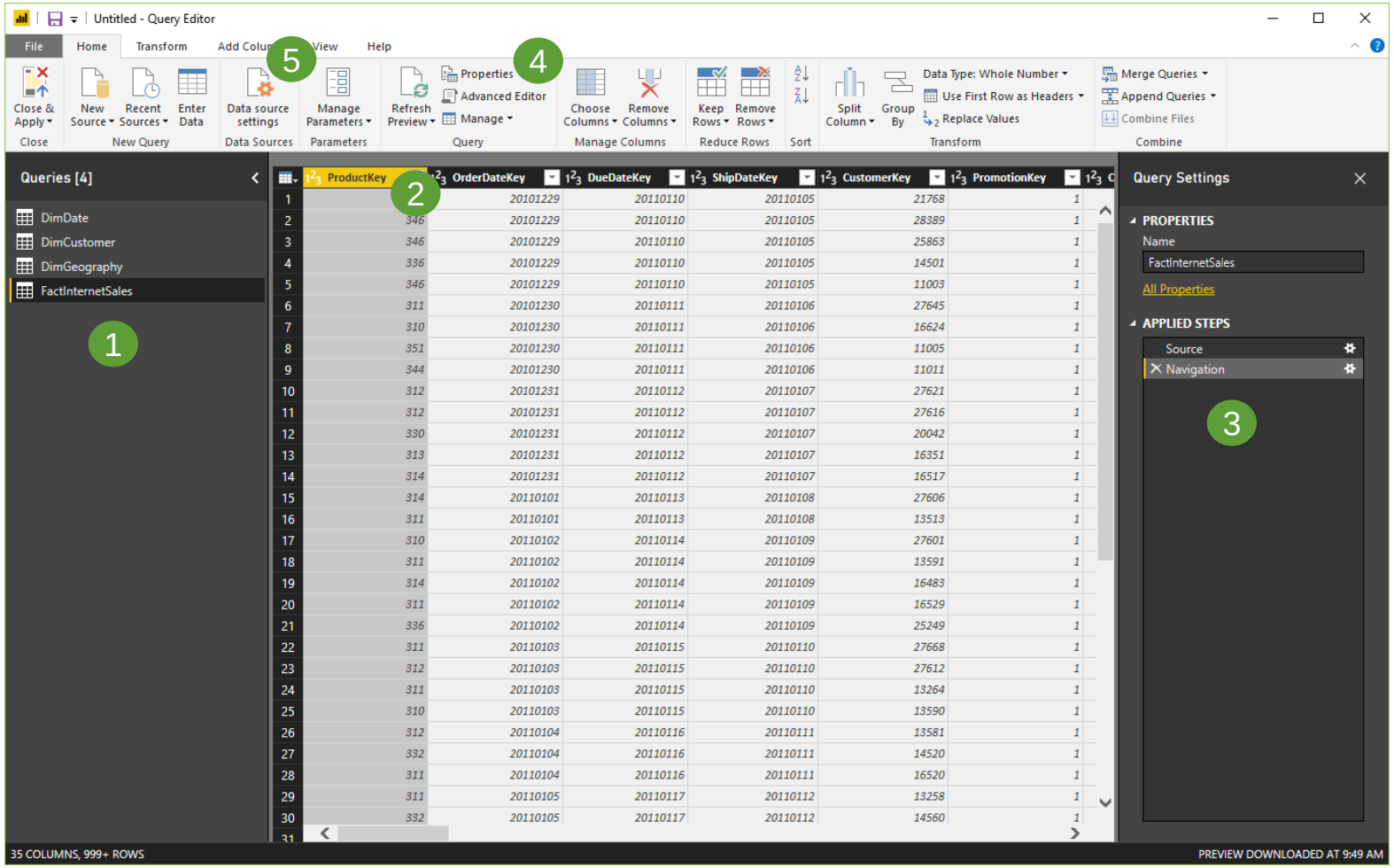
Data View

1. Tables
2. Fields
3. Calculated Columns & Measures



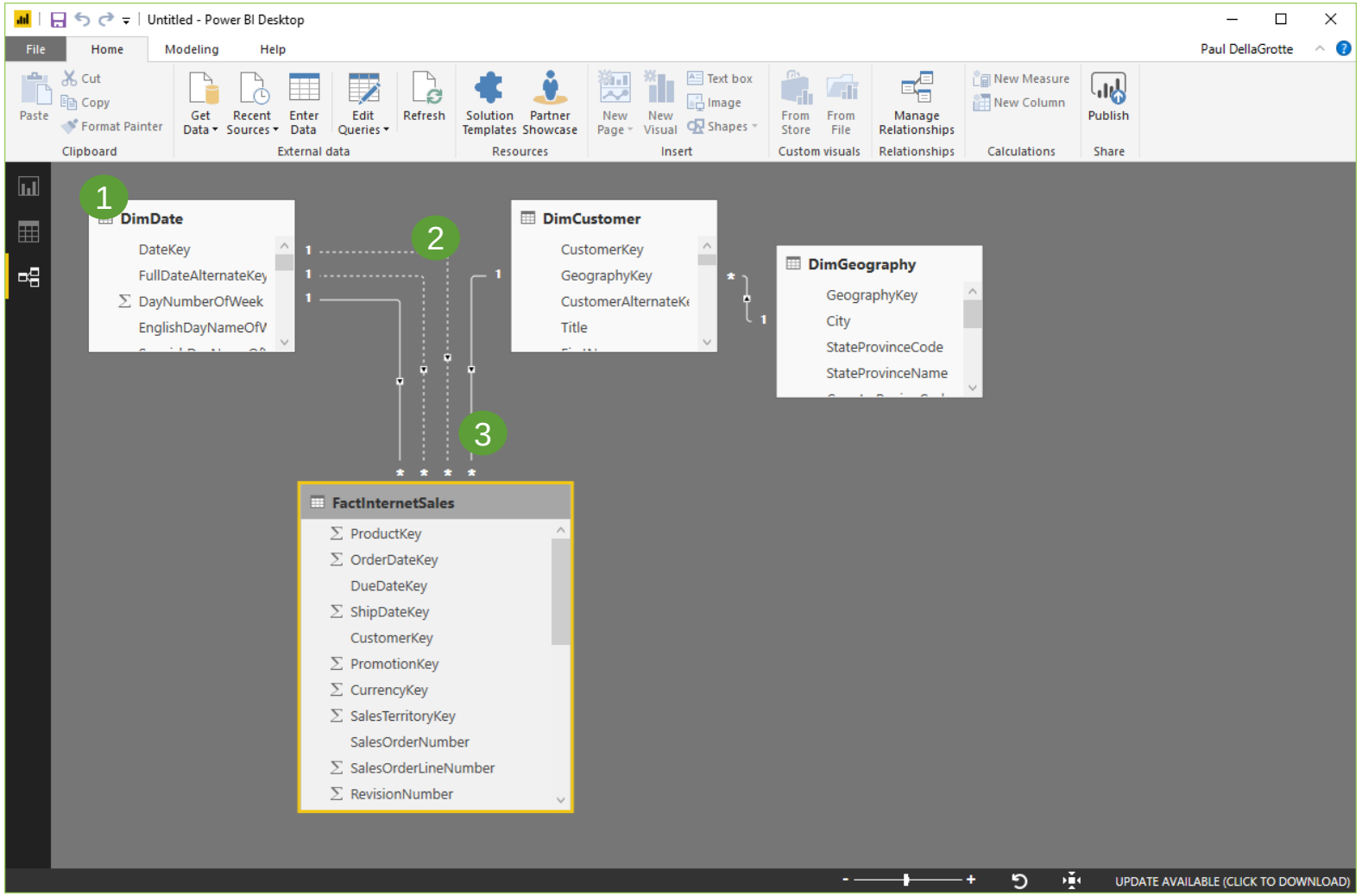
Power Query

1. Query Manager
2. Field and Data Type
3. Stepwise Transformations
4. Advanced Editor – ‘M’ Code
5. Data Source Settings – Manage Connection String



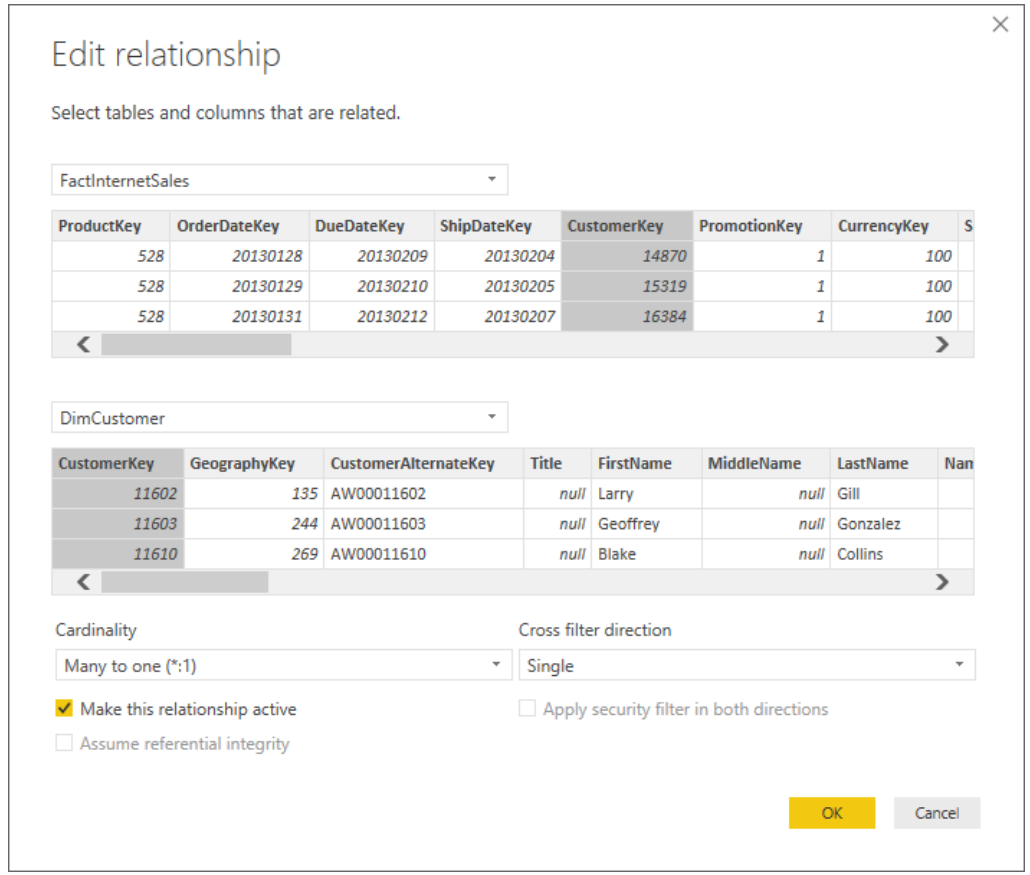
Relationships

1. Table
2. Inactive Relationship
3. Active Relationship



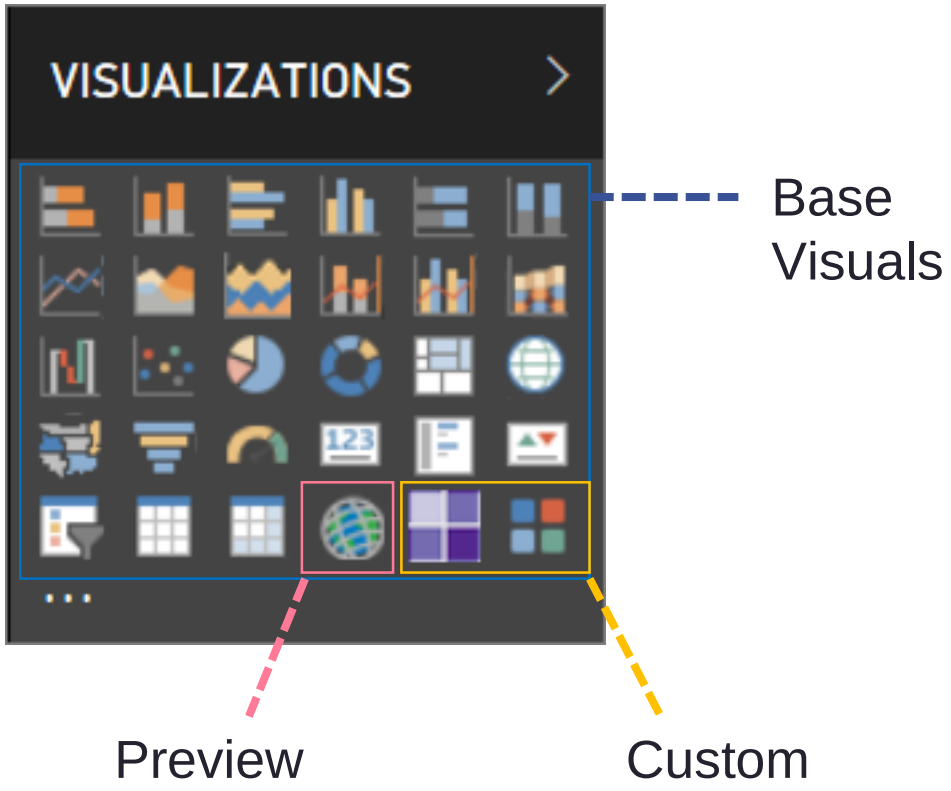
https://docs.microsoft.com/en-us/power-bi/desktop-relationship-view

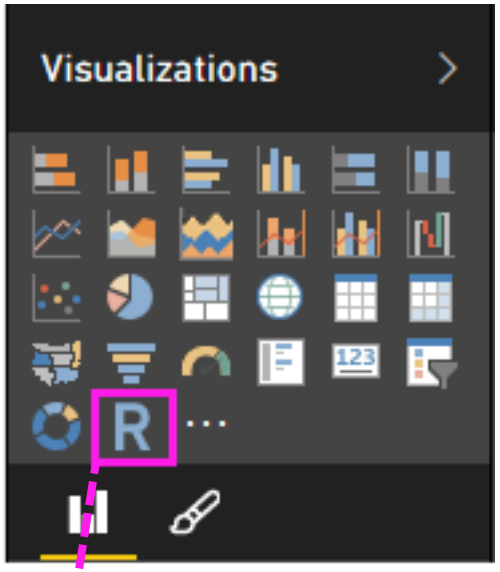
Relationships



https://docs.microsoft.com/en-us/power-bi/desktop-relationship-view

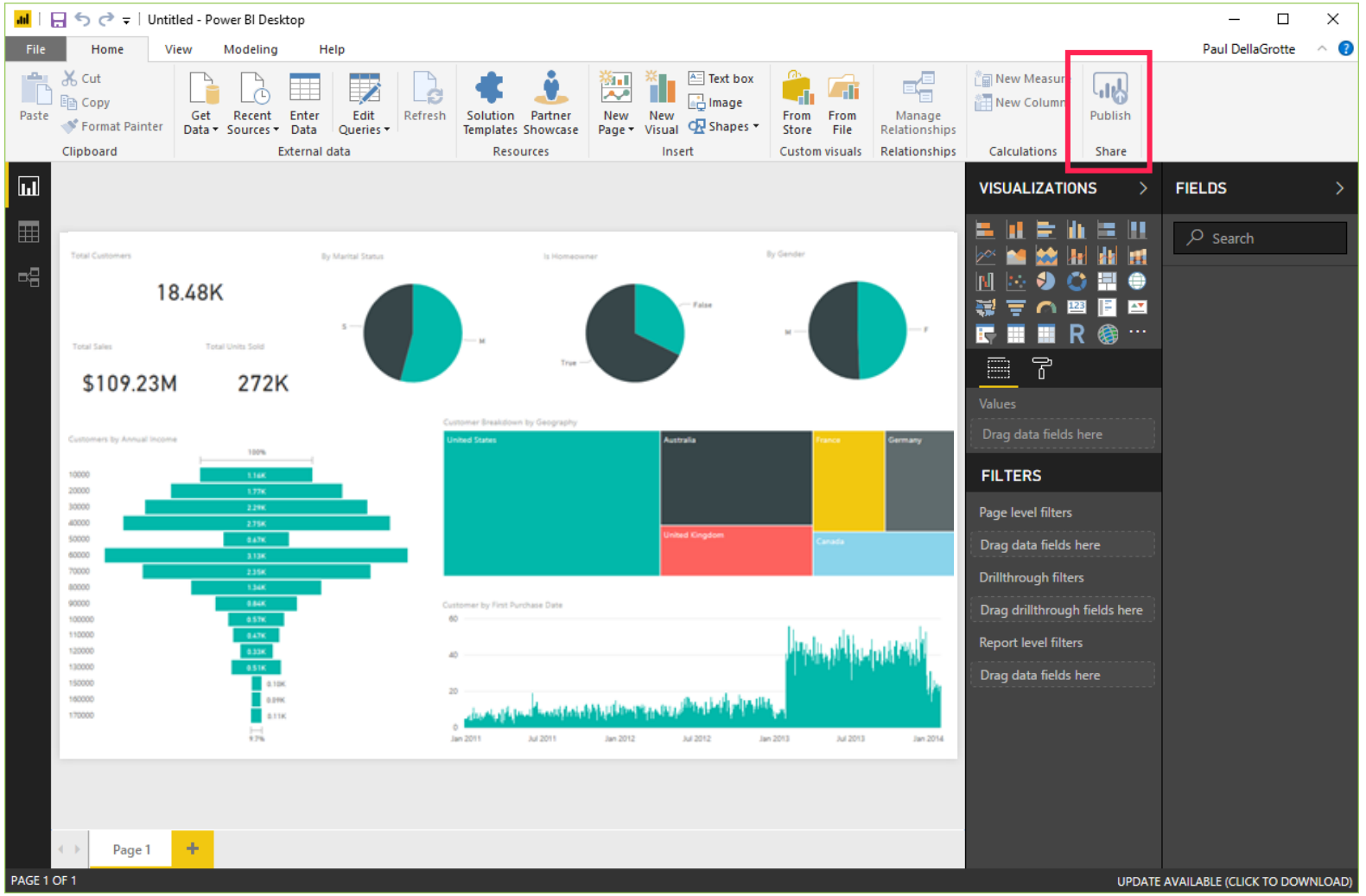
Reports





https://docs.microsoft.com/en-us/power-bi/desktop-report-view

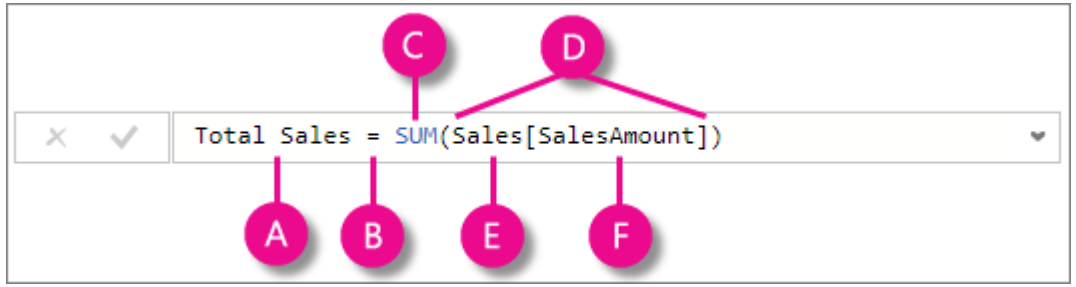
Publishing to Service



DAX

WHAT IS DAX (Data Analysis eXpression**)?**

- Formula AND Query Language
- Used to create Calculated Columns and Measures
- Evaluated based on Row and Filter Context
- Calculated Column: Evaluated Immediately by Row
- Measure: Evaluated at Query Time



https://docs.microsoft.com/en-us/power-bi/desktop-quickstart-learn-dax-basics

A. Name
B. Initialize
C. Function
D. Parameter(s)
E. Table
F. Column

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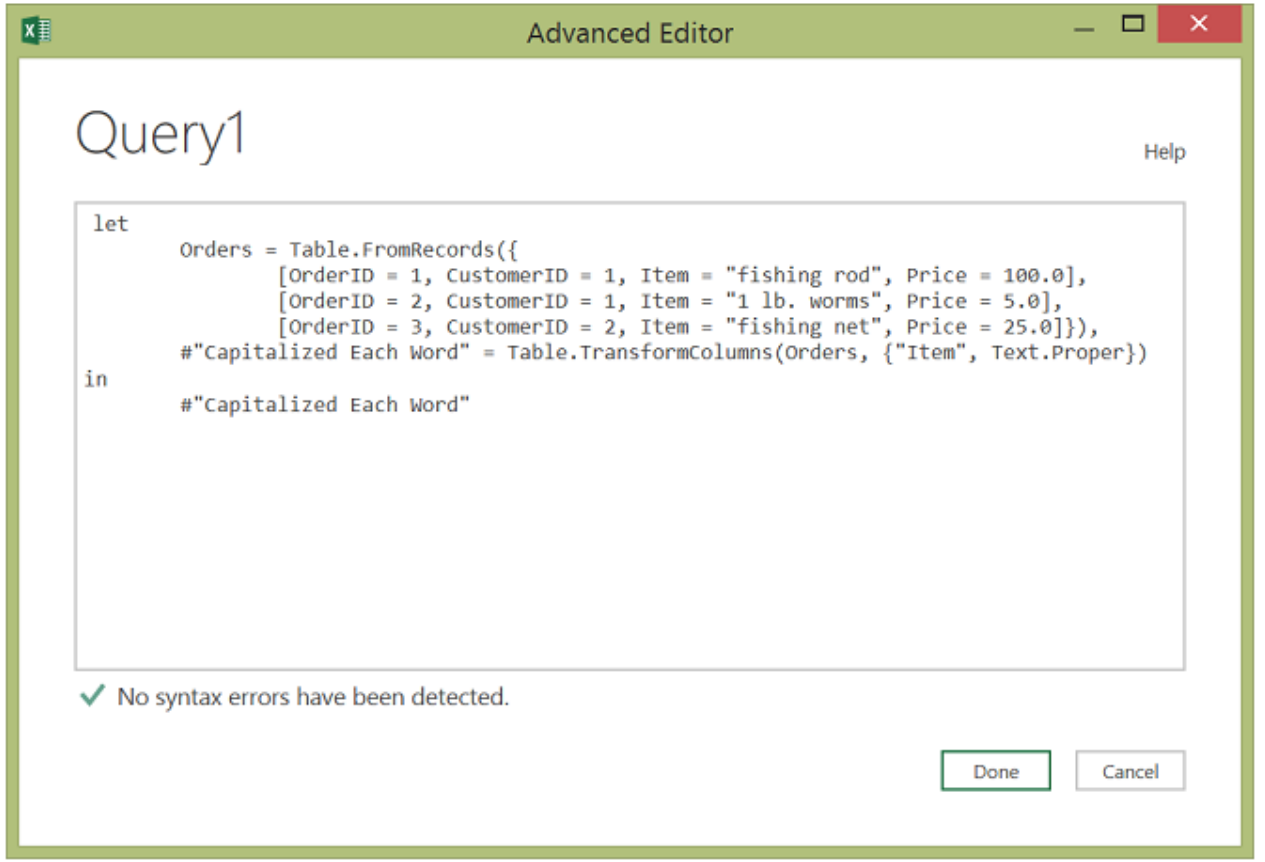
M



https://docs.microsoft.com/en-us/powerquery-m/quick-tour-of-the-power-query-m-formula-language

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Type of M Question

Match the following functions in M (Power Query Language) with their description/definition

Text.Split	Removes any occurrences of characters in trimChars (E.g.
Text.Proper	Returns the portion of text between the specified
Text.Trim	Returns a text value composed of the input text value repeated a
Text.Repeat	Returns a text value with first letters of all words converted to
Text.Combine	Returns a list containing parts of a text value that are delimited by
Text.Clean	Returns the original text value with non-printable characters

https://docs.microsoft.com/en-us/powerquery-m/text-functions

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Question – True or False

Using the new bookmarking features in the report designer in Power BI Desktop, you are limited to creating only one bookmark per page in a report.

Answer:

False

Question – Select all that apply

Which of the following statements are true regarding use of the Slicer visual in a Power BI report?

- [x] A Slicer visual is used on Power BI reports to provide the report consumer with interactive filtering behavior.
- [ ] A Slicer visual from a Power BI report can be pinned to a dashboard to make the dashboard interactive.
- [x] A Slicer visual based on a Date column can be configured to use slider controls.
- [ ] When adding a field to the Field well of a Slicer visual, you can use either a column or a measure.

Question – Multiple Choice

Which of the following visuals is not included as part of Power BI and must be added as a custom visual?

- ○ Waterfall
- ○ Treemap
- ◉ Histogram
- ○ Stacked Area Chart

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Tutorial Topics

Transform	Modeling & Visuals	Configure
Manage Query Groups - Create Group	Calculated Tables - DAX	Analyze in Excel
Connecting to Files in a Folder	Creating and managing Hierarchies	Sharing a dashboard
Power BI Template	Include / Exclude from Visual	Add Widget / Title
Query Dependency	Grouping / Binning fields	Create Security Group
Change Data Type	**Clustering (and Machine Learning)**	**Row Level Security**
Query Parameter	Change Default Aggregation	Change data refresh settings
Edit Data from a Custom Table	Export data from table	Featured Q&A
Connect to different data sources	Filter including Top N	**Publish to Web**

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Thank You!

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