

PIM Training Program

SQL

Amazon Metric reporting via ETL

Learning Objective

- At the end of the module, you will be able to publish your query results into MS Excel sheet



Learning Objectives



Agenda

- Introduction to Datanet Metrics Jobs
- How does it work?
- Reference Link



Introduction to Datanet Metrics Jobs

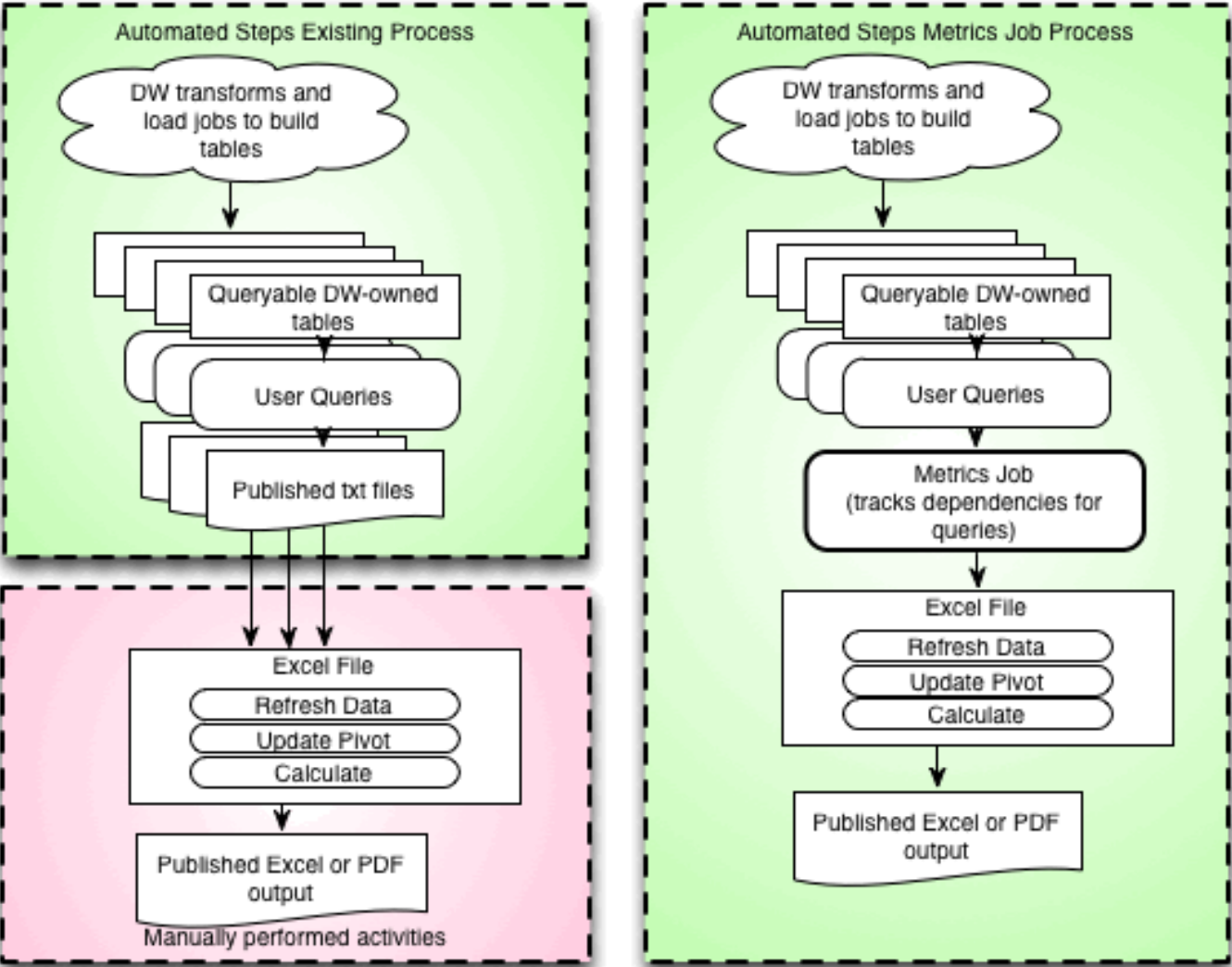
Introduction to Datanet Metrics

At Amazon it is very common to have regularly produced metrics decks that are comprised of Excel files linked to the output of one or more Data Warehouse queries (Datanet Data Feed jobs). Traditionally this requires manual effort to refresh the data and initiate calculation of the workbook.

Metrics jobs are a new type of Datanet job that allows the inclusion of data feed job results into Microsoft Excel document and perform worksheet calculation as the final step in the Datanet dependency chain.



Introduction to Datanet Metrics



How does it work?

How does it work?

In brief:

1. The user uploads an XLSX file to the metrics job profile and identifies the tabs in the file that will be updated with Datanet results
2. The user creates a metrics job that associates Data Feed job IDs with the tabs defined in the Metrics Job Profile
3. When the associated Data Feed dependencies are satisfied, Datanet calls the RefreshExcel service and provides the XLSX file along with the Data Feed job results
4. The RefreshExcel Service clears the configured tabs, writes the new data and refreshes and calculates the workbook (including pivot tables)
5. The updated file is returned and Datanet Publishers deliver the results.



How does it work?

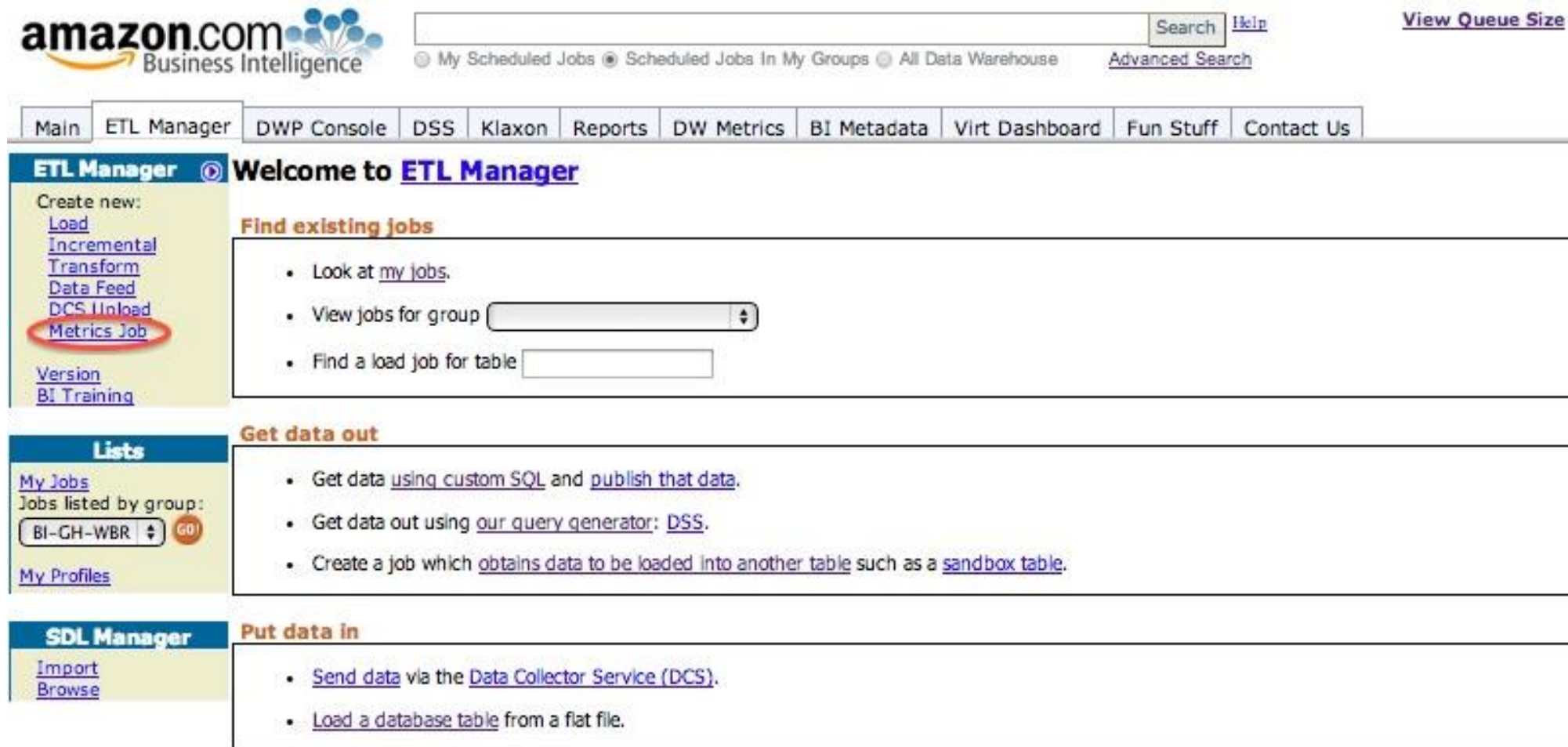
Output Variations:

- By default the system will create a .XLSX artifact for publishing (refreshed excel workbook)
- You can optionally select PDF or image formats in the profile for creation
 - For these artifacts (and HTML portal support) you need to specify the "Report Area" using [excel print areas](#)
- Once you've done that you can create multiple publishers each with different types of files
- **Image artifact used in an EMAIL publisher creates an Inline "Daily Flash" report**



How does it work?

Step 1: choose new Metrics job



amazon.com Business Intelligence

Search [Help](#)

My Scheduled Jobs Scheduled Jobs In My Groups All Data Warehouse [Advanced Search](#) [View Queue Size](#)

Main ETL Manager DWP Console DSS Klaxon Reports DW Metrics BI Metadata Virt Dashboard Fun Stuff Contact Us

ETL Manager Welcome to **ETL Manager**

Create new:

- [Load](#)
- [Incremental Transform](#)
- [Data Feed](#)
- [DCS Unload](#)
- [Metrics Job](#)**
- [Version](#)
- [BI Training](#)

Find existing jobs

- Look at [my jobs](#).
- View jobs for group
- Find a load job for table

Get data out

- Get data [using custom SQL](#) and [publish that data](#).
- Get data out using [our query generator](#): [DSS](#).
- Create a job which [obtains data to be loaded into another table](#) such as a [sandbox table](#).

Put data in

- [Send data](#) via the [Data Collector Service \(DCS\)](#).
- [Load a database table](#) from a flat file.

Lists

[My Jobs](#)

Jobs listed by group:

[GO!](#)

[My Profiles](#)

SDL Manager

[Import](#)

[Browse](#)



How does it work?

Step 2: Configure new metrics job profile

ETL Manager

Create new:
[Load](#)
[Incremental](#)
[Transform](#)
[Data Feed](#)
[DCS Upload](#)
[Metrics Job](#)
[Version](#)
[BI Training](#)

Lists

[My Jobs](#)
Jobs listed by group:
CONSUMER [GO](#)
[My Profiles](#)

SDL Manager

[Import](#)
[Browse](#)

Edit Metrics Job Profile - Metrics Flash

Description: Metrics Flash

Excel Workbook: [Browse...](#) MetricsFlash_sparklines.xls [Done](#) Upload progress will show here

You can browse and upload an xlsx file

☐ I acknowledge that this workbook does not contain PII data You must agree not to upload any PII/UCI data

Output File Template:

Excel Tabs

Select the excel tabs that you plan to link to Datanet jobs. Any changes made to tabs on the this page will affect all Metrics jobs for this profile. Note: Please re-upload workbook to display entire tab list for older profiles.

Tab Name Filter:

Tab Name	Select data tab(s)
flash	<input checked="" type="checkbox"/>
data_summary	<input checked="" type="checkbox"/>
data_trend	<input type="checkbox"/>

When your xlsx file has completed uploading, all the sheets detected in your file will show here.

Check the Select data tab(s) boxes only for worksheets that you wish to have populated with the raw data from datanet query results.

If there are many sheets in your workbook, you can use the Tab Name Filter above to filter the list of sheets.

Files To Generate

Metrics job have the ability to generate multiple output formats. Select which types of files you would like to generate.

☒ XLSX ☐ PDF Metrics jobs can now convert the output to PDF format. See the FAQ below on this page for potential differences between XLSX and PDF appearance.

[Help](#) [Save](#) [Cancel](#)

- You can configure multiple tabs that will be populated by Data Feed job results
- Data feed jobs are associated with the tabs in the job configuration section
- **Your metrics jobs will run more quickly if you remove any data from the data tabs in the Excel File that you upload** (The first step in the automated refresh is to clear any existing data, row by row. For 100 rows, it won't matter much, but for 50K or 100K rows, your jobs will take considerably less time if you have cleared the data before upload.)

How does it work?

Step 3: Configure Publishers and Job(s)

amazon.com

Business Intelligence

My Scheduled Jobs

Scheduled Jobs In My Groups

All Data Warehouse

Search

Advanced Search

View Queue Size

Main

ETL Manager

DWP Console

DSS

Klaxon

Reports

DW Metrics

BI Metadata

Virt Dashboard

Fun Stuff

Contact Us

ETL Manager

Create new:
[Load](#)
[Incremental](#)
[Transform](#)
[Data Feed](#)
[DCS Upload](#)
[Metrics Job](#)

[Version](#)
[BI Training](#)

Lists

[My Jobs](#)
[My Profiles](#)

SDL Manager

[Import](#)
[Browse](#)

View Metrics Job Info

Metrics Job Profile - New Profile

Created by Ben Wilson

Updated by Ben Wilson

Valid from 2013-11-20 21:01:16 PST

Workbook file tuesday_demo.xlsx

Output File New Profile_{JOBRUN_DETAILS}

Template

Quick Links

[Request T1C Priority for your job](#)
[Open a Trouble Ticket](#)
[Office Hours](#)
[Data Warehouse Help Desk](#)
[Wiki](#)
[Ask other ETL Manager users](#)

Publishers applied to this Profile

Help

New

Publisher Type

Format

Values

The above Job Profile is being used by these jobs

Help

New

You have no jobs configured. Click "new" to make one.

Note that files handled by email publishers must be smaller than 20MB in size to be delivered by Amazon's email system

You now must create a job and a publisher to use the new metrics job profile

PIM Training Program

Amazon Confidential

12

Reference Link

<https://w.amazon.com/index.php/AmazonMetrics#Introduction to Datanet Metrics Jobs>



END