



Power BI Updates

Chris Wagner & Helen Wall



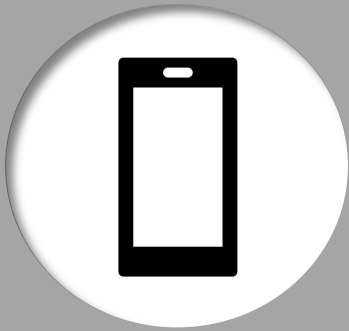


Report and Visuals

- **Error Bar Improvements & GA**
- **Composite models on Power BI Datasets & Analysis Services**
- **Filled Map for Azure Maps Visual!**
- Metric Visuals Updates

Modeling

- **New DAX function: NETWORKDAYS**
- **Multi-role RLS in composite models**
- **Query performance improvement**



Service and Mobile

Service

- Data Hub improvements – data preview & export
- Accessibility enhancements for embedded reports

Mobile

- Data – In – SPAAAAAAAAACE!!!!
- Track metrics with multiple milestones & targets



Data Connectors

- Connect to Datamarts
- Display Name – Dataverse (breaking change?)
- Databricks Update
- FactSet RMS – New
- Funnel - New



Report and Visuals

- New Format Pane (Generally available)
- Updates to Error Bars (Preview)
- Information protection updates
- **Table navigation improvements**
- Canvas zoom in Teams
- *Capabilities.json* file for defining visual permissions
- Improving custom visual load time
- Modeling
 - **Composite models for SQL Server Analysis Services**



Service and Mobile

- | | |
|---|---|
| Service | Embedded Analytics |
| <ul style="list-style-type: none">• Data Storytelling• Data hub• Metrics updates | <ul style="list-style-type: none">• Hierarchy slicers (JS API's)• Paginated reports with SSO data• JS SDK Paginated Reports parameters• DirectQuery for Power BI Datasets |



Data Connectors

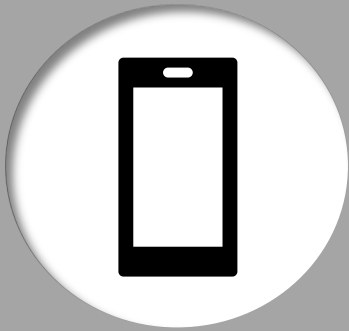
- | | | |
|--|---|---|
| <ul style="list-style-type: none">• Datamarts! (Preview)• Databricks (New)• SingleStore (New) | <ul style="list-style-type: none">• Hexagon PPM Smart API (Update)• Snowflake (Update)• Vessel Insight (Update)• Workplace Analytics/Viva Insights (Update) | <ul style="list-style-type: none">• Anaplan (Update)• Azure Databricks (Update)• Dremio Cloud (Update)• FactSet Analytics (Update) |
|--|---|---|





Report and Visuals

- **Field parameters – Preview!**
- **Composite model Management!!**
- Format pane updates - Preview
- Canvas Zoom
- Data point rectangular selection
- **Charticulator is now GA!!**
- Error bars for combo charts – Preview
- ArcGIS visual updates
- Dumbbell Bar Chart (Nova Silva)
- Drill Down Map PRO (ZoomCharts)



Service and Mobile

Service

- File downloads API
- Datasets hub improvements
- Deprecation of dashboard features

Mobile

- Goal updates in activity feed
- Windows app – new minimum OS requirement



Data Connectors

- Azure DataBricks – Update
- Denodo - Update
- **Google Sheets – Update!**
- Autodesk Construction Cloud - Update
- FactSet RMS – New
- Funnel - New



Report and Visuals

- New Format Pane Updates (Preview)
- **Tooltips for drill actions in matrix, line, and area charts!**
- Error bars for clustered and bar charts
- Bookmark navigator displays last selected bookmark per group
- PowerGantt Chart by Nova Silva

Modeling

- Dynamic query parameters now generally available
- **Updates to required permissions for composition model datasets**



Service and Mobile

Service

- **Updates for Power BI Goals with bulk updates, as well as sharing and access banner**

Mobile

- Visual interaction support in formatting options
- **Goals push notifications**



Data Connectors

- Autodesk Construction Cloud (New)
- Digital Construction Works Insights (Update)
- Dremio, Dremio Cloud (Update)





Report and Visuals

- **Dynamic Format Strings!**
- **Error Bars!**
- Multi-Row card selection (take 2)
- Quick Create from SharePoint
- Improved slicer accessibility
- graphomate 2021.4
- Updated sensitivity labels
- Azure map visual updates
- **Charticulator NOW CERTIFIED**
- Create reports from SharePoint documents



Service and Mobile

Service

- Datasets hub improvements
- Goals Enhancements
 - Custom Statuses
 - Notifications

Embedded Analytics

- Improved method for multi-tenancy deployment
- Paginated reports – support for SSO data sources



Data Connectors

- Anaplan – Update
- Bloomberg Enterprise Data & Analytics - Update
- FactSet Analytics – Update
- AssembleViews - Update
- BitSight - New



Report and Visuals

- New Format Pane (Preview)
- Plotly.js (Akvelon)
- HTML Text Styler 2.0
- Multiple Sparklines (Excelnaccess.com)
- Financial Reporting Matrix (Profitbase)

Modeling

- **Dynamic query parameters now supported in SQL Server + other data sources! (Preview)**



Service and Mobile

Embedded

- Power BI Dataset as data source for paginated reports
- New Dataset permission API's
- Delete Dashboard API

Service

- **Download *.pbix improvements**
- Deployment pipeline enhancements
- Updated Goals (notifications, multiple owners, personal workspaces)

Mobile

- Mobile-optimized report authoring enhancements
- Dark mode (Windows app)
- App new look available

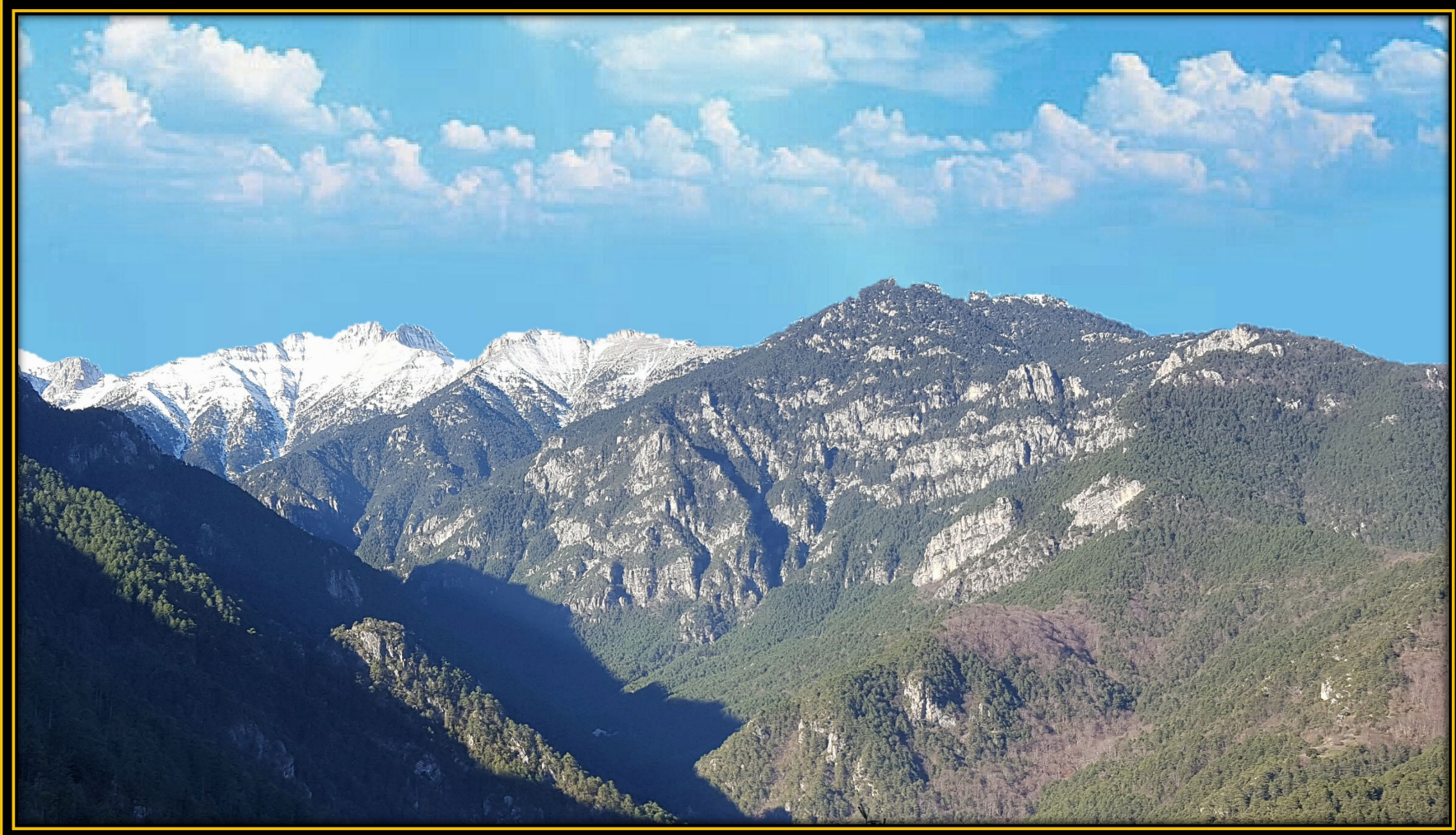


Data Connectors

- Amazon OpenSearch Service
- OpenSearch Project
- Data Construction Works Insight
- Azure Databricks - Update
- BQE Core – Update
- MicroStrategy – Update
- Starburst Enterprise – Update



January 2022: The Microsoft Power BI team
is taking a much-deserved break this month!





Report and Visuals

- **Sparklines!** (Preview)
- Format pane updates (Preview)
- Zebra BI Cards 1.0
- Drill Down Combo Bar PRO (ZoomCharts)

Modeling

- Visualize data with PowerApps/Dynamics 365 (Preview)



Service and Mobile

Embedded

- Improved matrix performance (4.1 API)
- Dataset as data source for paginated reports

Service

- **Hybrid Tables** (Premium)
- Email subscription access via Admin API
- Sharing links include updates to report changes

Mobile

- New report default view
- Recommended Content support hints
- Support for Goals



Data Connectors

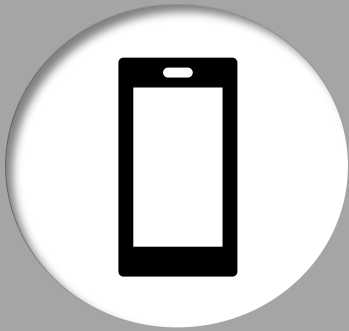
- Azure Data Explore – Update
- FHIR – Update
- Dremio Software – Update
- BQE Core – Update
- Exasol – Update
- Starburst Enterprise - Update
- TIBCO Data Virtualization (Generally Available)





Report and Visuals

- **Page and Bookmark Navigators**
- **New Formatting Options**
- Sort legend
- Bold, italic, and underline text formats
- Text box super/subscripts, bullet lists
- Scorecard visual
- AppSource find report files
- Drill Down map PRO
- Inforiver standard edition
- Lipstick Bar Chart
- **New format pane** (Preview)
- Tenant-level Bing Maps feature switch update



Service and Mobile

Mobile

- **Updated report filters**
- QR codes with URL parameters

Service

- Datasets hub improvements
- Azure Lockbox Support
- **Power BI Goals** (goal level permissions, Power Automate Integration, formatting)

Embedded Analytics

- **Power BI Embedded Gen2**
- Control embed token expiry
- Embedding support for paginated report visuals



Data Connectors

- **Azure Synapse Analytics** (Preview)
- **Google Sheets** (Preview)
- Azure Cosmos DB V2 (Preview)
- Delta Sharing (Preview)
- Google BigQuery (Update)
- Cognite Data Fusion (Update)
- Dremio Cloud (Update)



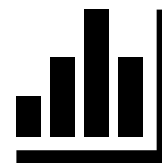
Report and Visuals

- Azure Maps Visual – Heat Map Layer
- Proxy Models – Individual Table(s) linking

Modeling

- Switch Functions- Performance Improvements
- Bitwise Functions
 - BITLSHIFT/BITRSHIFT
 - BITAND/BITOR/BITXOR

- Lollipop Bar Chart – Nova Silva
- Drill Down TimeSeries Pro - ZoomCharts



Service and Mobile

Embedded

- Object Level Security (OLS) is now GA
- Adjust Zoom levels
- Export API Update

Service

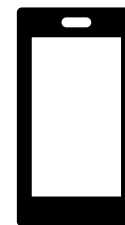
- **Premium Gen2 – GA!!!!**
- **Auto Install Power BI in Teams**
- API – Who has access to what
- Deployment Pipelines APIs- GA

Developers

- Modern Tooltips
- Modern Dialog

Paginated Reports

- ODBC Connector - GA



Data Connectors

- **Azure Databricks – UPDATE!!!!**
- Amazon Redshift - Update
- Dataverse - Update
- Azure Cosmos DB V2 - New

- Amazon Athena – GA
- SIS-CC-SDMX – New
- SumTotal - Update
- Usercube - New





Report and Visuals

- PAFnow Process Mining flowchart
- Drill Down Network PRO
- Annotated Bar
- Graphomate pictograms
- New button formatting
- Waterfall charts toggle totals
- Line chart series labels
- Sensitivity label for templates
- CALCULATE aggregate functions
- XIRR new parameters



Service and Mobile

Mobile

- Goals Available
- Content Exploration
- Request Access to reports

Service

- Goals: Automated status rules and improved filtering
- API's to Determine Artifacts
- Service Principals support for read-only Admin API's

Paginated Reports

- New version of Power BI Report Builder



Data Connectors

- Power BI Connector in Power Automate (New)
- Azure Databricks (Update)
- Bloomberg Enterprise Data and Analytics (Update)
- DataVirtuality (Update)
- Vena (Update)

Authors



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Helen is an instructor for several courses in the **LinkedIn Learning** library that focus on business intelligence applications such as Microsoft's Power BI and AWS QuickSight. Helen recorded the videos comprising these courses, and also authored, developed, and designed the creative content and projects within these courses. LinkedIn Learning is a paid subscription service, but it's a great investment to learn more about technology and business skills as a subscription allows you to access unlimited courses in the online library.

Chris Wagner

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Chris has been working in the Data and Analytics space for nearly 20 years. Chris has dedicated his professional career to making data and information accessible to the masses. A significant component in making data available is continually learning new things and teaching others from these experiences. To help people keep up with this ever-changing landscape, Chris frequently posts on LinkedIn and to this blog.

