Power BI

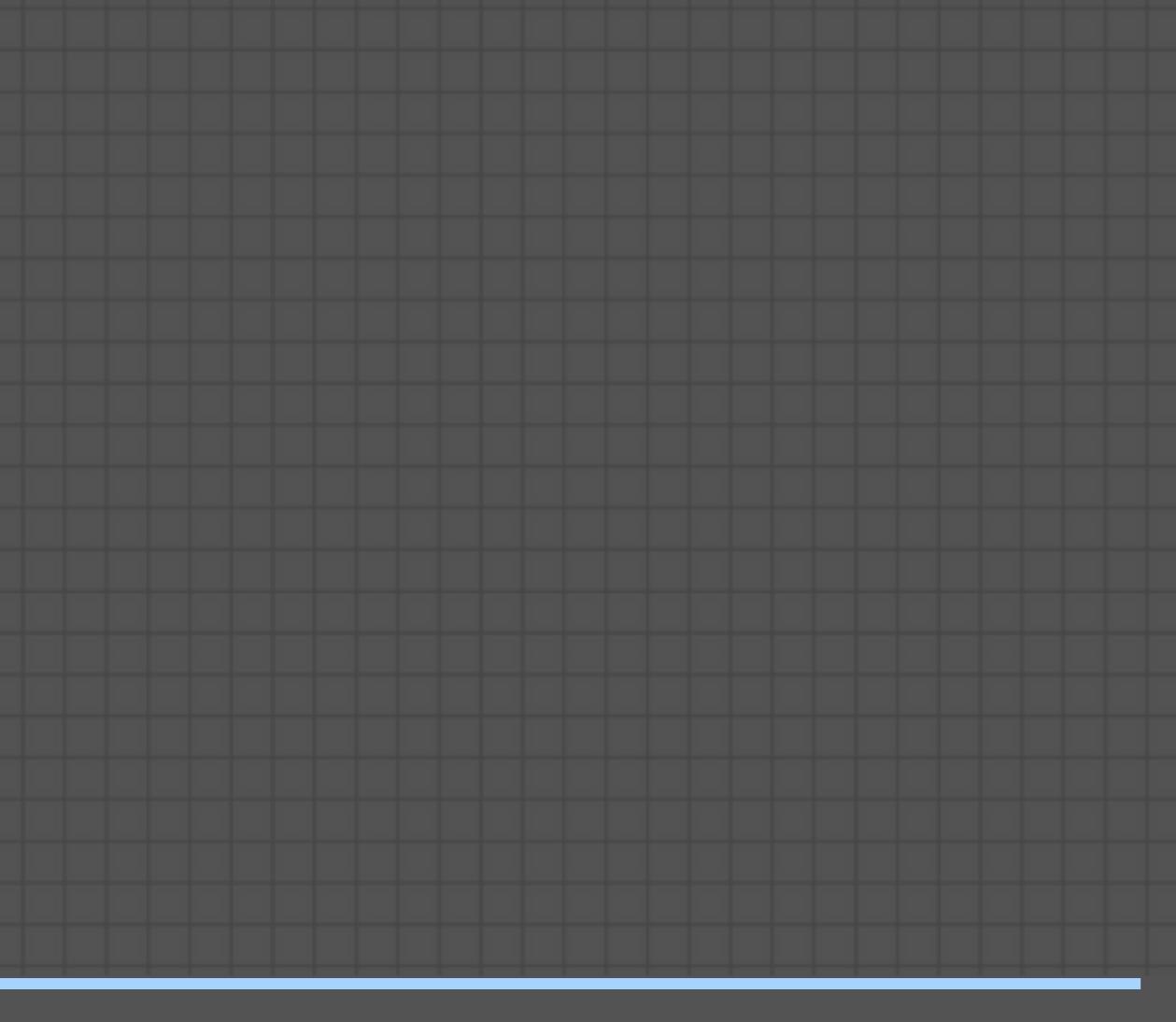## PUBLISHING & MAINTENANCE

PRATHY KAMASANI

ABOUT ME

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I am Prathy Kamasani

MSBI Contractor / Consultant

Microsoft Valuable Professional (MVP)

London Power BI Meet up organiser

An amateur painter and a skilful selfie taker

AGENDA

- Publishing
- Maintenance

AGENDA

- Publishing
  - Workspaces
  - PowerBI Apps
  - Environments
  - Design Standards

- Maintenance
  - Design Standards
  - Admin portal
  - Various API's

WORKSPACES

Once user develop a report or model, it needs to be published to a workspace in Power BI Service(powerbi.com) to collaborate and share with broader audience

- My Workspace
- App Workspaces

WORKSPACES

Once user develop a report or model, it needs to be published to a workspace in Power BI Service(powerbi.com) to collaborate and share with broader audience

My Workspace
- Any Power BI license
- Personal sandbox
- Can share a dashboard/report one at a time

APP WORKSPACES

- PowerBI Pro licence
- Shared Workspaces
- Add users as owners or members
- Dedicated capacity with Power BI Premium
- Share content using Power BI Apps
- Collaborate with colleagues

POWER BI APPS

- Distribution
- Share the selected content from an App Workspace
- Stage changes to <u>dashboards and reports</u> but not <u>datasets</u>
- Can add security groups as members
- Apps based on premium capacity can be shared with non pro license users
- App Workspaces won't create Office 365 entities

Apps are the evolution of content packs, Microsoft mentioned content packs and read only member access to App Workspaces will get deprecated over the time
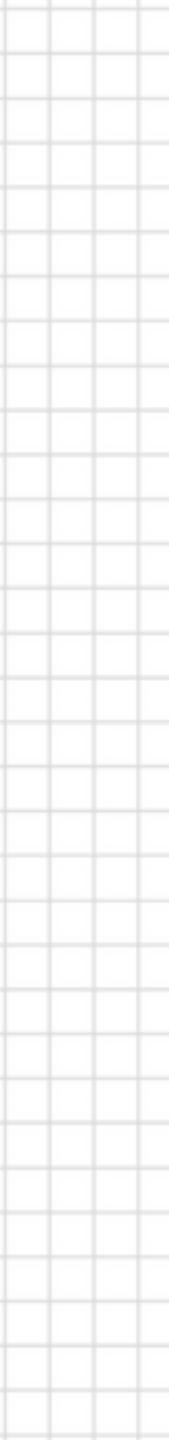
APP WORKSPACES

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- Creates Office 365 entities, creates a group email address appworkspace@tennant.com
- Collaboration with colleagues
- Workspaces can be created and maintained using Office 365 Admin
- One user can create up to 250 Office 365 groups
- Restrict who can create Groups
- Enforce naming conventions using Group Policy's

DESIGN STANDARDS

- Use Templates
- Add comments or descriptions where possible
- Add an about page with last refresh date time and description of Model
- Display parameters like Server name, Power App ID etc.
- Use Office 365 collaboration to maintain the change-log
- Create different workspaces for different Environments
- Version the Model
- Use One Drive as source control
- Hide unused columns
- In Query Editor, check M code especially steps like excluding errors, and change type of columns

ENVIRONMENTS

Power BI don't support Environments by default. Power BI Apps could be used as a staging environment to some extent.

• Workspace based on a work stream and data source environment
  Eg:
    DEV_Retail
    UAT_Retail
    Retail
• Don't include POC / workspace in App workspace name

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SOURCE CONTROL

Use <u>One Drive</u> as source control
• Create folders same as App Workspaces
  - DEV_Retail
  - UAT_Retail
  - Retail

(I personally recommend to use PBI Model with relevant server names e.g. UAT_RetailPBIModel)

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SO FAR

- Basic thumb rule - if you are using or accessing pro features then you need a Pro license unless you are viewing content via Power BI App, based on an App workspace with dedicated capacity or Embedded content
- Renaming workspace in Power BI does not rename Workspace entity or Group email address, so name workspaces wisely
- Restrict who can create Groups or enforce naming conventions and be friends with IT Team
- Use different workspace for different environments
- Version control using One drive or any other methods
- Enforce design standards

PUBLISHING

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MAINTENANCE

Power BI Tennant Administration
- Power BI Admin Portal

Support procedures that are necessary for
day-to-day operations
- Data Schedules
- Users
- Users Auditing
- Service status reports

POWER BI ADMIN PORTAL

Power BI Admin users can see the Admin Portal

Power BI Tennant settings

 - Export and sharing(*Restrict export functionality based on security group*)
 - Audit and usage settings

Capacity settings (Power BI Premium&Power BI Embedded)

Embed Codes

Organisation Visuals

Usage metrics

Users

Audit logs

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DATA SCHEDULES

- Create Power BI Admin account with mailbox and access to all App Workspaces
- Add members to App Workspaces using Office 365 Admin for advanced options like notification emails
- Limit the number of members of App Workspaces and share content using Power BI Apps
- Schedule datasets using Admin account for one place to monitor failure notification emails

USERS

- View Members in each App Workspace
- Users under Admin Portal
- Graph API to view all users in Azure Active Directory

Users Template - https://goo.gl/NtQc4D

USERS AUDITING

Usage Metrics of App Workspace
- *View usage of dashboards and reports*

Tennant Usage metrics
- *Gives an overall picture*
- *Can view top users and top App Workspaces*

Office 365 Admin portal audit log

Office 365 API

Template for Office 365 Auditing API - https://goo.gl/XgNnia

SERVICE STATUS REPORTS

- Schedule history
- Notification emails
- Gateway service status
- Office 365 Admin status page

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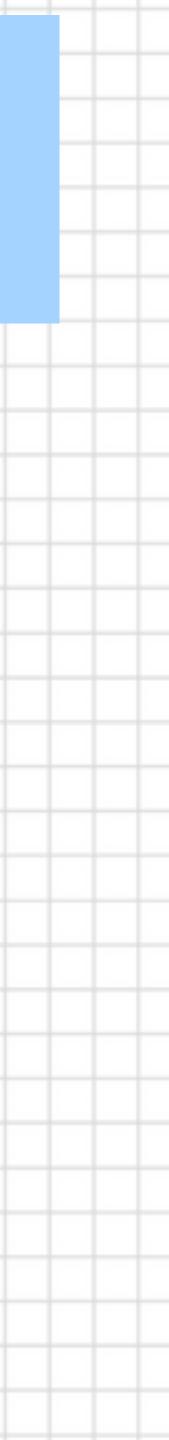- Office 365 Admin status page

Power BI Embedded API to get metadata of Power BI Tennant - https://goo.gl/CvyJ9B

- Power BI and the team who developed are awesome
- Educate and encourage business users within organisation with design standards
- Use office 365 collaboration
- Centralised admin portal is not available; remember it's just not yet available :)

Just like Jimi Hendrix ...

We love to get feedback

Please complete the session feedback forms

SQLBits - It's all about the community...

Please visit Community Corner, we are trying this year to get more people to learn about the SQL Community, equally if you would be happy to visit the community corner we'd really appreciate it.

Thanks

POWER BI PUBLISHING & MAINTENANCE

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Slides: https://goo.gl/XTNUMn

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References:

- Manage who can create Office 365 Groups - ttps://support.office.com/en-ie/article/manage-who-can-create-office-365-groups-4c46c8cb-17d0-44b5-9776-005fced8e618

- Power BI API Ref - https://msdn.microsoft.com/en-us/library/mt147898.aspx

- Office 365 Management API - https://msdn.microsoft.com/en-us/office-365/office-365-management-activity-api-reference

- My blog posts:

- Power BI template to document Power BI Tennant: https://prathy.com/2017/12/power-bi-template-to-document-the-power-bi-service/

- Power BI Users: https://prathy.com/2017/11/find-power-bi-users-organisation/

- Power BI Audit log: https://prathy.com/2018/02/powerbi-audit-log-using-office365-management-api/