A Day In The Life of a(n Accidental) Power BI Administrator

Nicky van Vroenhoven

bit.ly/adminpbi

PBIG
POWER BI GEBRUIKERSGROEP

Admini-stration & Data Governance

De Power BI Gebruikersdagen worden mede mogelijk gemaakt door:

PBIG — POWER BI GEBRUIKERSGROEP

PLATINUM

delaware — Smart. wortell — ilionx — easydash

GOUD

Nova Silva — Tabular Editor — KASPAROV FINANCE & BI — rockfeather

creates. — EIFFEL Voorblijven. Niet bijblijven. — macaw — GET RESPONSIVE

ZILVER

VICTA BUSINESS INTELLIGENCE — Dynamic People — Motion10 AN Hso COMPANY — VisionBI Smart Data Experts — VALID STAY AHEAD

inergy — valcon — iqbs — Quanto collective analytics

COMMUNITY

Kimura data intelligence — DashData. — volda; INFORMATIESPECIALISTEN — Power BI Connector by DAVISTA — AZURROFINANCE

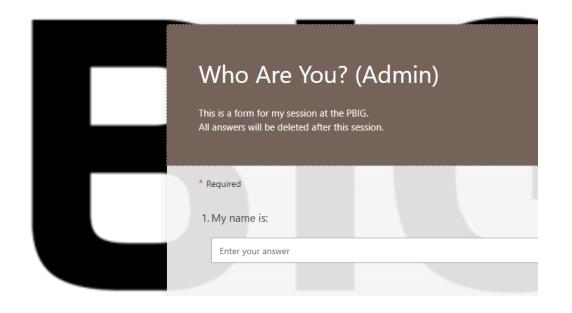# Who Are You?

bit.ly/adminpbi

Check out my blog for a how-to:
www.nickyvv.com/2019/12
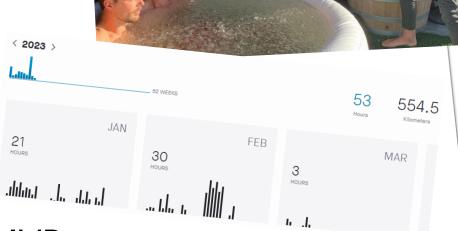
Nicky van Vroenhoven

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@Powerdobs

@NickyvV

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Data Platform MVP

Typical tasks of an admin

- Tenant settings
- Workspace creation
- Gateways & data sources
- Auditing & monitoring
- Premium capacity
- Desktop software
- (Usage of) Licensing

- Integration w/ 365 apps
- Power Platform integrations
- Power BI Report Server
- Training users
- General branding guidelines
- Managing PBI Community/CoE
- …

Topics

- The Power BI Admin role
- Tenant settings
- Managing Updates
- Collaboration and sharing
- Power Platform Admin Center
- Monitoring & Automation

Takeaways

- Understand the features and configurations available in Power BI from an administrator's perspective

- Understand the best practices while administering Power BI

- Have enough experience with the configurations to be able to use it when you return to your office

What is a Power BI Admin?

- Business, empowerment <> governance
- Support business users while enforcing the rules
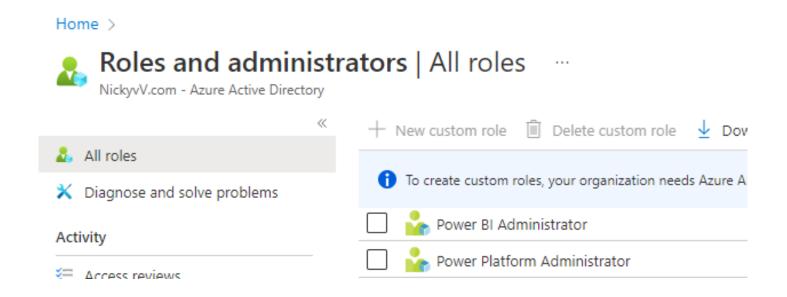- Part of Center of Excellence

What is a Power BI Admin?

Type	Scope
Power BI Service Administrator	Power BI tenant
Power BI Gateway Administrator	Single gateway (cluster)
Power BI Premium Capacity Administrator	Single capacity
Power BI Workspace Admin	Single app workspace
Power Platform Administrator	Power Platform (tenant)

The Power BI Admin Role

- Azure Active Directory Role Assignment

- Admin can also **view** license assignments

Typical tools of an admin

- Power BI Admin Portal
- Power Platform Admin Center
- Microsoft 365 Admin Center
- Security & Compliance Center
- Azure Active Directory Portal
- PowerShell
- REST APIs
- External tools like DaxStudio, ALM Toolkit, Tabular Editor
- …

Tenant Settings

- Part of the Power BI Admin Portal
- Access granted for:
  - Global Admin
  - Power Platform Service Administrator
  - Power BI Service Administrator
- Controls tenant level operations
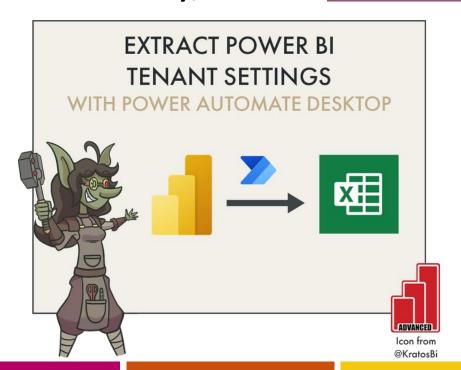- Provides for granular settings

Tenant Settings

- Document! Document! Document!
  - Think about the why's
- Manually, or the *Kurt Buhler-way* ☺

EXTRACT POWER BI
TENANT SETTINGS
WITH POWER AUTOMATE DESKTOP

ADVANCED

Icon from
@KratosBi

	Setting Type	Setting	Current Value	Current Value (Icon)		
1	Setting Type	Setting	Current Value	Current Value (Icon)		
2	Help and suppo	Publish "G	Disabled for the	✕		
3	Help and suppo	Receive en	Disabled for the	✕		

Tenant Settings
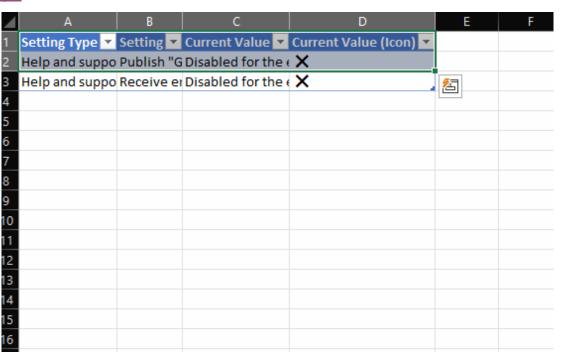
- Document! Document! Document!
  - Think about the why's
- Manually, or the *Kurt Buhler-way* ☺
- Change notification
  - Set up email alerts when a setting is changed with Defender for Cloud Apps (needs a license)
    https://www.coatesdatastrategies.com/blog/how-to-be-alerted-when-power-bi-tenant-settings-change

Tenant Settin

- Document! Docu
  - Think about the
- Manually, or the
- Change notificat
  - Set up email ale   with Defender for
    Cloud Apps

https://www.coatesdatas   er-bi-tenant-settings-change

Microsoft

Admin notification for new activity policy match

A new match was detected for your 'Power BI - Administrative Activity' policy.

Activity:	Update admin feature switch: PowerBI Admin Feature **CertifyDatasets**; Parameters: property **Switch State False**
App:	Microsoft Power BI
Client IP address:	165.2
Client location:	Belgium
Client device:	Windows 10
User:	Admin - Van Vroenhoven, N.V. (Nicky) (adm_vanvroen@
Activity time:	Fri, 27 May 2022 20:05:53 UTC
Alert ID:	62913c328525e3

>> Review this alert

Explore more options:
>> Investigate other activities from this user
>> Investigate other activities from this IP address

This email was sent to you because a policy was set to alert you when new matches are detected. Update policy settings

Thanks, Microsoft Defender for Cloud Apps

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Tenant Settings

- Document! Document! Document!
  - Think about the why's
- Manually, or the *Kurt Buhler-way* ☺
- Change notification
  - Set up email alerts when a setting is changed with Defender for Cloud Apps
- Create a set of AAD-groups

Tenant Settings

- AAD-groups:
  - PowerBI-Users
  - PowerBI-Admins
  - PowerBI-Datamart-Creators
  - PowerBI-Gateway-Admin
  - PowerBI-Workspace-Creators
  - PowerBI-APIs
- Settings
  - **Create workspaces**   Restrict to PowerBI-Workspace-Creators
  - **Use datasets across workspaces**   Entire organization
  - **Publish to web**   Disabled for entire organization
  - **Create Datamarts**   Restrict to PowerBI-Datamart-Creators
  - **Allow service principals to use Power BI APIs**   Enabled for "PowerBI-APIs"
  - **Allow service principals to use read-only admin APIs**   Enabled for "PowerBI-APIs"
  - **Enhance admin APIs responses with detailed metadata**   Enabled for "PowerBI-APIs"
  - **Enhance admin APIs responses with DAX and mashup expressions** Enabled for "PowerBI-APIs"
  - **Add and use certified visuals only (block uncertified)**   Enabled
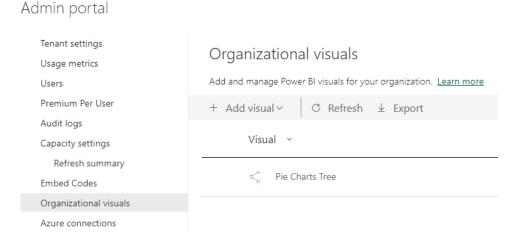
Tenant Settings

- Power BI visuals
  - Check 3 tenant settings
  - [Group policy](#) for Power BI Desktop
  - Establish approval process for usage of custom visuals
  - Admin setting for Organizational visuals
    - Overrides the tenant settings!

Blog: [nickyvv.com/2020/05](#)

Managing updates

- Service (out of our control)
  - But… communication (to users) is key!
- PBI Desktop
- Gateway (keep in sync with PBID, pref. ~latest)
- PBIRS (bi-yearly, specific PBID-version)

Collaborate and share

- My Workspace
- (Shared) Workspaces
- Apps

It's called **My Workspace** for a reason!

- It's for **personal** use only
- Previously: create a shared workspace [Nicky's workspace]
- Recently released into Public Preview:
  - [My workspace governance improvements](#)
  - PBI Admins can now add (and remove) themselves as admin of [My workspace].
  - Also exposed via Activity Log: **AddAdminPersonalWorkspaceAccess**

Workspaces & Apps

- Workspaces
  - Control creation
  - Pro feature

- Apps
  - Free if backed by Premium (per capacity)
  - New: Audiences

- Manage *Export and sharing settings*

Export and sharing settings

▷ Allow Azure Active Directory guest users to access Power BI
Enabled for the entire organization

▷ Invite external users to your organization
Enabled for the entire organization

▷ Allow Azure Active Directory guest users to edit and
Disabled for the entire organization

▷ Show Azure Active Directory guests in lists of sugge
Enabled for the entire organization

▷ Publish to web ⓘ
Enabled for the entire organization

▷ Copy and paste visuals
Enabled for the entire organization

▷ Export to Excel
Enabled for the entire organization

▷ Export to .csv
Enabled for the entire organization

▷ Download reports
Enabled for the entire organization

▷ Users can work with Power BI datasets in Excel usin
Enabled for the entire organization

▷ Export reports as PowerPoint presentations or PDF
Enabled for the entire organization

▷ Export reports as MHTML documents
Enabled for the entire organization

▷ Export reports as Word documents
Enabled for the entire organization

▷ Export reports as XML documents
Enabled for the entire organization

▷ Export reports as image files
Disabled for the entire organization

Disabled for the entire organization

▷ Print dashboards and reports
Enabled for the entire organization

▷ Certification
Disabled for the entire organization

▷ Create email subscriptions
Enabled for the entire organization

▷ Allow email subscriptions to be sent to external users
Enabled for the entire organization

▷ Featured content
Enabled for the entire organization

▷ Allow connections to featured tables
Enabled for the entire organization

▷ Allow shareable links to grant access to everyone in your organization
Enabled for the entire organization

▷ Enable Microsoft Teams integration in the Power BI service
Enabled for the entire organization

▷ Install Power BI app for Microsoft Teams automatically
Enabled for the entire organization

▷ Enable Power BI add-in for PowerPoint
Enabled for the entire organization

▷ Allow DirectQuery connections to Power BI datasets
Enabled for the entire organization

▷ Guest users can work with shared datasets in their own tenants
Disabled for the entire organization

▷ Allow specific users to turn on external data sharing
Enabled for the entire organization

Branding

- Service: Tenant settings
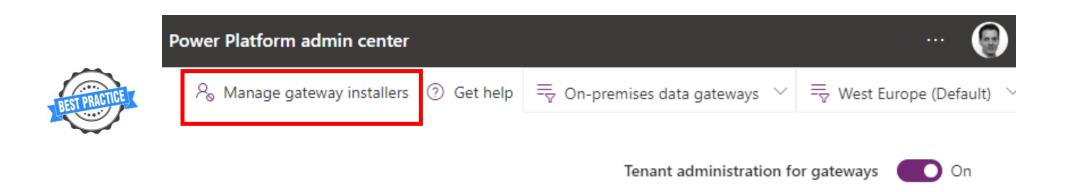- Theme files/templates
- Filtering in the service

Branding

- Tenant settings: Custom branding
- Theme files/templates
  - Generate (corporate) theme: powerbi.tips
  - Be aware of accessibility
    - Color checker
- Filtering in the service
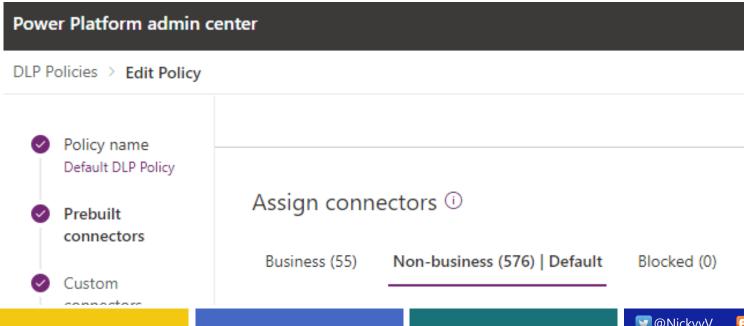 - Slicers? Slicer panel? Filter pane?

Power Platform Admin Center

- Restricted access for Power BI Admins

- Gateway & data source management

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Power Platform Admin Center

- Restricated access for Power BI Admins

- Gateway & data source management

- Data Loss Prevention Policy

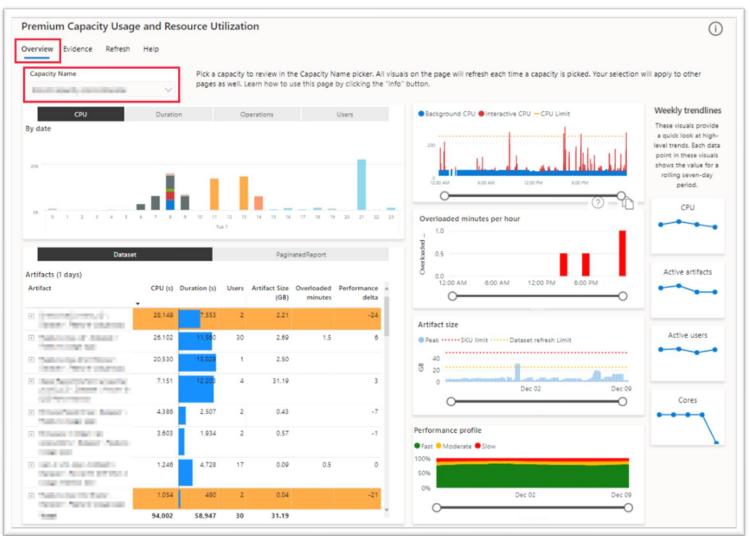# Monitoring & automation

- System health
  - [Power BI Support site](#)
  - [Power BI Known Issues](#)
  - [Azure Health Status](#)
  - [M365 Admin Center](#)

Monitoring & automation

- Premium Metrics App

Monitoring & automation
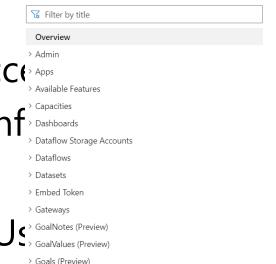
REST API's

- Enhanced visibility into user acce

- Retrieve user and permission inf

- Workspace **Scanner API** with Us
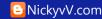 - User access information for variou

REST Operation groups

This table lists the Power BI REST API operation groups.

> ⓘ Note
>
> To manage **Power BI Embedded** capacities, use the **Power BI Embedded Azure**

Operation group	Description
Admin	Operations for working with administrative t
Apps	Operations for working with Apps.
Available Features	Operations that return available features.
Capacities	Operations for working with capacities.
Dashboards	Operations for working with dashboards.
Dataflow Storage Accounts	Operations for working with dataflow storag
Dataflows	Operations for working with dataflows.
Datasets	Operations for working with datasets.
Embed Token	Operations for working with embed tokens.
Gateways	Operations for working with gateways.
Groups	Operations for working with groups.
Imports	Operations for working with imports.
Pipelines	Operations for working with deployment pip
Push Datasets	Operations for working with push datasets.

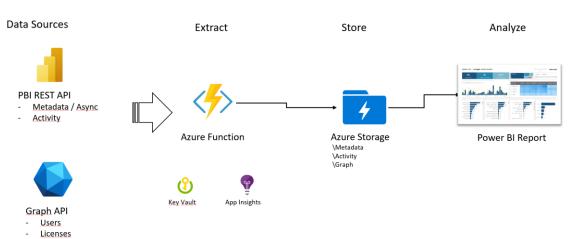# Monitoring & automation

- Activity Log data
  - Power BI Activity Log: stored for 30 days
    - PBI Admin rights
  - M365 Audit log: stored for 90 days
    - Office Admin rights
  - Start collecting data today (and report later)!

Monitoring & automation

- Admin monitoring
  - Out-of-the-box ([roadmap item](#), this month?!)
  - Or roll your own with the REST API – Scanner API's

- Even better: Rui Romano's solution(s)
  - github.com/RuiRomano/pbimonitor
  - Power BI Monitor
  - Gateway monitoring

Call To Action

- Go through and document your Tenant settings
- Get started with monitoring your environment
  - Extract Power BI Activity log
  - Setup Gateway monitoring
  - [Check your Premium Metrics App]
- Check documentation: learn.microsoft.com/en-us/power-bi/
  - Power BI Admin doc's
  - Implementation scenario's
  - Adoption roadmap

Resources

- Kurt Buhler: [Export Power BI Tenant settings](#)
- [Certified Power BI Visuals](#)
  - Organizational Visuals: [nickyvv.com/2020/05](#)
- Rui Romano's [monitoring solutions](#) on Github
- Microsoft Learn:
  - [Power BI Admin doc's](#)
  - [Implementation scenario's](#)
  - [Adoption roadmap](#)

De Power BI Gebruikersdagen worden mede mogelijk gemaakt door:

Thank you!

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