

A DYNAMICSCON PRESENTATION



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DYNAMICSCON VIRTUAL

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DYNAMICS
GP

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Dynamics GP and Moving to Azure

Agenda

- Dynamics GP landscape today
- Different environments for GP today
- Review costs of staying with on prem servers
- Why would you move to Azure
- What does moving to azure look like
- Components of Azure
- Next Steps, things to think about, tip and tricks
- Existing GP backups and azure

Dynamics GP landscape

- Running GP on prem
- Hosting provider is hosting your servers or hosting GP
- Azure but not configured correctly

Different on prem environments for GP

- Domain controller server – Physical or virtual server
- Server hosting GP, MR, SSRS databases. (running sql instance)
- Local workstation installs, or a server setup for RDS – combination of the two
- May also have a webserver and running GP web client.

Costs of staying on prem

- **Capital Expenses**

- Hardware costs
- Licensing costs

- **Operating Expenses**

- IT personnel
- Cost to patch OS monthly
- Physical security for your servers (room and access to servers)
- Time it takes to purchase, update and configure a server
- Other hardware needed to keep servers up and running. (switches, ups, etc)
- Depreciation of existing servers. Server may be able to last 5 years but the OS on there may no longer be supported by year 5, etc

Why would you move to Azure

- Uptime(99.95%) guarantee and not affected by local power outages.
- Less risk associated with azure then managing on prem servers
- Upgrades and patches to OS can be done in less time and automated.
- Flexible – If you need more resources at certain times of the year or need to increase data storage or increase users you can go it quickly

Why would you move to Azure

- Cost effective as you only pay for consumption
- Microsoft has made a commitment to support GP until 2028 and beyond and moved to modern lifecycle which means yearly updates on a predictable schedule
- Scalable, WFH and remote growth
- Modern platform enablement
- More secure with Identity management model – with azure AD

What does moving to azure look like?

- A couple of different scenarios
- Hybrid solution where you keep your Domain controller on prem
 - Move SQL server, hosting and accessing GP to Azure
 - You need to setup a virtual gateway to put your local network and azure network on the same network
 - When you then use SSRS or MR for example it will use your existing on prem domain user to authenticate.
 - Also good to setup secondary domain controller VM in azure as backup in cases something happens to your existing on prem domain

What does moving to azure look like?

- Scenario 2
- Move everything to Azure
 - Users log into their workstation using M365 account
 - Use Azure active directory domain services
 - Virtual machine for SQL
 - Use Azure virtual desktop services for users to access GP and other applications

Components of Azure

- **Virtual Machines (VM's)**

- Servers in the cloud
- Each virtual machines can have different RAM or CPU configuration.
- You mostly pay for compute hours associated with VM of different sizes. This means if the VM is not on you don't normally pay for the resource.
- VM's can be scaled up and down as needed.
- With GP our SQL server would a VM we need to configure

Components of Azure

• Azure Storage

- Hard drive in the cloud, but far better . Used for drives on VM's
- Durable and highly available – data is replicated in a way that make it highly available in the event of an outage.
- Secure – all data written to azure storage account is encrypted by the service.
- Scalable – can group to meet you needs
- Managed – Azure handles hardware maintenance, updates, and critical issues for you.
- Azure Blobs, Azure Files, Azure Disks are just some of the services around Azure Storage

Components of Azure

- **Azure Virtual desktop**

- Service that is used so we can access our apps (GP, MR, SSRS, etc)
- Allows for full desktop or access as a remote app
- Windows 10 or 11 and can be multi-session to reduce costs
- VM sizing and scaling policies
- Images, app, and profile management.
- Remote app streaming – low latency, high-performance user experience from virtually anywhere on any device.
- Use remote desktop app to sign in

Components of Azure

- **Azure Domain services**

- Managed domain services such as domain join, group policy, and lightweight LDAP and Kerberos/NTLM authentication.
- Use without needing to deploy, manage and patch domain controllers in the cloud
- Integrates with your existing AD tenant.
- High availability. Includes multiple domain controllers that you don't have to manage.
- If scenario 2 where everything is moving to azure then this will be required to manage Authentication to MR, SSRS, etc

Components of Azure

- **Azure VM Backup and Azure Backup center**
 - Used to backup your VM and storage disks
 - You create a vault to store your backup into
 - Things like retention policy and redundancy alter costs. (locally redundant will be far less expensive the geo-redundant storage for backups.
 - Moving data to Archive Tier is also less costly. Example archive tier is 0.0036 per GB or 0.36 per 100 GB
 - Azure backup center used to manage backups

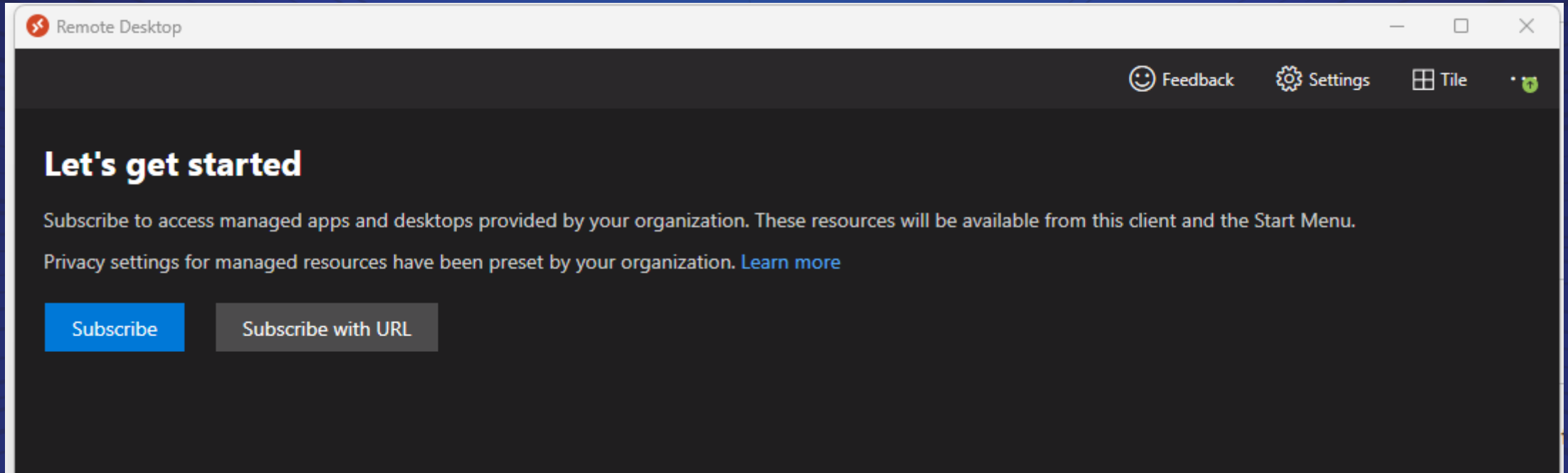
Tips and Tricks

- **Use reserved instances to reduce cost**
 - If you are planning on leaving your machines on, which you would with GP and azure
 - 1 year or 3 year reserved instances. Up to 72% discount when compared to pay as you go.
 - Good to start off with pay as you go for the first few months before locking into a reserved instance

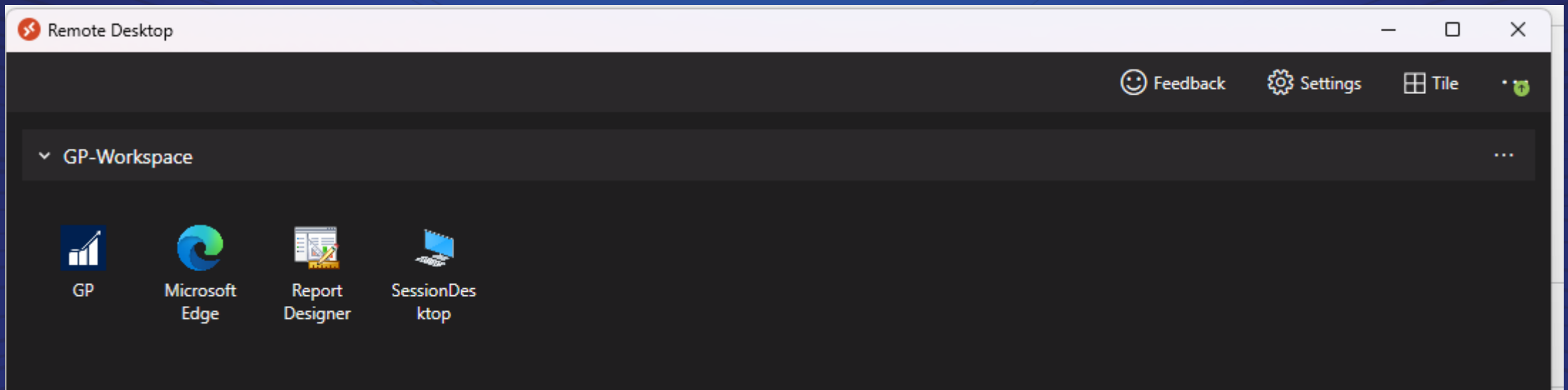
Tips and Tricks

- **Printers and other applications**

- Think about printers and speed at which you want to print stuff from GP. Probably will need a virtual gateway to facilitate this
- Think about access to other application and what could be moved to azure remote desktop services. Also think about things like onedrive access from other applications.



- Sign in with M365 account



- Once signed in I see the apps I have access to or full desktop



- Once launched that app will then show in my taskbar similar to another applications

Next Steps

- **Work with GP partner**
 - Most GP Partners will have a questionnaire and discovery of your existing environment
 - Used to gather current version of GP and ISV products you are using
 - Current server specs, number of companies, disk space consumed by databases
 - Review number of users
 - Workloads
 - Modules and functionality you are using in GP
 - Integrations you may be running
 - Review other apps you are running on the servers

Moving GP backups to Azure

- Can be used today to have your on prem sql backups going to the cloud and offsite.
- Setup proper maintenance plan
- Backups to Azure storage
- Full, log and differential backups

Moving GP backups to Azure

- **Azure Blob storage components**

- Create a Storage account in Azure
- Create a container
- Have a storage blob in the container
 - URL format `https://<storageaccount>.blob.core.windows.net/<container>/<blob>`

- **SQL server components**

- URL `https://<storageaccount>.blob.core.windows.net/<container>/<FILENAME.bak>`
- Credential – info that is required to connect and authenticate to azure blob storage.

Showing 1 to 1 of 1 records.

No grouping

<input checked="" type="checkbox"/> Name ↑↓	Type ↑↓	Kind ↑↓	Resource group ↑↓	Location ↑↓	Subscription ↑↓
<input checked="" type="checkbox"/> dynamicscon1	Storage account	StorageV2	PAULDEMOENV	East US	DEMOENV-PAUL

- Create storage account

dynamicscon1 | Containers Storage account

Search

+ Container Change access level Restore containers Refresh Delete Give feedback

Search containers by prefix Show deleted containers

Name	Last modified	Public access level	Lease state
<input type="checkbox"/> Slogs	2/20/2023, 11:51:02 AM	Private	Available
<input type="checkbox"/> demo	2/20/2023, 11:54:01 AM	Private	Available

Overview
Activity log
Tags
Diagnose and solve problems
Access Control (IAM)
Data migration
Events
Storage browser
Data storage
Containers
File shares
Queues
Tables
Security + networking

- Create a container in the storage account

demo | Access policy ...

Container

Search Save

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

Shared access tokens

Access policy

Properties

Metadata

Stored access policies

+ Add policy

Identifier	Start time	Expiry time
demoaccess	2/20/2023, 12:00:00 AM	3/16/2023, 12:00:00 AM

Immutable blob storage

+ Add policy

Identifier	Scope	Retention interval
No results		

- Setup access policy and setup shared access tokens

demo | Shared access tokens ...

Container

Search

A shared access signature (SAS) is a URI that grants SAS

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

Shared access tokens

Access policy

Properties

Metadata

Signing method

Account key User delegation key

Signing key

Key 1

Stored access policy

demoaccess

Permissions

6 selected

Start and expiry date/time

Start

02/20/2023

(UTC-06:00) Central Time (US & Canada)

Expiry

03/16/2023

(UTC-06:00) Central Time (US & Canada)

Allowed IP addresses

for example, 168.1.5.65 or 168.1.5.65-168.1.5.65

Allowed protocols

HTTPS only HTTPS and HTTP

Generate SAS token and URL

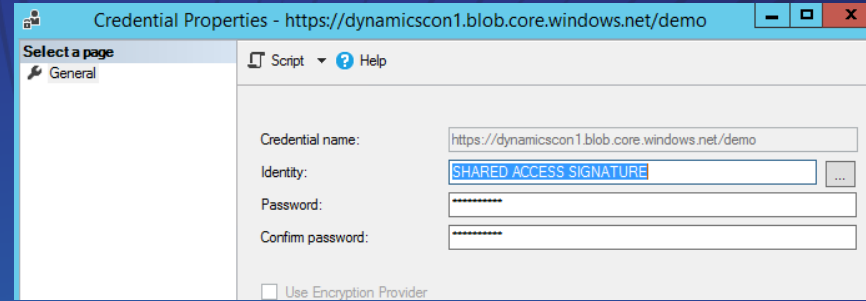
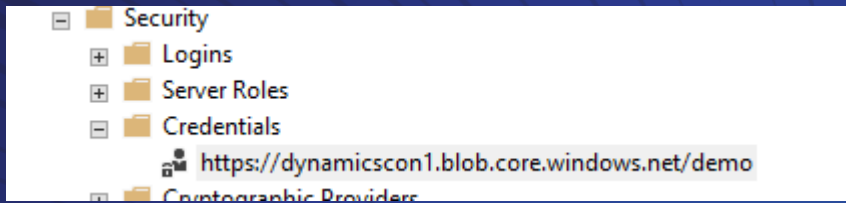
Generate SAS token and URL

Blob SAS token

si=demoaccess&spr=https&sv=2021-06-08&sr=c&sig=GA09zeSpt6tmMMUI3PmD5irywp8VMQnOcsKSkBA0y%2F8

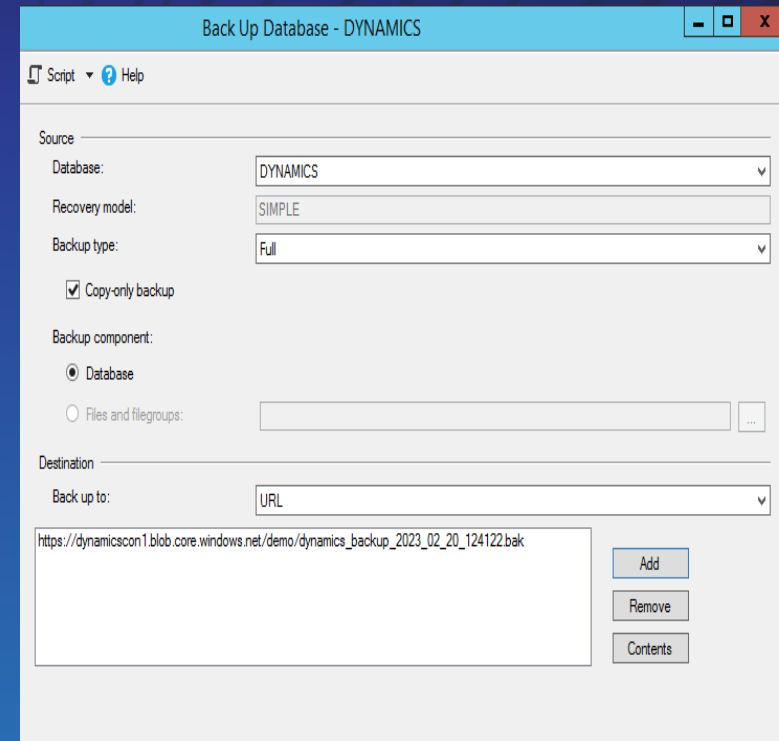
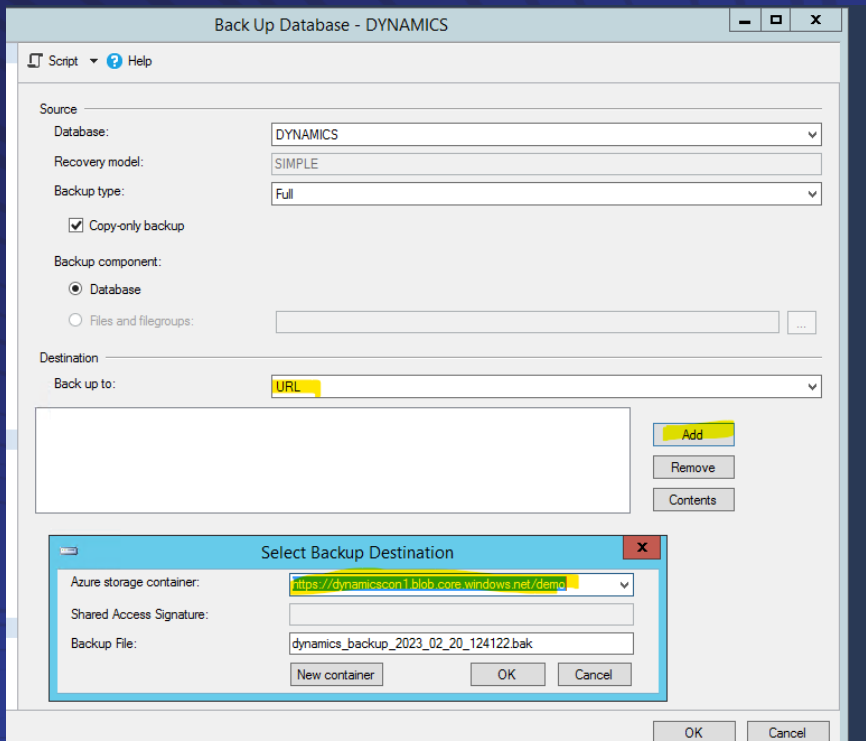
Blob SAS URL

https://dynamicscon1.blob.core.windows.net/demo?si=demoaccess&spr=https&sv=2021-06-08&sr=c&sig=GA09ze



```
https://dynamicscon1.blob.core.windows.net/demo?si=demoaccess&spr=https&sv=2021-06-08&sr=c&sig=GA09zeSpt6tmMMU13PmD5
```

- Create a new credential and then put storage account and container in the credential name on the on prem server
- Identity should be SHARED ACCESS SIGNATURE
- Password will be everything after the ?




- Change backup to URL
- Select Add
- Select Azure storage container

Authentication method: Access key (Switch to Azure AD User Account)
Location: demo

Search blobs by prefix (case-sensitive) Show deleted blobs

+ Add filter

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
<input type="checkbox"/>  dynamics_backup_2023_02_20_123225.bak	2/20/2023, 12:33:11 ...	Cool (Inferred)		Block blob	302.75 MiB	Available

- After backup run I have my .bak file in my storage container

Thank you DynamicsCon

Q&A



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