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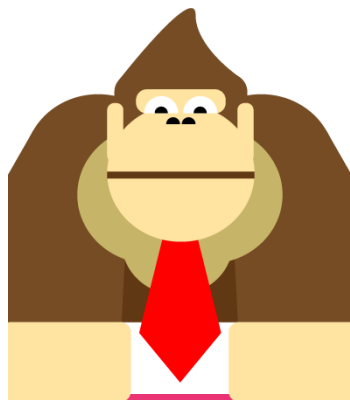
To hyperscale or not to Hyperscale

That's question, in five minutes

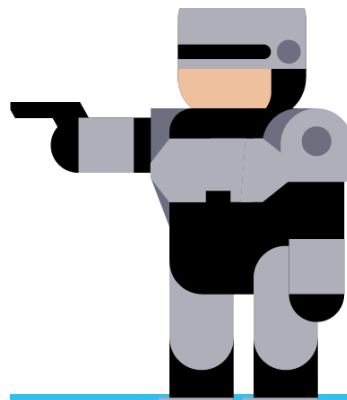
Talking points



Design



Pros and
cons



Bugs?



Would you use
it?





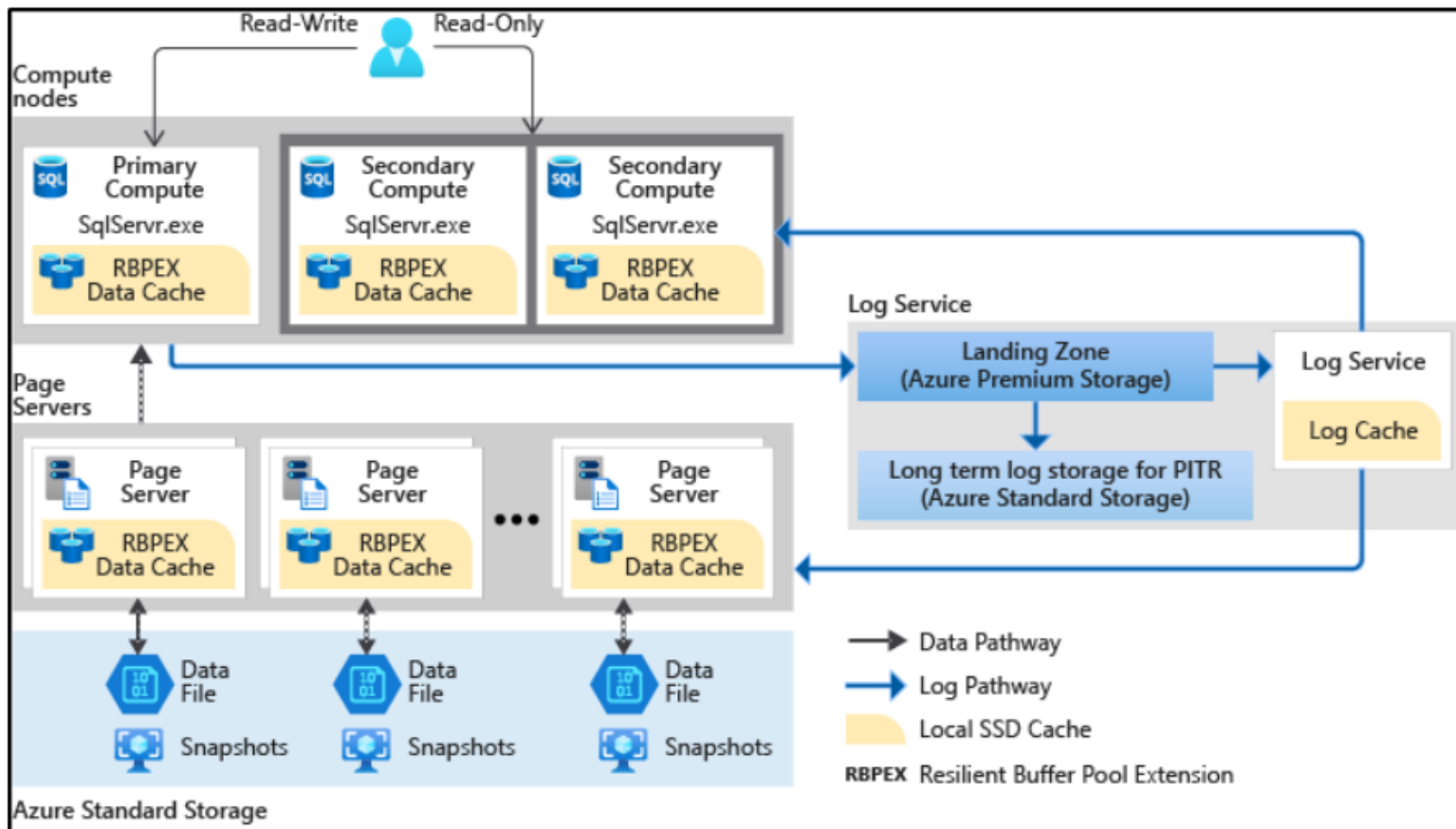
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- ▶ Production DBA / Performance tuning
- ▶ Azure infrastructure with Terraform
- ▶ SQL training
- ▶ Photography, running, cycling, timekeeping
- ▶ Public speaker
- ▶ Certified beyond any repair



Hyperscale!

- ▶ It's really fast (less to no log waits)
- ▶ It scales in the background
- ▶ You can scale it when needed
- ▶ Costs are related to the running SKU

Hyperscale?

- ▶ Scaling means a failover
- ▶ Don't forget to scale down
- ▶ Scaling loses most of your DMV contents
- ▶ Look at your restores! Is the default correct?

- ▶ Querystore doesn't seem to suffer (much)

Hyperscale?

► Is this correct for your restore?

Database name *

restoreddb-new_2021-10-20T07-50Z



Server ⓘ

sql server, elastic pool (West Europe)



Want to use SQL elastic pool? * ⓘ



Yes



No

Compute + storage * ⓘ

Hyperscale

Gen5, 16 vCores

[Configure database](#)

Hyperscale bug

- ▶ Do not upgrade a database to Hyperscale
- ▶ The underlying design breaks. You need 128 GB page servers, we got one 1 TB page server
- ▶ RBIO_RG_STORAGE wait
- ▶ No performance at all

Hyperscale bug



Database Properties -

```
SELECT d.name,  
       vfs.file_id,  
       fsu.total_page_count,  
       ((fsu.total_page_count * 8)/1024)/1024 as file_gb  
FROM sys.databases d  
INNER JOIN sys.dm_io_virtual_file_stats(null,null) vfs on d.database_id=vfs.database_id  
INNER JOIN sys.dm_db_file_space_usage fsu on d.database_id = fsu.database_id  
       AND fsu.file_id = vfs.file_id
```



Query Store

Hyperscale bug

Results					Messages				
	name	file_id	total_page_count	file_gb					
1	My Hyperscale DB	1	16777216	128	27	My Hyperscale DB	28	16777216	128
2	My Hyperscale DB	3	16777216	128	28	My Hyperscale DB	29	16777216	128
3	My Hyperscale DB	4	16777216	128	29	My Hyperscale DB	30	15728640	120
4	My Hyperscale DB	5	16777216	128	30	My Hyperscale DB	31	13107200	100
5	My Hyperscale DB	6	16777216	128	31	My Hyperscale DB	32	11796480	90
6	My Hyperscale DB	7	16777216	128	32	My Hyperscale DB	33	9175040	70
7	My Hyperscale DB	8	16777216	128	33	My Hyperscale DB	34	7864320	60
8	My Hyperscale DB	9	16777216	128	34	My Hyperscale DB	35	5242880	40
9	My Hyperscale DB	10	16777216	128	35	My Hyperscale DB	36	2621440	20

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Show of hands, will you use
it?

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Any questions?

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To hyperscale or not to Hyperscale

In five minutes