Hyperscale long restore VLDB

Last updated by | Subbu Kandhaswamy | May 16, 2022 at 8:18 PM PDT

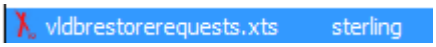
* **Note:** This issue has been fixed and Product team rolled out the fix globally. If you notice customer experiencing this issue still, then please escalate to engineering - Backup/Restore Hyperscale queue

Contents

Issue

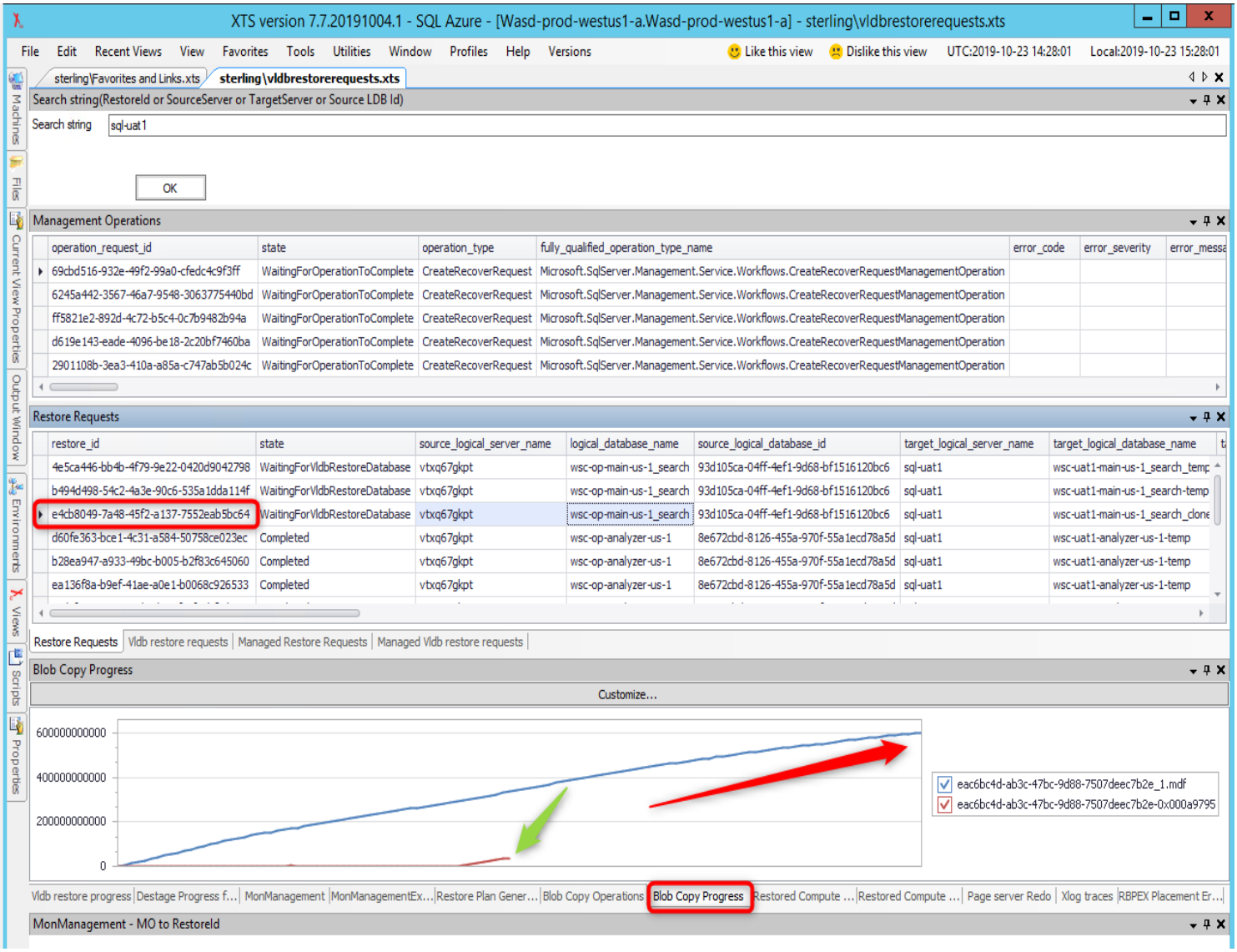
If a customer complains about long restore operations there are two things you need to check

Check XTS view



Check how the copy progress is progressing

- Find the restore request
- Look for **blob copy progress**
  - We can see in green one file looks like stopped. In this case log finished copy
  - We can see that MDF is still progressing



Already requested to PG one additional information in same XTS view, but that you can get from CMS

select vrr.restore_id, vrr.copy_batch_id, target_blob_uri, ascr.copied_in_byte / (1.0 * size_in_byte), ascr.state, ascr.copied_in_byte, ascr.copy_id, ascr.size_in_byte, copy_start_time, copy_end_time, ascr.request_copy_type
from vldb_restore_requests vrr

left join azure_storage_copy_requests ascr

on ascr.copy_batch_id = vrr.copy_batch_id

where vrr.restore_id = 'e4cb8049-7a48-45f2-a137-7552eab5bc64'

order by ascr.state asc

Check status of files

restore_id	copy_batch_id	target_blob_uri	Column1	state	copied_in_byte	copy_id	size_in_byte	copy_start_time	copy_end_time	request_copy_type
e4cb8049-7a48-45f2-a137-7552eab5b...	5a73c8bd-86c7-4ffa-a016-9275c340fb...	https://wasd2prodwus1ahspp957.blob...	0.927943356950263811	Copying	601932988416		648674279424	22/10/2019 07:52:25		ServerSideAsync
e4cb8049-7a48-45f2-a137-7552eab5b...	5a73c8bd-86c7-4ffa-a016-9275c340fb...	https://wasd2prodwus1ahsds144.blob...	1.000000000000000000	Succeeded	34359746560		34359746560	22/10/2019 07:52:26	22/10/2019 22:31:14	ServerSideAsync

Internal Information (Additional Details)

FROM PG in a ICM

The file transfers we were seeing over the weekend were about 128GB, this file is about 1TB. The cause is that this is an older database. At some point we changed over from using 1TB file splits to using 128GB file splits (for a variety of reasons, including the fact that it makes DB copies much faster).

Unfortunately, there is no way for us to go in to an old database and split up the older 1TB files. You can advise the customer that if this is a problem for them, they can create a *new* database (not geo-restore, not PITR restore) and they would get the 128GB file size. How this might happen depends on the customer's use-case. One way is to export this database to bacpac (using sqlpackage.exe, the portal is limited to DBs about 150GB in size), then re-import it (also with sqlpackage). If this database is some kind of "play" database which they deployed to test Hyperscale and it doesn't contain production data, they could instead just create a new one via the portal and they will get a new DB with the new file size.

Reg LONG copy time check

- https://portal.microsofticm.com/imp/v3/incidents/details/149495279/home
- https://portal.microsofticm.com/imp/v3/incidents/details/149811430/home

From PG Team

Another reason it takes a very long time to restore is that a Geo-Restore is designed for disaster recovery. We assume the primary storage account (the one in the same region as the DB) is inaccessible, so we restore from the secondary. This means that, even if it appears to be a restore into the same region as the active DB, the files are actually coming from the paired region. In this case, I believe On-Call Engineer manually changed the recovery file to instead be copying from the same region.

The solution to paired-region copy would be to use point-in-time restore which should finish very quickly. However it sounds like the customer may have tried this but the portal was not working.

How good have you found this content?