Tungsten Replicator Master Class

Advanced: Working with MongoDB

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Topics

In this short course, we will:

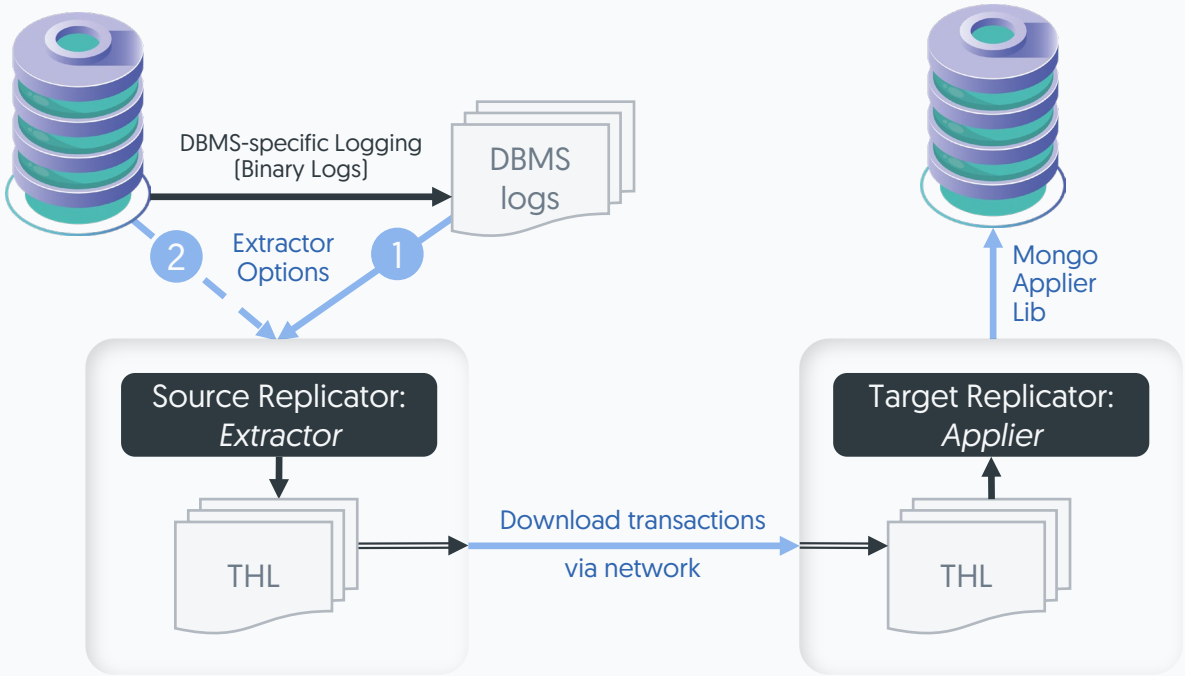
- Review replicator flow
- Explore MongoDB specific pre-requisites
- Review configurations

Replicator Flow

How MongoDB Replication Works

Option 1: Local Install
Extractor reads directly from the logs, even when the DBMS service is down. This is the default.

Option 2: Remote
Extractor gets log data via MySQL Replication protocols (which requires the DBMS service to be online) This is how we handle Amazon Aurora extraction tasks.



THL = Events + Metadata

Object Mapping

Mongo

- MySQL database → database
- Table → collection
- Row → document

Prerequisites

- Review online documentation
  - https://docs.continuent.com
  - Download the prerequisite checklist
- Extractor/applier hosts
  - OS user
  - /etc/hosts
  - sudoers
  - Ruby
  - Java
- Network
  - Review port requirements
- MySQL
  - my.cnf settings
  - User accounts

MongoDB

- User account
- If using Atlas, export certificates
- Add replicator to Atlas whitelist

Extractor Config

```
[defaults]
user=tungsten
install-directory=/opt/continuent
mysql-allow-intensive-checks=true
profile-script=~/.bash_profile
disable-security-controls=true
rest-api-admin-user=tungsten
rest-api-admin-password=secret
replicator-rest-api-authentication=true
replicator-rest-api-ssl=true
replicator-rest-api-port=8097
replicator-rest-api-address=0.0.0.0

[alpha]
master=tr-ext-2
members=tr-ext-2
replication-user=tungsten
replication-password=secret
replication-port=3306
enable-heterogeneous-service=true
svc-applier-filters=dropstatementdata,replicate
property=replicator.filter.replicate.ignore=mysql
#or
property=replicator.filter.replicate.do=<schemanamehere>
```

Applier Configs

MongoDB Atlas

```
[defaults]
user=tungsten
install-directory=/opt/continuent
profile-script=~/.bash_profile
disable-security-controls=false
rmi-ssl=false
thl-ssl=false
rmi-authentication=false
rest-api-admin-user=tungsten
rest-api-admin-password=secret
replicator-rest-api-authentication=true
replicator-rest-api-ssl=true
replicator-rest-api-port=8097
replicator-rest-api-address=0.0.0.0

[alpha]
master=tr-ext-2
members=tr-app-1
datasource-type=mongodb
replication-user=dbadmin
replication-password=Secret123
replication-port=27017
replication-host=atlasendpoint.mongodb.net
property=replicator.applier.dbms.connectString=mongodb+srv://${replicator.glo
bal.db.user}:${replicator.global.db.password}@${replicator.global.db.host}/?r
etryWrites=true&w=majority
```

MongoDB

```
[defaults]
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install-directory=/opt/continuent
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disable-security-controls=true
rest-api-admin-user=tungsten
rest-api-admin-password=secret
replicator-rest-api-authentication=true
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replicator-rest-api-address=0.0.0.0

[alpha]
master=tr-ext-2
members=tr-app-1
datasource-type=mongodb
replication-user=dbadmin
replication-password=Secret123
replication-port=27017
```

Summary

What we have learnt today

- Reviewed replicator flow
- Explored Mongo specific pre-requisites
- Reviewed configurations

Thank you for listening

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