

TDM Upgrade Guide

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Purpose

The purpose of this document is to provide steps to upgrade TDM environment from older version to TDM 4.8 and above.

Introductions

TDM Upgrade procedure has changed from upgrading the repository from Datamaker to TDM Portal.

Upgrade Pre-Requisites

Upgrade Path for 4.9

Versions	Suggested Path
4.0	4.0 -> 4.2->4.4->4.6->4.7->4.9
4.1	4.1 -> 4.3->4.6->4.7->4.9
4.2	4.2 -> 4.4->4.6->4.7->4.9
4.3	4.3 -> 4.5 -> 4.7->4.9
4.4	4.4 -> 4.6-> 4.7->4.9
4.5	4.5->4.7->4.9
4.6	4.6->4.7->4.9
4.7	4.7 -> 4.9
4.8	4.8 -> 4.9

Download Media

You can download the media from [Broadcom Support](#)

SEARCH :

PRODUCTS	RELEASE	SERVICEPACK	DOCKER	CART	DOWNLOAD	FTP
CA Test Data Manager Data Source Type Seeding MULTI-PLATFORM	4.6	0000				
CA Test Data Manager for Data Generation and Test Matching Seeding MULTI-PLATFORM	4.8	0000				
CA Test Data Manager for Masking and Subsetting Seeding MULTI-PLATFORM	4.8	0000				
CA Test Data Manager for Data Generation and Test Matching MSP MULTI-PLATFORM	4.8	0000				
CA Test Data Manager for Test Data on Demand MSP MULTI-PLATFORM	4.8	0000				

Download the required files as per your environment requirement.

CA Test Data Manager Full Package – For both DataMaker and TDM portal upgrade on Windows.

CA Test Data Manager Portal for Docker – TDM portal on docker

CA Test Data Manager for Data Generation and Test Matching MSP

Release: Service Pack:

4.9
4.8
4.7
4.6
4.5

Download Package

SEARCH :

RELEASE	SERVICEPACK	COMPONENT	DATE	DOCKER	CART	DOWNLOAD	FTP
4.8.1	0000	CA Test Data Manager Repository Kit 4.8.1 GEN0000000000662.ZIP <i>For Docker Upgrade</i>	Jul 25 2019 11:18AM				
4.8.1	0000	CA Test Data Manager Portal for Docker 4.8.1 GEN0000000000301.zip	Jul 24 2019 8:35AM				
4.8.1	0000	CA Test Data Manager Portal for Docker (image kit) 4.8.1 GEN0000000000302.zip	Jul 24 2019 8:37AM				
4.8.1	0000	CA Test Data Manager Portal for Docker (image bundle) 4.8.1 GEN0000000000303.zip <i>Portal and DataMaker Upgrade</i>	Jul 24 2019 8:28AM				
4.8.1	0000	CA Test Data Manager Full Package 4.8.1 GEN0000000000262.ZIP	Jul 24 2019 8:32AM				

Backup

Repository Backup

We recommend that you backup your **gtrep repository** before you upgrade the CA TDM software. This process varies depending on your database. Check with your Database Administrator for more information on how to proceed.

TDM Portal

NOTE: Stop the **TDM Portal** and **OrientDB services** before performing the below steps.

Folders	Note	Comments
C:\Program Files\CA\CA Test Data Manager Portal	Copy the Entire folder and Store it in the Backup Folder	Recommended
C:\Program Data\CA\CA Test Data Manager Portal	Copy the Entire folder and Store it in the Backup Folder	Recommended
C:/ProgramData/CA/CA Test Data Manager Portal/orientdb/databases/	Copy the orientdb folder and store it in Backup Folder	Mandatory
C:/ProgramData/CA/CA Test Data Manager Portal/	Copy the Entire folder and Store it in the Backup Folder	Recommended
C:/ProgramData/CA/CA Test Data Manager Portal/logs	Delete all the files from the logs folder	Mandatory

DataMaker

NOTE: Stop the **CA TDoD Service** and **CA Remote Publish services** before performing the below steps.

Folders	Note	Comments
C:\Grid-Tools\	Copy the Entire folder and Store it in the Backup Folder	Recommended
C:\Program Files (x86)\Grid-Tools\	Copy the Entire folder and Store it in the Backup Folder	Recommended

Upgrade Process

Upgrade TDM Portal

TDM Portal Upgrade on Windows

Step by Step process guides you the upgrade process.

- Stop the **TDM Portal** and **OrientDB** services before performing the below steps.

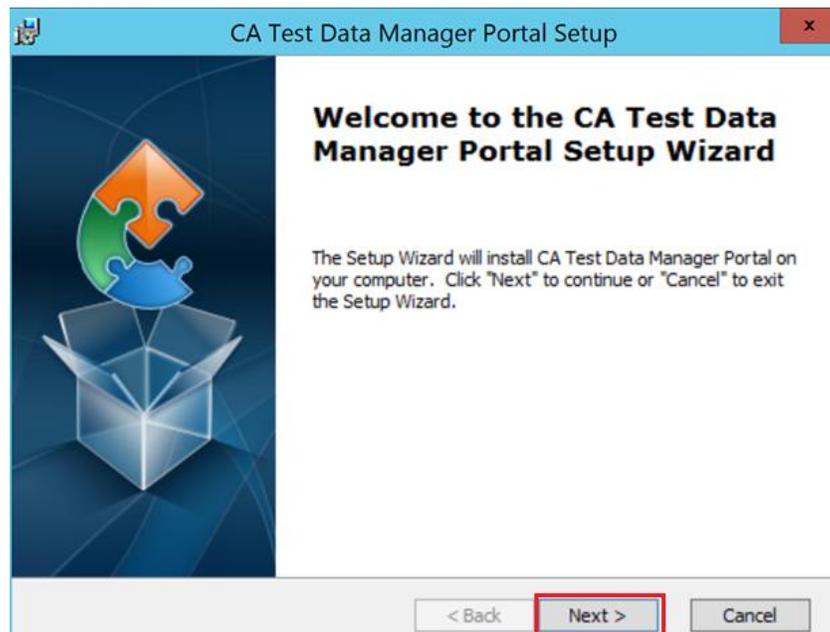
CA TDDU Service	CA TDDU SE...	Automatic	Local syste...
CA Test Data Manager Portal	Manages an...	Automatic	Local Syste...
Certificate Propagation	Copies user ...	Running	Manual
CNG Key Isolation	The CNG ke...	Running	Manual (Trig...
OrientDB	OrientDB - ...	Automatic	Local Syste...
Performance Counter DLL Host	Enables com...	Manual	Local Service

- Right click on the installation file and choose **Run as Administrator**

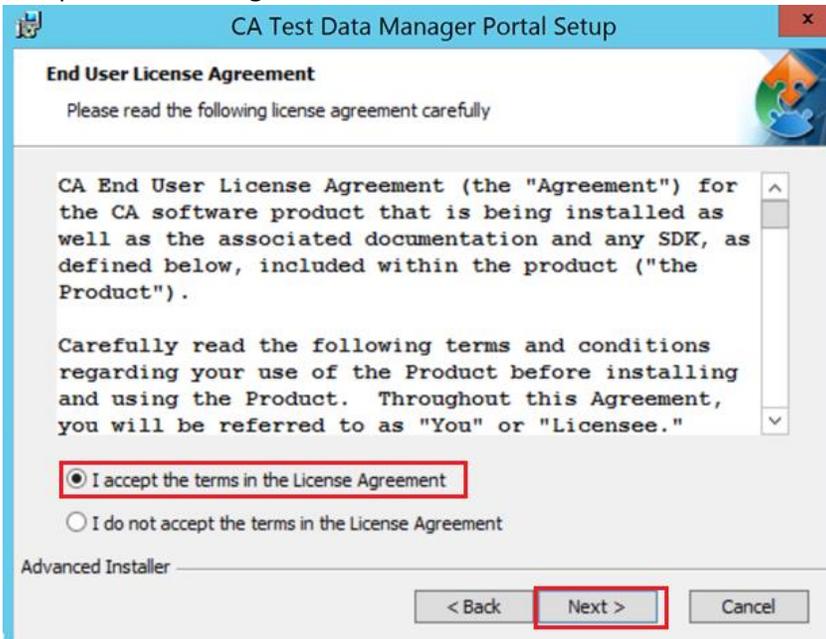
Name	Date modified	Type	Size
setup_CA Test Data		Application	676,163 KB
setup_GTServer_4.9		Application	1,024,041 KB

Open
Run as administrator
Troubleshoot compatibility

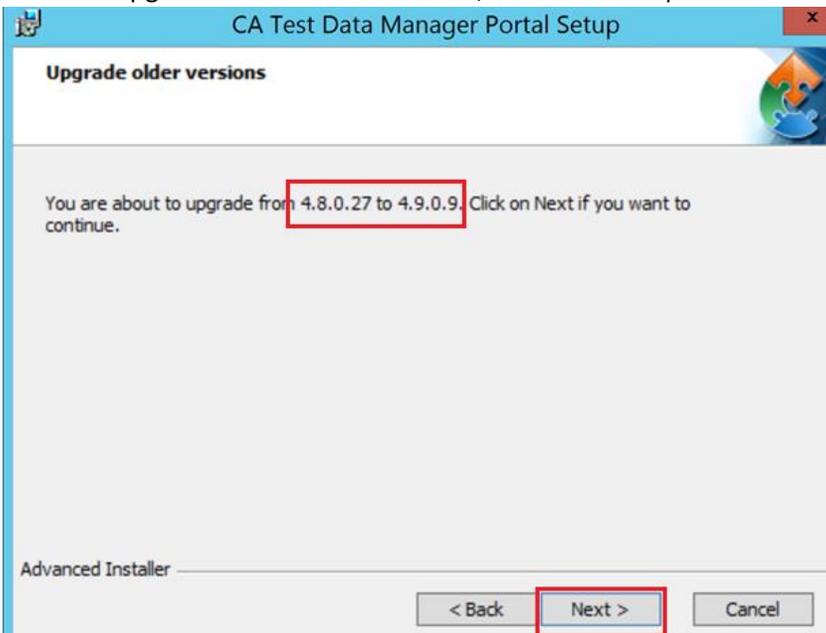
- Choose **Next**



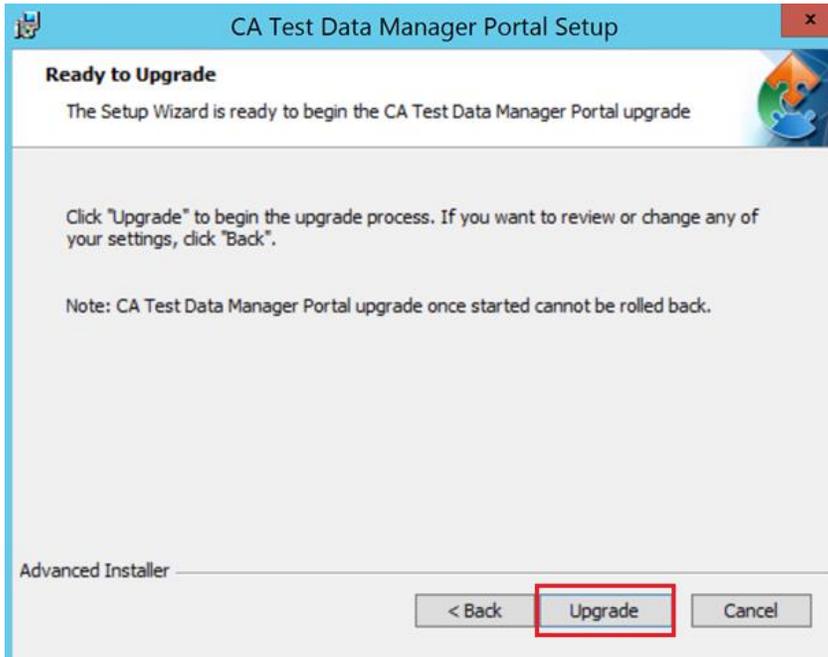
- Accept the **License Agreement** and select **Next**



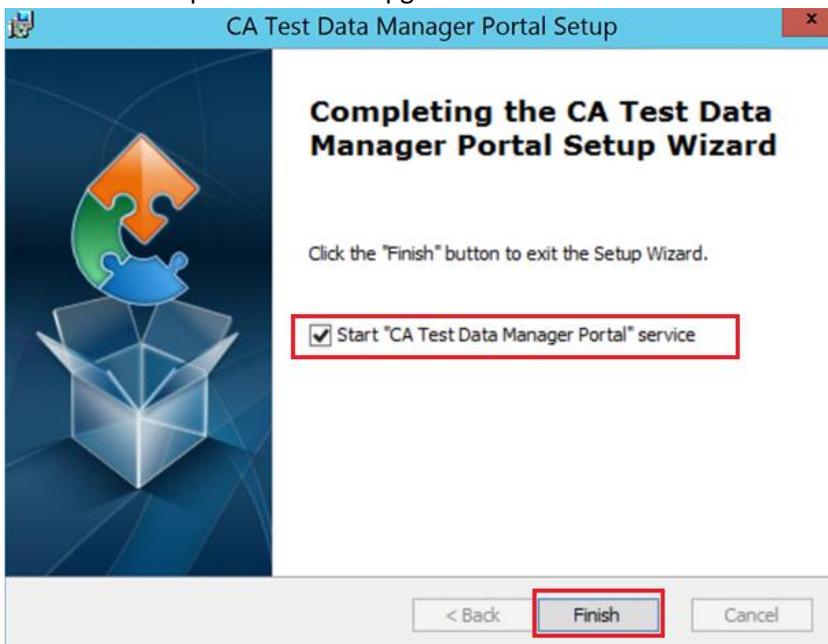
- Note the upgrade version FROM and TO, Select **Next** to proceed with the upgrade.



- Select **Upgrade** to proceed with the upgrade.



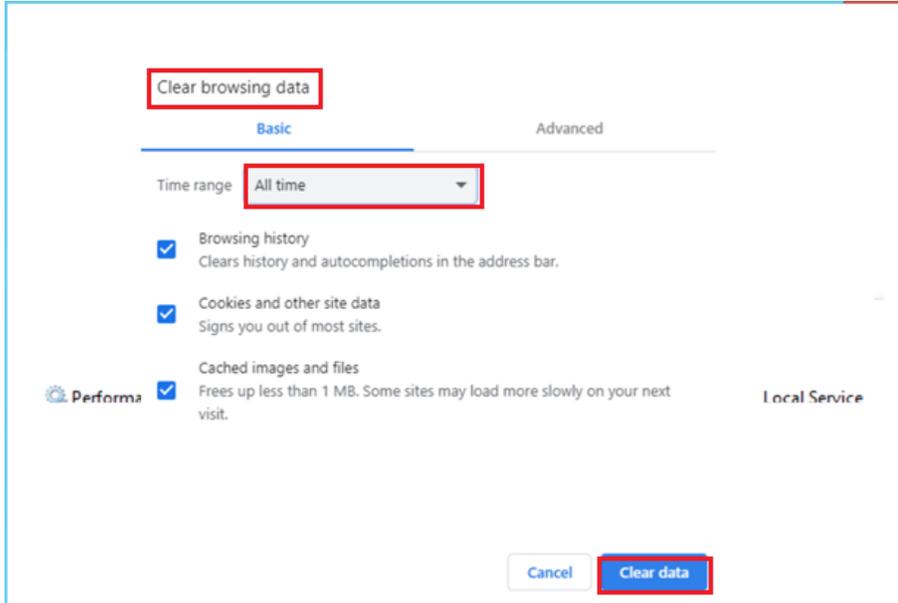
- Select **“Start CA Test Data Manager Portal”** Service to start the Service automatically and **“Finish”** to complete the TDM Upgrade.



- Check the **TDM Portal** and **OrientDB services**, It should be started and running.

CA Test Data Manager Portal	Manages an...	Running	Automatic	Local Syste...
Certificate Propagation	Copies user ...	Running	Manual	Local Syste...
CNG Key Isolation	The CNG ke...	Running	Manual (Tri...	Local Syste...
Optimize drives	Helps the c...		Manual	Local Syste...
OrientDB	OrientDB - ...	Running	Automatic	Local Syste...
Performance Counter DLL Host	Enables rem...		Manual	Local Service

- Optionally clear Browsing Data for the Chrome or Internet Explorer Browser.

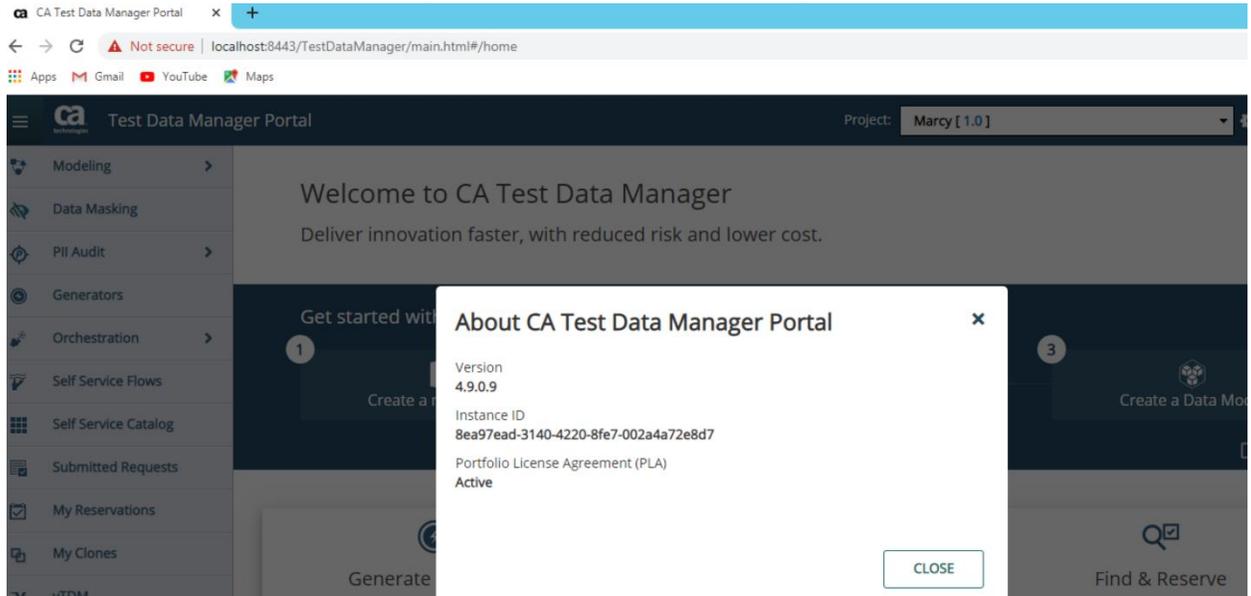


- Check the TDM Portal logs

This PC > Ioddisk1 (C:) > ProgramData > CA > CA Test Data Manager Portal > logs

Name	Date modified	Type	Size
TDMModelService.log	2/3/2020 8:12 AM	Text Document	190 KB
TdmWeb.log	2/3/2020 8:12 AM	Text Document	48 KB
TDMDataService.log	2/3/2020 8:11 AM	Text Document	20 KB
TDMService.log	2/3/2020 8:11 AM	Text Document	43 KB
TDMPublish.log	2/3/2020 8:11 AM	Text Document	21 KB
TDMProjectService.log	2/3/2020 8:11 AM	Text Document	23 KB
TDMOrchestration.log	2/3/2020 8:10 AM	Text Document	18 KB
TDMMaskingService.lvnstest004655.log	2/3/2020 8:10 AM	Text Document	29 KB
TDMJobEngine.log	2/3/2020 8:11 AM	Text Document	37 KB
TDMLegacyExecuterService.log	2/3/2020 8:10 AM	Text Document	18 KB
TDMGeneratorService.log	2/3/2020 8:09 AM	Text Document	47 KB
TDMFindReserve.log	2/3/2020 8:09 AM	Text Document	22 KB
TDMEventService.log	2/3/2020 8:09 AM	Text Document	27 KB
TDMDataReservation.log	2/3/2020 8:09 AM	Text Document	31 KB
TDMConnectionProfileManager.log	2/3/2020 8:09 AM	Text Document	23 KB
TDMDataFlowService.log	2/3/2020 8:09 AM	Text Document	19 KB
TDMSchemaManagementStartup.log	2/3/2020 8:08 AM	Text Document	7 KB
startup.log.lck	2/3/2020 8:08 AM	LCK File	0 KB
startup.log	2/3/2020 8:06 AM	Text Document	1,023 KB

- After all the logs are created, TDM portal should be UP and Running



TDM Portal Upgrade on Docker

Note: Used the Oracle Docker container, if you are using Oracle server, you can skip the Oracle steps.

Download the TDM Docker Images

Using the “CA Test Data Manager Portal for Docker 4.9” from CA downloads

Extract the file using below command

```
tar -xvf TDM_Portal_docker-4.9.0.12.tgz
```

```
[root@lvnqa006717 TDM4.9]# tar -xvf TDM_Portal_docker-4.9.0.12.tgz
./
./TDM_images/
./TDM_images/orientdb/
./TDM_images/orientdb/orientdb-2.2.33.tgz
./TDM_images/tdmweb/
./TDM_images/tdmweb/tdmweb-4.9.0.12.tgz
./TDM_images/action-service/
./TDM_images/action-service/action-service-4.9.0.12.tgz
./TDM_images/messaging/
./TDM_images/messaging/messaging-4.9.0.12.tgz
./TDM_images/tdmtools/
./TDM_images/tdmtools/tdmtools-4.9.0.12.tgz
./TDM_images/masking/
./TDM_images/masking/masking-4.9.0.12.tgz
./README-RUN.md
./docker-compose-messaging.yml
./docker-compose-masking.yml
./README-UPGRADE.md
./README-INSTALL.md
./backup-volumes-4.7.sh
./docker-compose-ora.yml
./docker-compose.yml
./restore-volumes-from-4.7-backup.sh
```

NOTE:

You can view README-RUN.md to read more information
README-Install.md for new TDM installation and
README-Upgrade.md for TDM upgrade.

Import new Docker images:

```
gunzip -c ./TDM_images/orientdb/orientdb-2.2.33.tgz | docker load
```

```
[root@lvnqa006717 TDM4.9]# gunzip -c ./TDM_images/orientdb/orientdb-2.2.33.tgz | docker load
96eda0f553ba: Loading layer 127.6MB/127.6MB
bd95983a8d99: Loading layer 11.78kB/11.78kB
293b479c17a5: Loading layer 15.87kB/15.87kB
fa1693d66d0b: Loading layer 3.072kB/3.072kB
5ee193656ff8: Loading layer 8.044MB/8.044MB
03848a540a1a: Loading layer 40.87MB/40.87MB
667ca85c72c4: Loading layer 107.4MB/107.4MB
50d55594de41: Loading layer 11.14MB/11.14MB
6b212006b132: Loading layer 52.77MB/52.77MB
0677eeb2ed69: Loading layer 4.608kB/4.608kB
69f2c7d2a7b3: Loading layer 38.4kB/38.4kB
2423dcec9177: Loading layer 4.096kB/4.096kB
Loaded image: tdm/orientdb:2.2.33
[root@lvnqa006717 TDM4.9]#
```

```
gunzip -c ./TDM_images/tdmtools/tdmtools-4.9.0.12.tgz | docker load
```

```
[root@lvnqa006717 TDM4.9]# gunzip -c ./TDM_images/tdmtools/tdmtools-4.9.0.12.tgz | docker load
dca2de535dd4: Loading layer 931.3kB/931.3kB
92eacb00e375: Loading layer 229.7MB/229.7MB
099f3241793d: Loading layer 756.9MB/756.9MB
Loaded image: tdm/tdmtools:4.9.0.12
[root@lvnqa006717 TDM4.9]#
```

```
gunzip -c ./TDM_images/tdmweb/tdmweb-4.9.0.12.tgz | docker load
```

```
[root@lvnqa006717 TDM4.9]# gunzip -c ./TDM_images/tdmweb/tdmweb-4.9.0.12.tgz | docker load
b378f4c44f62: Loading layer 1.256MB/1.256MB
82e5548552ee: Loading layer 10.74MB/10.74MB
585ded39ad93: Loading layer 6.854MB/6.854MB
afc292122a84: Loading layer 38.4kB/38.4kB
fad421221ffa: Loading layer 50.69kB/50.69kB
d743ba5fa558b: Loading layer 36.86kB/36.86kB
5aa427d67b05: Loading layer 65.02MB/65.02MB
6ead558a28c4: Loading layer 4.608kB/4.608kB
5efdbea9257f: Loading layer 158.2kB/158.2kB
0ef496c01a43: Loading layer 28.16kB/28.16kB
c009c9cf13d0: Loading layer 3.238MB/3.238MB
5df34260ab25: Loading layer 64kB/64kB
8932152eca48: Loading layer 24.06kB/24.06kB
8d9ec54c5073: Loading layer 93.7kB/93.7kB
0f9e62dc4148: Loading layer 1.091GB/1.091GB
91045eec3b21: Loading layer 5.027MB/5.027MB
a111d73771d9: Loading layer 13.31kB/13.31kB
41ad8b2a7336: Loading layer 27.65kB/27.65kB
Loaded image: tdm/tdmweb:4.9.0.12
[root@lvnqa006717 TDM4.9]#
```

```
gunzip -c ./TDM_images/action-service/action-service-4.9.0.12.tgz | docker load
```

```
[root@lvnqa006717 TDM4.9]# gunzip -c ./TDM_images/action-service/action-service-4.9.0.12.tgz | docker load
4f2e321b5320: Loading layer 38.36MB/38.36MB
8f98c698000f: Loading layer 5.632kB/5.632kB
Loaded image: tdm/action-service:4.9.0.12
```

```
gunzip -c ./TDM_images/messaging/messaging-4.9.0.12.tgz | docker load
```

```
[root@lvnqa006717 TDM4.9]# gunzip -c ./TDM_images/messaging/messaging-4.9.0.12.tgz | docker load
bb853e567789: Loading layer 3.627MB/3.627MB
6f1d3acd28e0: Loading layer 40.87MB/40.87MB
f85c5ad9a5d1: Loading layer 107.4MB/107.4MB
8d93c2c8878a: Loading layer 38.4kB/38.4kB
712cfcfc3ed0: Loading layer 4.096kB/4.096kB
12a9cf1f8a89: Loading layer 4.096kB/4.096kB
3cfa6c74ae23: Loading layer 37.5MB/37.5MB
7a09c61e12a0: Loading layer 4.096kB/4.096kB
15cfbc2bd044: Loading layer 5.12kB/5.12kB
fde25c105009: Loading layer 7.168kB/7.168kB
2fa08a066b79: Loading layer 447.5kB/447.5kB
Loaded image: tdm/messaging:4.9.0.12
```

```
gunzip -c ./TDM_images/masking/masking-4.9.0.12.tgz | docker load
```

```
[root@lvnqa006717 TDM4.9]# gunzip -c ./TDM_images/masking/masking-4.9.0.12.tgz | docker load
03271d425a37: Loading layer 933.4kB/933.4kB
da9ad2c7425a: Loading layer 38.4kB/38.4kB
69ad6dbde316: Loading layer 158.2kB/158.2kB
4238045463f3: Loading layer 28.16kB/28.16kB
f22fb1b70b03: Loading layer 3.238MB/3.238MB
cb116ae5dd89: Loading layer 53.45MB/53.45MB
ec622094a7a5: Loading layer 5.027MB/5.027MB
2489fa02ce62: Loading layer 13.31kB/13.31kB
88154484cd29: Loading layer 6.144kB/6.144kB
92deb6841303: Loading layer 163.9MB/163.9MB
12f079709288: Loading layer 7.68kB/7.68kB
4d38ae339bb5: Loading layer 27.65kB/27.65kB
f27ee7d8fb94: Loading layer 4.096kB/4.096kB
6c558aaaf953: Loading layer 3.584kB/3.584kB
Loaded image: tdm/masking:4.9.0.12
```

Backup the Docker containers

IMPORTANT NOTE: Make sure you stop all the container before the backup.

Stop all the containers

```
docker container ls -a
```

```
[root@lvnqa006717 opt]# docker container ls -a
CONTAINER ID   IMAGE                                COMMAND                                CREATED        NAMES
STATUS        PORTS
844e0f7444d7   tdm.packages.ca.com/tdm/tdmweb:4.8.100.3  "/opt/tdm/bin/tdmweb..."  8 weeks ago   tdm48_tdmw
Exited (137) 44 hours ago
eb_1
84d0c51ff4b8   tdm.packages.ca.com/tdm/masking:4.8.100.3  "/opt/tdm/bin/tdmweb..."  8 weeks ago   tdm48_mask
Up 8 weeks    8080/tcp
ing_2
1e49fe7ac8ce   tdm.packages.ca.com/tdm/masking:4.8.100.3  "/opt/tdm/bin/tdmweb..."  8 weeks ago   tdm48_mask
Up 8 weeks    8080/tcp
ing_3
b2d029ad6cc2   tdm.packages.ca.com/tdm/masking:4.8.100.3  "/opt/tdm/bin/tdmweb..."  8 weeks ago   tdm48_mask
Up 8 weeks    8080/tcp
ing_1
b97a566d9a21   tdm.packages.ca.com/tdm/orientdb:2.2.33    "/opt/tdm/bin/orient..."  8 weeks ago   tdm48_orie
Exited (137) 44 hours ago
ntdb_1
6ee163c8ea80   tdm.packages.ca.com/tdm/messaging:4.8.100.3  "/opt/tdm/set_creds..."  8 weeks ago   tdm48_mess
Up 8 weeks    4369/tcp, 5672/tcp, 15671-15672/tcp, 25672/tcp, 0.0.0.0:5671->5671/tcp
aging_1
cddda5924e8    store/oracle/database-enterprise:12.2.0.1  "/bin/sh -c '/bin/ba..."  8 weeks ago   tdm48_orac
Up 8 weeks (healthy) 0.0.0.0:1521->1521/tcp, 5500/tcp
ledb_1
```

```
docker stop <<Container ID>>
```

```
[root@lvnqa006717 TDM4.9]# docker ps
```

```
[root@lvnqa006717 TDM4.9]# docker ps
CONTAINER ID   IMAGE                                COMMAND                                CREATED        STATUS        PORTS
7efd2def8bb4   tdm.packages.ca.com/tdm/tdmweb:4.8.100.3  "/opt/tdm/bin/tdmweb..."  11 seconds ago   Up 10 seconds   8080/tcp,
0.0.0.0:8443->8443/tcp   tdm481_tdmweb_1
10b7b940e45b   tdm.packages.ca.com/tdm/orientdb:2.2.33    "/opt/tdm/bin/orient..."  12 seconds ago   Up 11 seconds   2424/tcp,
2480/tcp          tdm481_orientdb_1
12b8b6d5fa13   store/oracle/database-enterprise:12.2.0.1  "/bin/sh -c '/bin/ba..."  37 minutes ago   Up 37 minutes (healthy) 0.0.0.0:15
21->1521/tcp, 5500/tcp   tdm481_oracleldb_1
[root@lvnqa006717 TDM4.9]# docker logs 7efd2def8bb4
First container startup
Default config started
```

```
[root@lvnqa006717 TDM4.9]# docker-compose stop
Stopping tdm49_orientdb_1 ... done
```

```
[root@lvnqa006717 TDM4.9]# docker ps
```

```
[root@lvnqa006717 TDM4.9]# docker ps
CONTAINER ID   IMAGE                                COMMAND                                CREATED        STATUS        PORTS
7efd2def8bb4   tdm.packages.ca.com/tdm/tdmweb:4.8.100.3  "/opt/tdm/bin/tdmweb..."  11 seconds ago   Up 10 seconds   8080/tcp,
0.0.0.0:8443->8443/tcp   tdm481_tdmweb_1
10b7b940e45b   tdm.packages.ca.com/tdm/orientdb:2.2.33    "/opt/tdm/bin/orient..."  12 seconds ago   Up 11 seconds   2424/tcp,
2480/tcp          tdm481_orientdb_1
12b8b6d5fa13   store/oracle/database-enterprise:12.2.0.1  "/bin/sh -c '/bin/ba..."  37 minutes ago   Up 37 minutes (healthy) 0.0.0.0:15
21->1521/tcp, 5500/tcp   tdm481_oracleldb_1
[root@lvnqa006717 TDM4.9]# docker logs 7efd2def8bb4
First container startup
Default config started
```

```
[root@lvnqa006717 TDM4.9]# docker stop 7cfd 10b7 12b8
7cfd
10b7
12b8
```

```
[root@lvnqa006717 TDM4.9]# docker ps
```

```
CONTAINER ID   IMAGE                                COMMAND                                CREATED
STATUS        PORTS
```

- Create a Backup folder For Example: /opt/Backup
- Make sure you execute backup commands from Backup folder
- Backup of Oracle OrientDB and TDMWeb containers

Connect to the existing volume and take the backup

docker ps

```
[root@lvndev000631 tdm4.8.1]# docker ps
CONTAINER ID   IMAGE                                     COMMAND                                CREATED        STATUS        PORTS
7cf42def8bb4   tdm.packages.ca.com/tdm/tdmweb:4.8.100.3  "/opt/tdm/bin/tdmweb..."           11 seconds ago Up 10 seconds 8080/tcp,
0.0.0.0:8443->8443/tcp   tdm481_tdmweb_1
10b7b940e45b   tdm.packages.ca.com/tdm/orientdb:2.2.33  "/opt/tdm/bin/orient..."          12 seconds ago Up 11 seconds 2424/tcp,
2480/tcp         tdm481_orientdb_1
12b8b6d5fa13   store/oracle/database-enterprise:12.2.0.1  "/bin/sh -c '/bin/ba..."          37 minutes ago Up 37 minutes (healthy) 0.0.0.0:15
21->1521/tcp, 5500/tcp   tdm481_oracledb_1
[root@lvndev000631 tdm4.8.1]# docker logs 7cf42def8bb4
First container startup
Default config started
```

tdm481_tdmweb_1 is the 4.8 TDMWeb container name

tdm481_orientdb_1 is the 4.8 Orient DB container name

tdm481_oracledb_1 Oracle DB container name

TDBWeb Backup

```
docker run --rm --volumes-from tdm481_tdmweb_1 -v $(pwd):/backup alpine sh -c "tar -cvzf
/backup/portal-volumes.tar.gz /mnt/logs /mnt/storage /mnt/fdmconfig"
```

OrientDB Backup

```
docker run --rm --volumes-from tdm481_orientdb_1 -v $(pwd):/backup alpine sh -c "tar -cvzf
/backup/orientdb-volumes.tar.gz /orientdb/backup /orientdb/config /orientdb/databases"
```

Oracle Backup

```
docker run --rm --volumes-from tdm481_oracledb_1 -v $(pwd):/backup alpine sh -c "tar -cvzf
/backup/oracle-volumes.tar.gz /ORCL"
```

Note: To get the Volume of Oracle

docker container inspect **tdm48_oracledb_1** | less

```
},
  "Name": "overlay2"
},
"Mounts": [
  {
    "Type": "volume",
    "Name": "tdm48_oracledbdata",
    "Source": "/var/lib/docker/volumes/tdm48_oracledbdata/_data",
    "Destination": "/ORCL",
    "Driver": "local",
    "Mode": "rw",
    "RW": true,
    "Propagation": ""
  }
]
```

Modify the compose files

docker-compose.yml File

Make sure the 4.9 image is correct and Oracle GTREP data details are entered.

```

1  version: '3.5'
2
3  networks:
4  default:
5  name: tdm_default
6  services:
7  orientdb:
8  image: tdm.packages.ca.com/tdm/orientdb:2.2.33
9  hostname: orientdb
10 environment:
11   #- 'ORIENTDB_ROOT_PASSWORD=marmite'
12   - 'ORIENTDB_ROOT_PASSWORD={cry}tHpzgrvNhtVu6uHGnd9EdlAuwMR30OL0sAXhBWdgM3Md'
13 volumes:
14   - 'orientdb_backup:/orientdb/backup'
15   - 'orientdb_config:/orientdb/config'
16   - 'orientdb_databases:/orientdb/databases'
17 tdmweb:
18 image: tdm.packages.ca.com/tdm/tdmweb:4.9.0.12
19 hostname: tdmweb
20 environment:
21   # Customise connection to an external gtrep
22   - 'GTREP_HOST=oracledb'
23   - 'GTREP_PORT=1521'
24   - 'GTREP_USER=GTREP'
25   - 'GTREP_PASSWORD=CAdemo123'
26   # Default values for Oracle are:
27   #- 'GTREP_DB_TYPE=oracle'
28   #- 'GTREP_SERVICE_NAME=orcl'
29   - 'GTREP_DB_TYPE=oracle'
30   - 'GTREP_SERVICE_NAME=ORCLCDB.localdomain'
31   # Default values for SQL Server are:
32   #- 'GTREP_DB_TYPE=sqlserver'
33   #- 'GTREP_DATABASE=gtrep'
34   #- 'ORIENTDB_PASSWORD=marmite'
35   - 'ORIENTDB_PASSWORD={cry}tHpzgrvNhtVu6uHGnd9EdlAuwMR30OL0sAXhBWdgM3Md'
36   # Make sure the MESSAGING_* properties define connection to the actual TDM Messaging Service
37   # or are commented out, if no scalable masking is needed.

```

docker-compose-ora.yml file

```

1  # This is docker-compose override file for the base docker-compose.yml that adds oracle gtrep container to the same environment.
2  # Use:
3  # docker-compose -f docker-compose.yml -f docker-compose-ora.yml up -d
4
5  version: '3.5'
6
7  networks:
8  default:
9  name: tdm_default
10 services:
11 orientdb:
12 image: store/oracle/database-enterprise:12.2.0.1
13 shm_size: '2G'
14 hostname: oracledb
15 ports:
16 - '1521:1521'
17 volumes:
18 - 'oracledbdata:/ORCL'
19 volumes:
20 oracledbdata:

```

docker-compose-masking.yml file

```

version: '3.5'

networks:
  default:
    name: tdm_default
services:
  masking:
    image: tdm.packages.ca.com/tdm/masking:4.9.0.12
    environment:
      - 'MESSAGING_SERVER=messaging'
      - 'MESSAGING_PORT=5671'
      # Specify your messaging credentials here
      # These values should match the credentials which have been specified
      # in the tdmweb container above. These are the user credentials
      # that the masking service will use to connect to the message broker.
      - 'MESSAGING_USER=Admin'
      - 'MESSAGING_PASS={cry}1hY5pZrm87PWjgPdmypDbVZnL4a108lxy8YLuUVRMcr8'
    depends_on:
      - messaging
    volumes:
      - 'masking_storage:/mnt/storage'
      - 'masking_logs:/mnt/logs'
      - 'masking_seedtables:/mnt/seedtablesCustom'
volumes:
  masking_logs:
  masking_storage:
  masking_seedtables:

```

docker-compose-messaging.yml File

```

version: '3.5'

networks:
  default:
    name: tdm_default
services:
  messaging:
    image: tdm.packages.ca.com/tdm/messaging:4.9.0.12
    hostname: messaging
    ports:
      # Expose rabbitmq port in order to make it possible to scale with remote masking engine.
      - '5671:5671'
      # Expose port 15671 to allow HTTPS access to the rabbitmq management console.
      #- '15671:15671'
    environment:
      - RABBITMQ_LOG_BASE=/var/log/rabbitmq/log
      - RABBITMQ_LOGS=/var/log/rabbitmq/log/rabbitmq.log
      - RABBITMQ_SASL_LOGS=/var/log/rabbitmq/log/rabbitmq_sasl.log
      # Specify your messaging credentials here
      # These values should match the credentials which have been specified
      # in the tdmweb and masking containers above. These credentials will
      # be used to create a user on the message broker.
      - 'DEFAULT_USER=Admin'
      - 'DEFAULT_PASS={cry}1hY5pZrm87PWjgPdmypDbVZnL4a108lxy8YLuUVRMcr8'
      # SSL selfsigned certificate only
      - RABBITMQ_SSL_CACERTFILE=/home/testca/cacert.pem
      - RABBITMQ_SSL_CERTFILE=/home/server/cert.pem
      - RABBITMQ_SSL_FAIL_IF_NO_PEER_CERT=false
      - RABBITMQ_SSL_KEYFILE=/home/server/key.pem
      - RABBITMQ_SSL_VERIFY=verify_none
    volumes:
      - 'messaging_rabbitmqdb:/var/lib/rabbitmq'
volumes:
  messaging_rabbitmqdb:

```

Restore the TDM containers

TDMWeb Restore

Make sure you run the restore commands from backup directory (Example opt/Backup)

```
docker run --rm --volumes-from tdm49_tdmweb_1 -v $(pwd):/backup alpine sh -c "tar -xvzf /backup/portal-volumes.tar.gz"
```

```
[root@lvnqa006717 Backup]# docker run --rm --volumes-from tdm49_tdmweb_1 -v $(pwd):/backup alpine sh -c "tar -xvzf /backup/portal-volumes.tar.gz"
mnt/logs/
mnt/logs/tdm/
mnt/logs/tdm/TDMSchemaManagement.Log
mnt/logs/tdm/TDMDataFlowService.Log
mnt/logs/tdm/TDMDataReservation.Log
mnt/logs/tdm/TDMFindReserve.Log
mnt/logs/tdm/TDMGeneratorService.Log
mnt/logs/tdm/TDMLegacyExecuterService.Log
mnt/logs/tdm/TDMModelService.Log
mnt/logs/tdm/TDMOrchestration.Log
mnt/logs/tdm/TDMPublish.Log
mnt/logs/tdm/TDMMyDataService.Log
mnt/logs/tdm/Tdmweb.2020-02-07.0.Log.zip
mnt/logs/tdm/Tdmweb.2020-02-06.0.Log.zip
mnt/logs/tdm/TDMService.2020-02-06.0.Log.zip
mnt/logs/tdm/TDMConnectionProfileManager.Log
mnt/logs/tdm/TDMEventService.Log
mnt/logs/tdm/TDMMaskingService.Tdmweb.2019-12-16.0.Log.zip
mnt/logs/tdm/Tdmweb.2020-02-09.0.Log.zip
mnt/logs/tdm/TDMProjectService.2019-12-16.0.Log.zip
```

OrientDB Restore

```
docker run --rm --volumes-from tdm49_orientdb_1 -v $(pwd):/backup alpine sh -c "tar -xvzf /backup/orientdb-volumes.tar.gz"
```

```
[root@lvnqa006717 Backup]# docker run --rm --volumes-from tdm49_orientdb_1 -v $(pwd):/backup alpine sh -c "tar -xvzf /backup/orientdb-volumes.tar.gz"
orientdb/backup/
orientdb/config/
orientdb/config/automatic-backup.json
orientdb/config/cert/
orientdb/config/default-distributed-db-config.json
orientdb/config/hazelcast.xml
orientdb/config/orientdb-client-log.properties
orientdb/config/orientdb-server-config.xml
orientdb/config/orientdb-server-log.properties
orientdb/config/security.json
orientdb/databases/
orientdb/databases/osystem/
orientdb/databases/osystem/OSystem.wmr
orientdb/databases/osystem/name_id_map.cm
orientdb/databases/osystem/dirty.fl
orientdb/databases/osystem/internal.pcl
orientdb/databases/osystem/internal.cpm
orientdb/databases/osystem/database.ocf
orientdb/databases/osystem/index.pcl
orientdb/databases/osystem/index.cpm
orientdb/databases/osystem/manindex.pcl
orientdb/databases/osystem/manindex.cpm
orientdb/databases/osystem/default.pcl
orientdb/databases/osystem/default.cpm
orientdb/databases/osystem/command-cache.json
orientdb/databases/osystem/dictionary.sbt
orientdb/databases/osystem/dictionary.nbt
```

Oracle Restore

```
docker run --rm --volumes-from tdm49_oracledb_1 -v $(pwd):/backup alpine sh -c "tar -xvzf /backup/oracle-volumes.tar.gz"
```

Start the TDM Upgrade

Run the below command

Cd to the TDM4.9 directory

```
docker-compose -f docker-compose.yml -f docker-compose-masking.yml -f docker-compose-messaging.yml up -d
```

```
[root@lvnqa006717 TDM4.9]# docker-compose -f docker-compose.yml -f docker-compose-ora.yml -f docker-compose-masking.yml -f docker-compose-messaging.yml up --scale masking=3
Starting tdm49_messaging_1 ... done
Starting tdm49_orientdb_1 ... done
Starting tdm49_oracleldb_1 ... done
Starting tdm49_masking_1 ... done
Starting tdm49_masking_2 ... done
Starting tdm49_masking_3 ... done
Starting tdm49_tdmweb_1 ... done
Attaching to tdm49_messaging_1, tdm49_orientdb_1, tdm49_oracleldb_1, tdm49_masking_1, tdm49_masking_2, tdm49_masking_3, tdm49_tdmweb_1
masking_1 | ln: failed to create symbolic link '/opt/tdm/logs/tdm': File exists
masking_1 | ln: failed to create symbolic link '/opt/tomcat/temp/logs/fdm': File exists
masking_1 | ln: failed to create symbolic link '/opt/tdm/jobs/jobs': File exists
masking_2 | ln: failed to create symbolic link '/opt/tdm/logs/tdm': File exists
masking_2 | ln: failed to create symbolic link '/opt/tomcat/temp/logs/fdm': File exists
masking_2 | ln: failed to create symbolic link '/opt/tdm/objects/objects': File exists
masking_1 | ln: failed to create symbolic link '/opt/tdm/ssl-cert/ssl-cert': File exists
masking_1 | ln: failed to create symbolic link '/opt/tomcat/jdbc-drivers/jdbc-drivers': File exists
masking_1 | Not first container startup
masking_1 | Skipping configuration tasks
masking_1 |
masking_2 | ln: failed to create symbolic link '/opt/tdm/jobs/jobs': File exists
masking_2 | ln: failed to create symbolic link '/opt/tdm/objects/objects': File exists
masking_2 | ln: failed to create symbolic link '/opt/tdm/ssl-cert/ssl-cert': File exists
masking_2 | ln: failed to create symbolic link '/opt/tomcat/jdbc-drivers/jdbc-drivers': File exists
masking_2 | Not first container startup
masking_2 | Skipping configuration tasks
masking_2 |
masking_3 | ln: failed to create symbolic link '/opt/tdm/logs/tdm': File exists
masking_3 | ln: failed to create symbolic link '/opt/tomcat/temp/logs/fdm': File exists
masking_3 | ln: failed to create symbolic link '/opt/tdm/jobs/jobs': File exists
masking_3 | ln: failed to create symbolic link '/opt/tdm/objects/objects': File exists
orientdb_1 | Setting root password
masking_1 | ln: failed to create symbolic link '/opt/tdm/ssl-cert/ssl-cert': File exists
masking_3 | ln: failed to create symbolic link '/opt/tomcat/jdbc-drivers/jdbc-drivers': File exists
masking_3 | Not first container startup
masking_3 | Skipping configuration tasks
masking_3 |
oracleldb_1 | Start up Oracle Database
tdmweb_1 | ln: failed to create symbolic link '/opt/tdm/logs/tdm': File exists
oracleldb_1 | Fri Feb 14 16:16:32 UTC 2020
tdmweb_1 | ln: failed to create symbolic link '/opt/tdm/jobs/jobs': File exists
tdmweb_1 | ln: failed to create symbolic link '/opt/tdm/objects/objects': File exists
tdmweb_1 | ln: failed to create symbolic link '/opt/tdm/ssl-cert/ssl-cert': File exists
tdmweb_1 | ln: failed to create symbolic link '/opt/tomcat/jdbc-drivers/jdbc-drivers': File exists
tdmweb_1 | Not first container startup
tdmweb_1 | Skipping configuration tasks
tdmweb_1 |
```

Post Upgrade

docker ps

```
[root@lvnqa006717 ~]# docker ps
CONTAINER ID        IMAGE                                     COMMAND
CREATED            STATUS              PORTS
NAMES
01f4107476ae       tdm.packages.ca.com/tdm/tdmweb:4.9.0.12  "/opt/tdm/bin/t
dmweb..." 2 hours ago       Up About an hour   8080/tcp, 0.0.0.0:844
3->8443/tcp    tdm49_tdmweb_1
3c94e91528b9       store/oracle/database-enterprise:12.2.0.1  "/bin/sh -c '/b
in/ba..." 23 hours ago       Up About an hour (healthy) 0.0.0.0:1521->1521/tc
p, 5500/tcp    tdm49_oracleldb_1
6dc7c9ef580b       tdm.packages.ca.com/tdm/masking:4.9.0.12  "/opt/tdm/bin/t
dmweb..." 23 hours ago       Up About an hour   8080/tcp
tdm49_masking_2
372fb4e644b3       tdm.packages.ca.com/tdm/masking:4.9.0.12  "/opt/tdm/bin/t
dmweb..." 23 hours ago       Up About an hour   8080/tcp
tdm49_masking_3
10d228c5db82       tdm.packages.ca.com/tdm/masking:4.9.0.12  "/opt/tdm/bin/t
dmweb..." 23 hours ago       Up About an hour   8080/tcp
tdm49_masking_1
150c465ad7d1       tdm.packages.ca.com/tdm/messaging:4.9.0.12  "/opt/tdm/set_c
reds..." 23 hours ago       Up About an hour   4369/tcp, 5672/tcp, 1
5671-15672/tcp, 25672/tcp, 0.0.0.0:5671->5671/tcp    tdm49_messaging_1
befb1c5e6cb2       tdm.packages.ca.com/tdm/orientdb:2.2.33  "/opt/tdm/bin/o
rient..." 23 hours ago       Up About an hour   2424/tcp, 2480/tcp
tdm49_orientdb_1
```

docker logs <<TDM WEB Container ID >>

```

tdm49_orientdb_1
[root@]vnqa006717 ~]# docker logs 01f4
First container startup
Default config started

No config files found in /opt/tdm/conf. Creating new default configuration.
Mandatory files for generating keystore not found.
Expected certificate file: /opt/tdm/ssl-cert/tdm-site.pem
Expected key file: /opt/tdm/ssl-cert/tdm-site.key
Generating new keystore at: /opt/tdm/conf/.keystore
Feb 14, 2020 3:59:37 PM com.ca.tdm.GenerateTDMWebKeystore main
INFO: Host Name for which the certificate will be generated is: tdm-tdmweb
Feb 14, 2020 3:59:37 PM com.ca.tdm.GenerateTDMWebKeystore main
INFO: Installation folder name provided is: /opt/tdm
Feb 14, 2020 3:59:37 PM com.ca.tdm.GenerateTDMWebKeystore main
INFO: KeyStore with generated certificate will be saved at: /opt/tdm/conf
Feb 14, 2020 3:59:37 PM com.ca.tdm.GenerateTDMWebKeystore main
INFO: Name of the KeyStore will be: .keystore

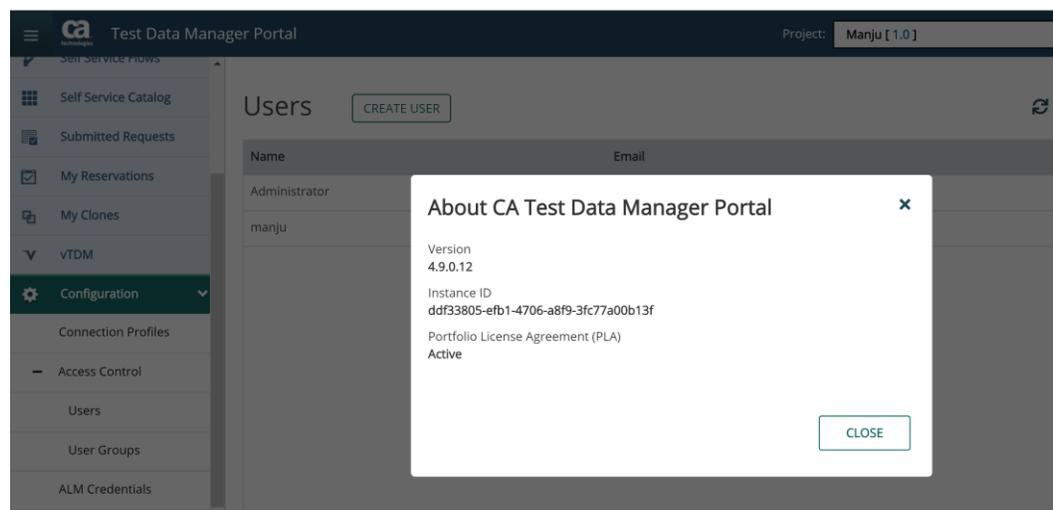
Skipping re-initialization of Logback, because we are using logback xml configuration which is already
initialized

TDMMain

14-Feb-2020 16:21:44.947 INFO [main] org.apache.catalina.startup.HostConfig.deployWAR Deployment of web
application archive [/opt/tomcat/webapps/TestDataManager.war] has finished in [25,215] ms
14-Feb-2020 16:21:44.955 INFO [main] org.apache.catalina.startup.HostConfig.deployDirectory Deploying w
eb application directory [/opt/tomcat/webapps/ROOT]
14-Feb-2020 16:21:44.957 INFO [main] com.ca.tdm.TDMWebPropertyReader.getProperty Reading Property: cata
lina.base
14-Feb-2020 16:21:44.993 INFO [main] org.apache.catalina.startup.HostConfig.deployDirectory Deployment
of web application directory [/opt/tomcat/webapps/ROOT] has finished in [37] ms
14-Feb-2020 16:21:45.025 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler
["https-jsse-nio-8443"]
14-Feb-2020 16:21:45.128 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler
["ajp-nio-8009"]
14-Feb-2020 16:21:45.199 INFO [main] org.apache.catalina.startup.Catalina.start Server startup in [217,
330] milliseconds
Encrypt One Block
Encrypt One Block

```

login to the TDM Portal

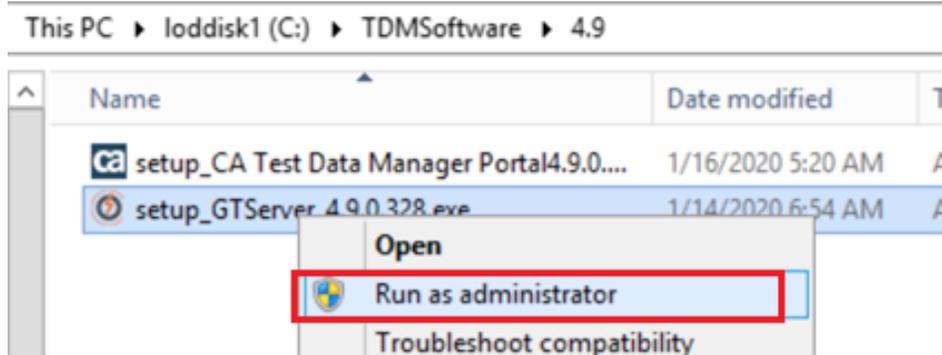


Upgrading the DataMaker and Components

To Upgrade the DataMaker, Javelin, Fast Data Maker, TDoD and other components, you can follow below steps.

Note: Same process is followed to install the DataMaker and other components on the client.

- Right Click on the **GTServer.exe** and choose **Run as administrator**



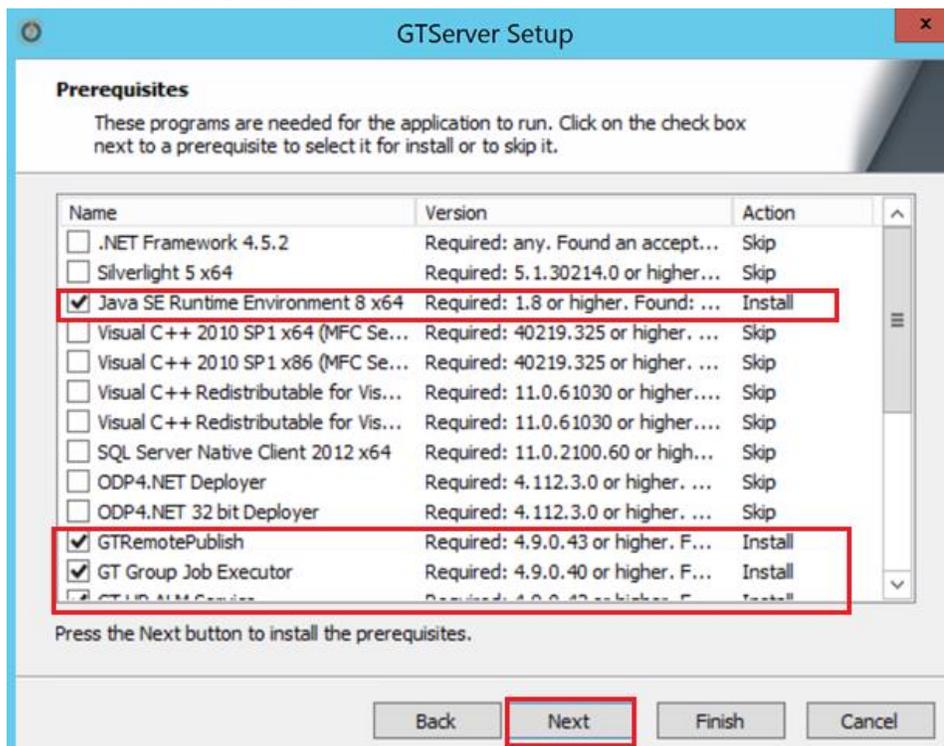
- Select "**Next**" to continue



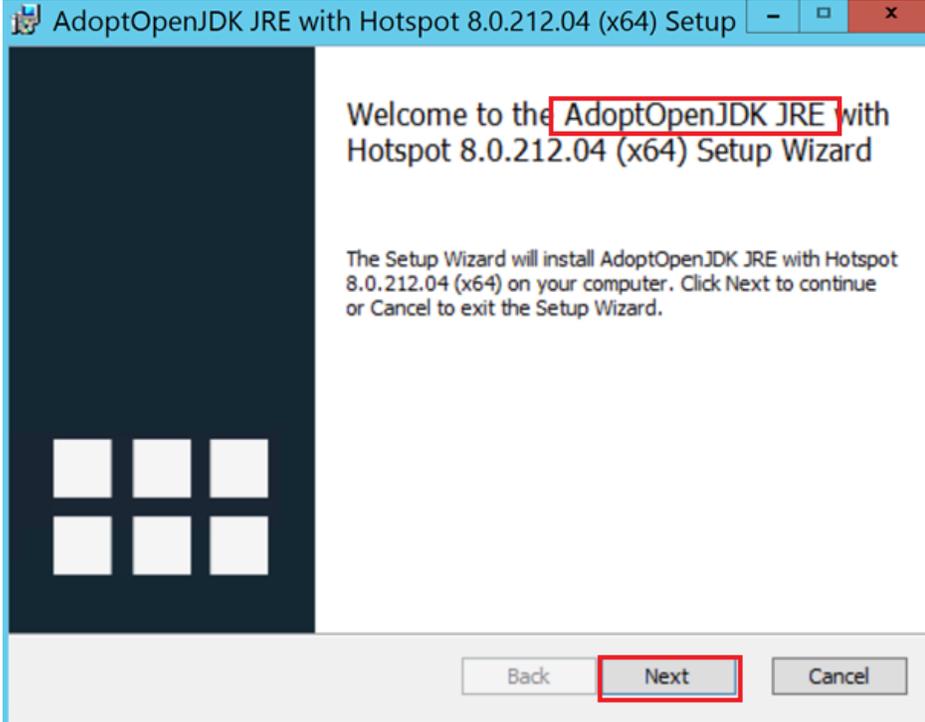
- Accept the License Agreement and select “Next”



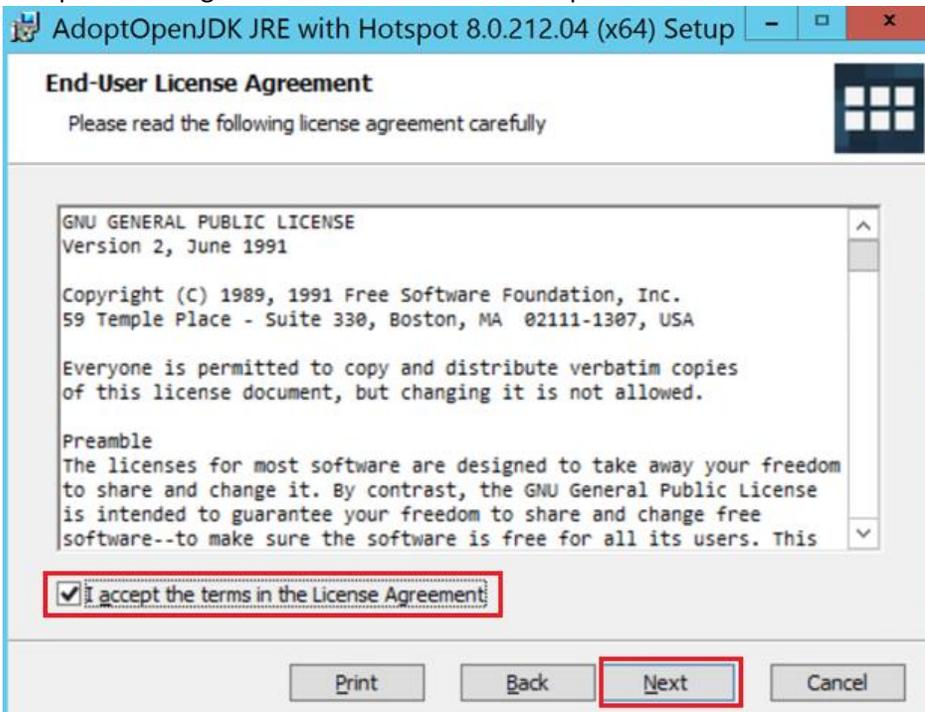
- Choose the components to be installed or upgraded.
Note: Choose the **Default**



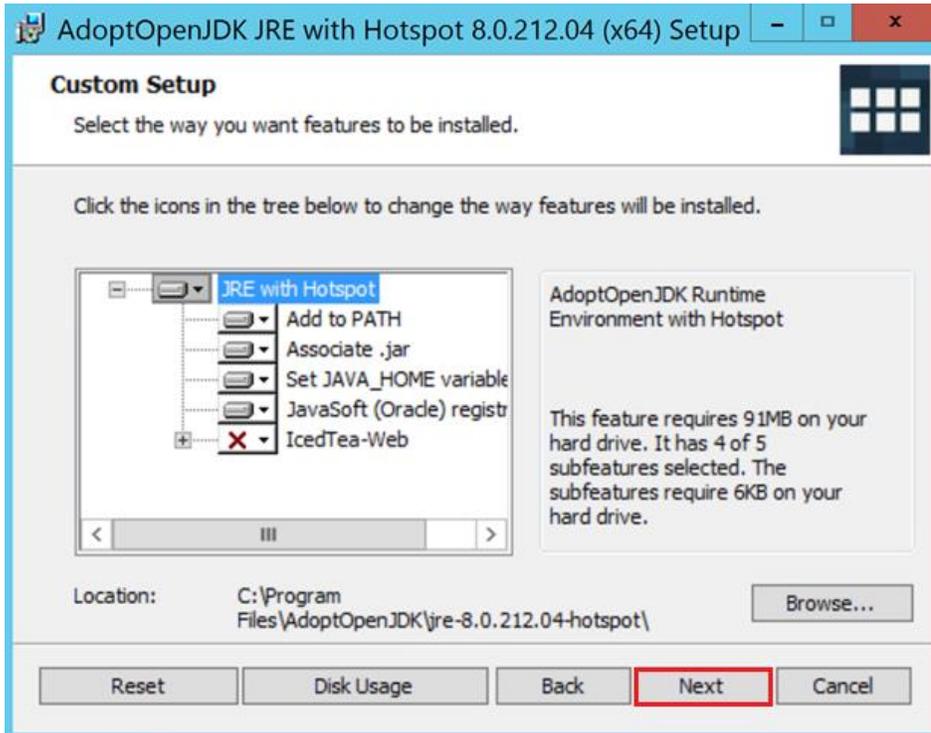
- From TDM 4.8 onwards, OpenJDK is installed, So choose “Next” to install



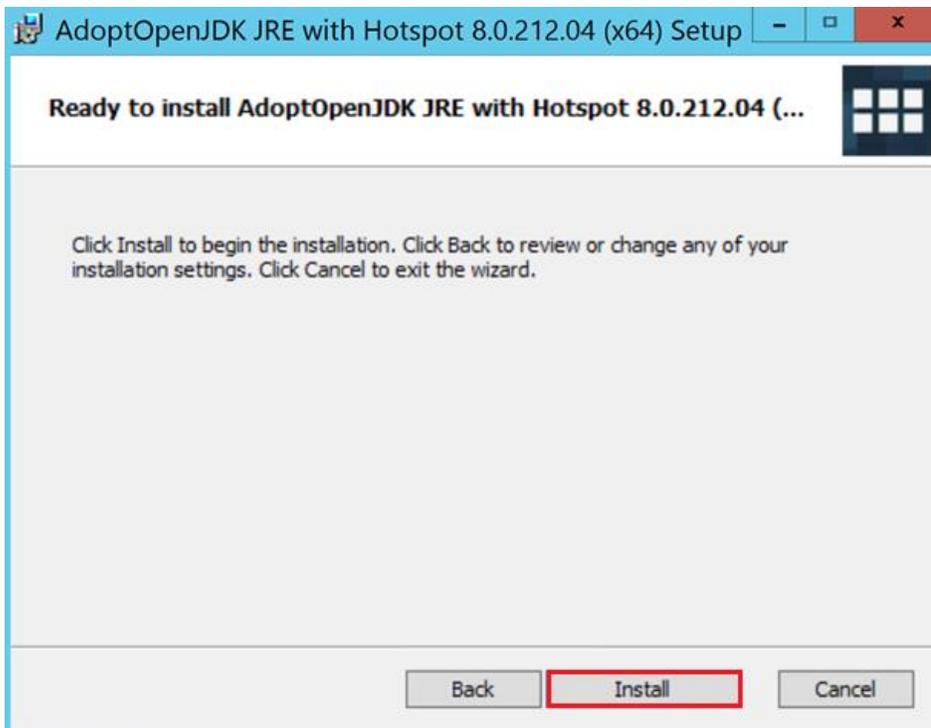
- Accept License Agreement and select “Next” to proceed.



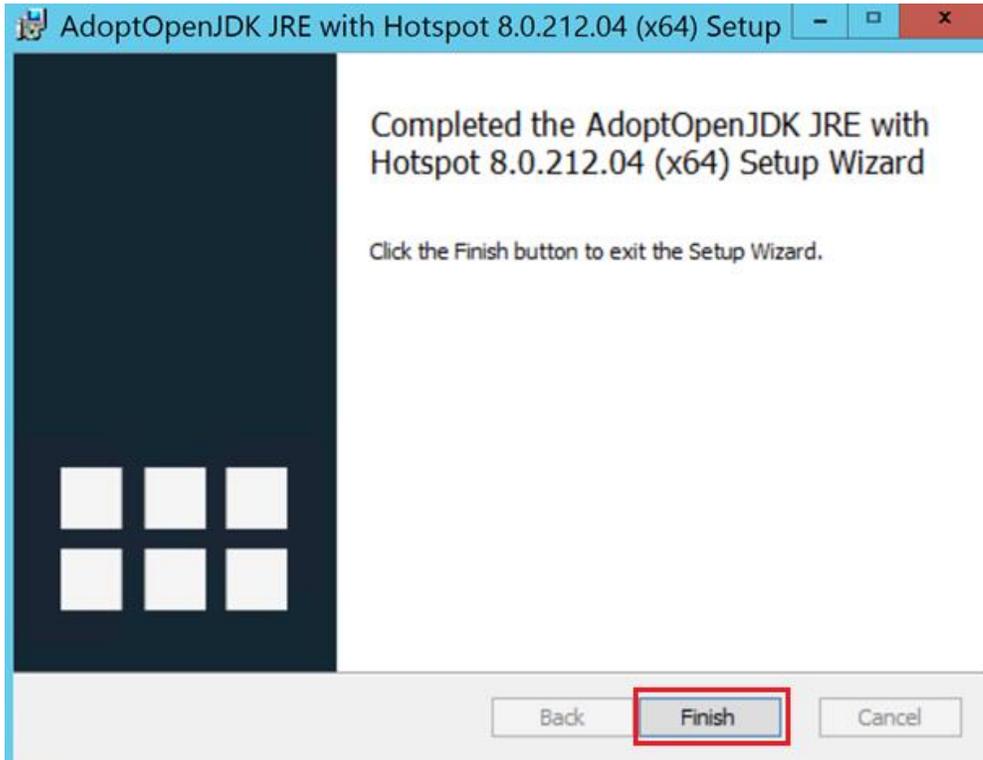
- Choose “Next”



- Choose “Install”

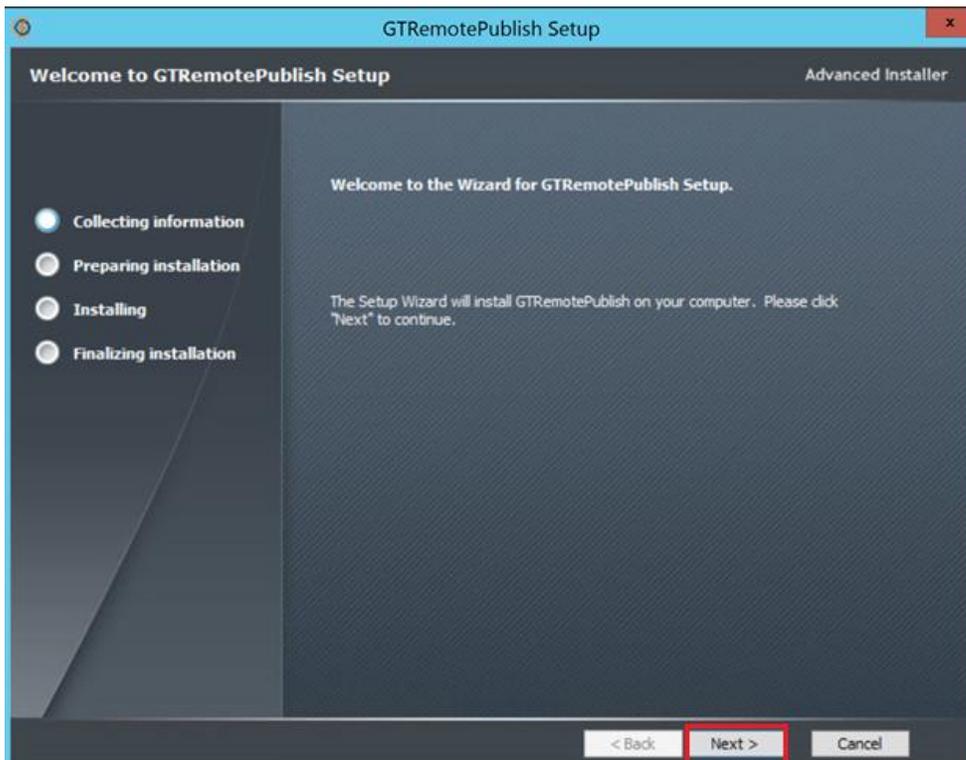


- Choose Finish to complete the OpenJDK installation.

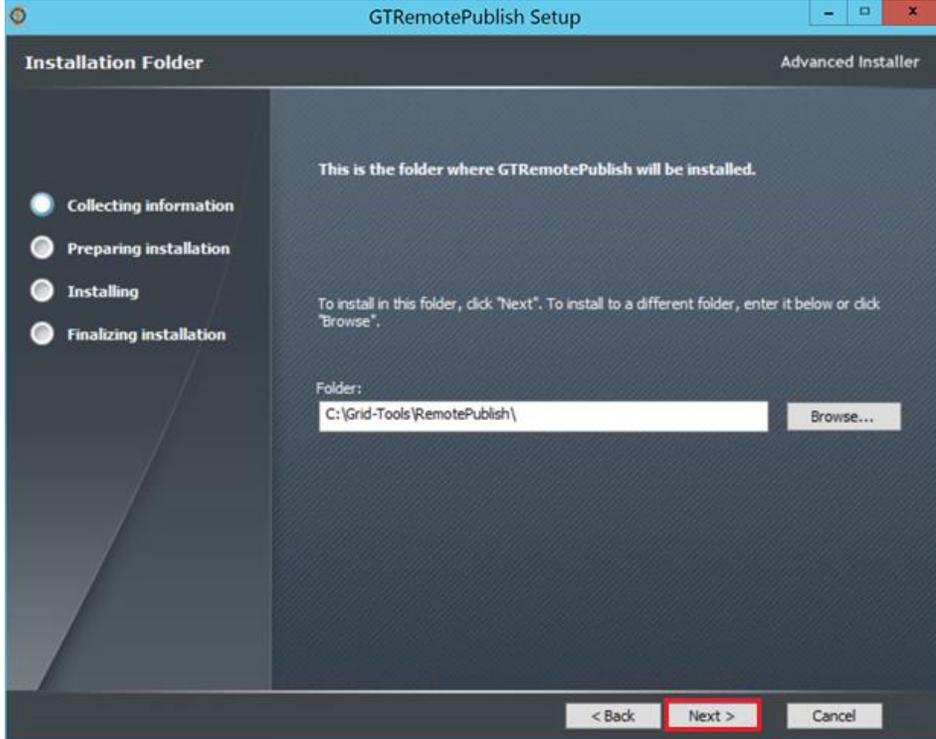


Installing Remote Publish

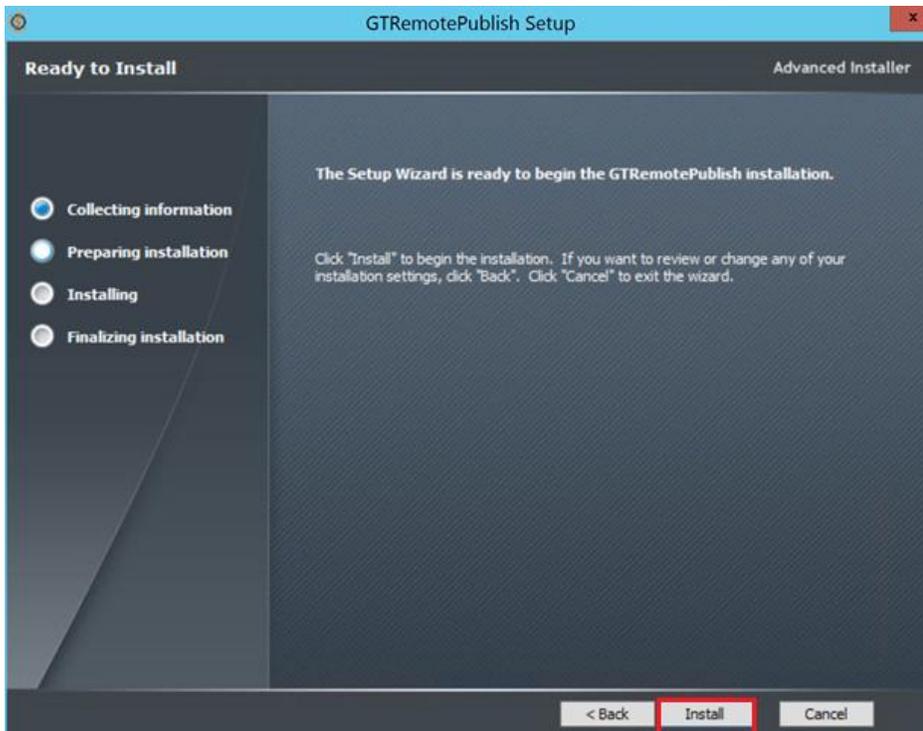
- Select "Next"



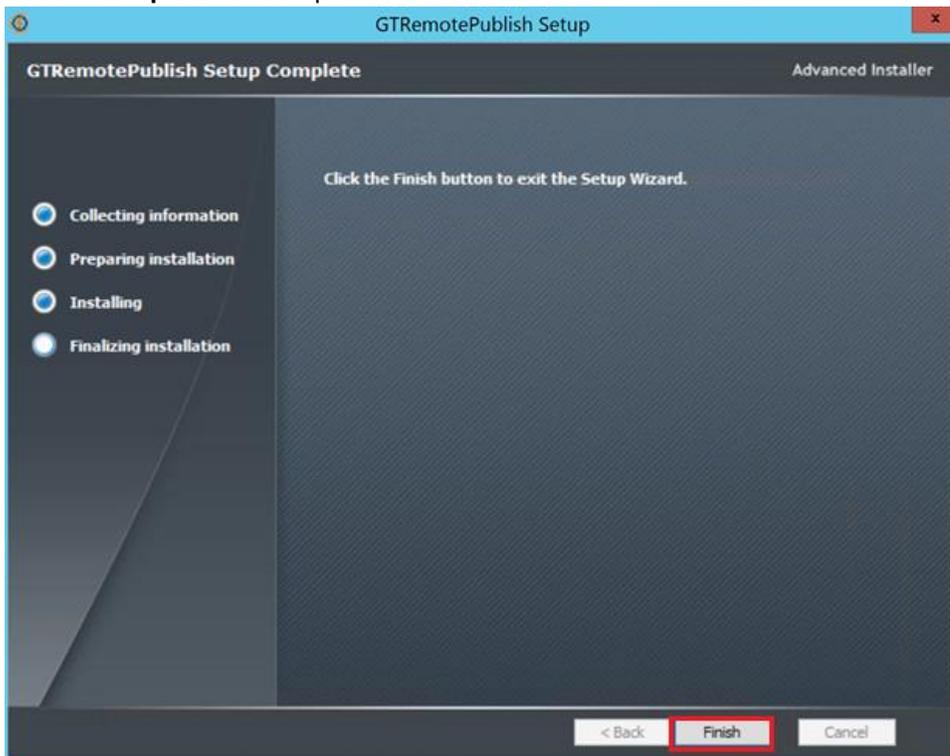
- Select **“Next”** to continue the installation



- Select **“Install”** to continue the installation



- Select **“Complete”** to complete the installation

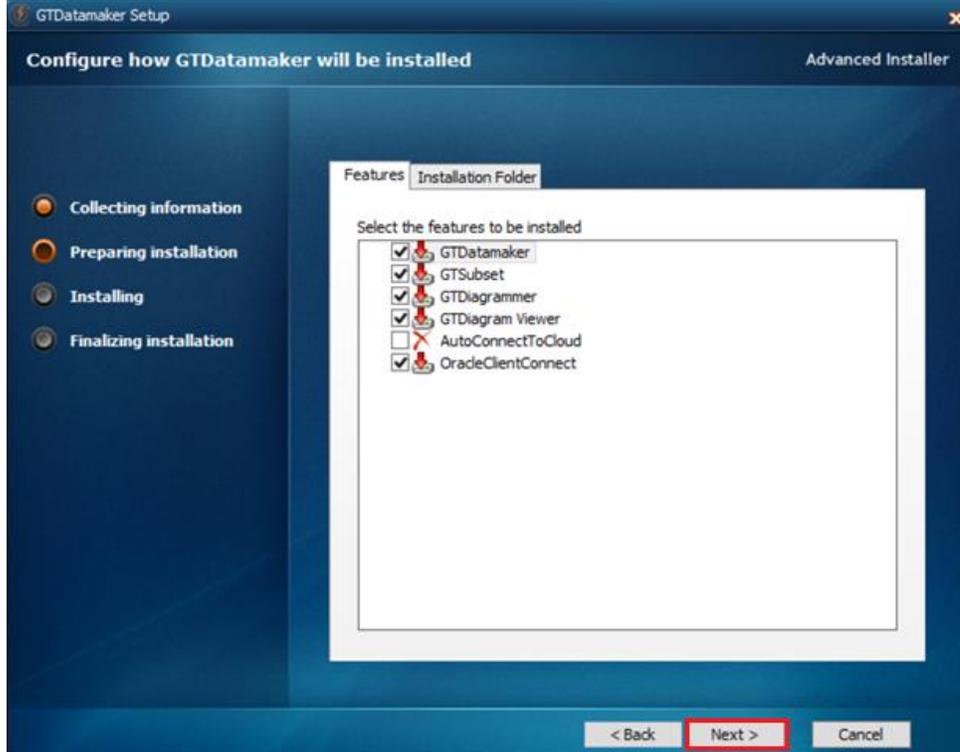


GT DataMaker Installation

- Select **“Next”** to continue the installation



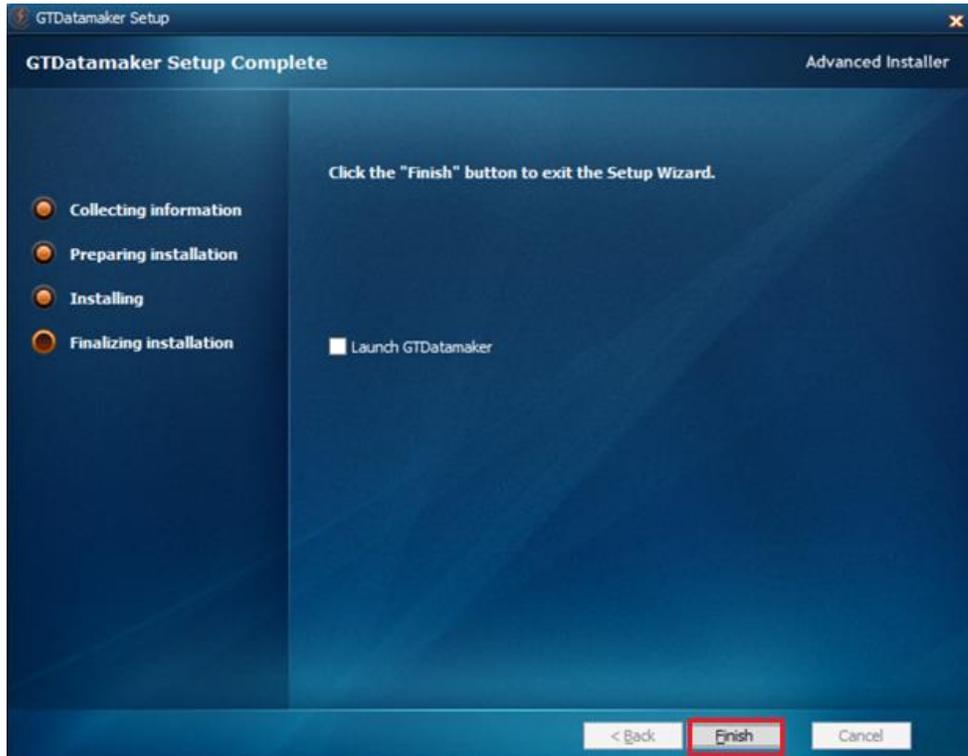
- Select “**Next**” to continue the installation



- Select “**Install**” to continue the installation

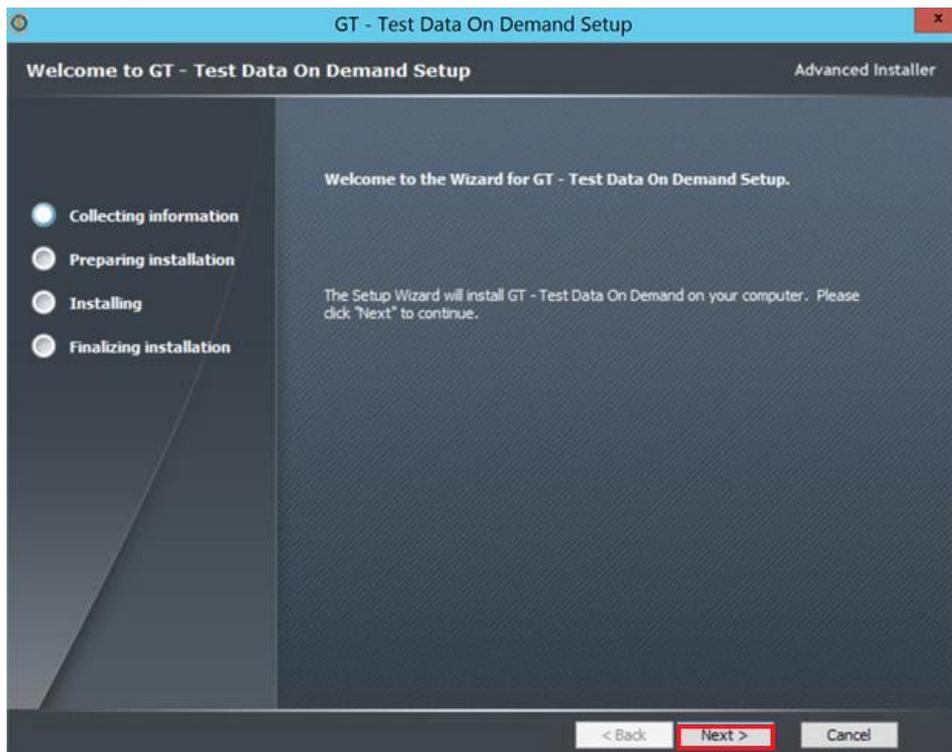


- Select **“Finish”** to complete the installation

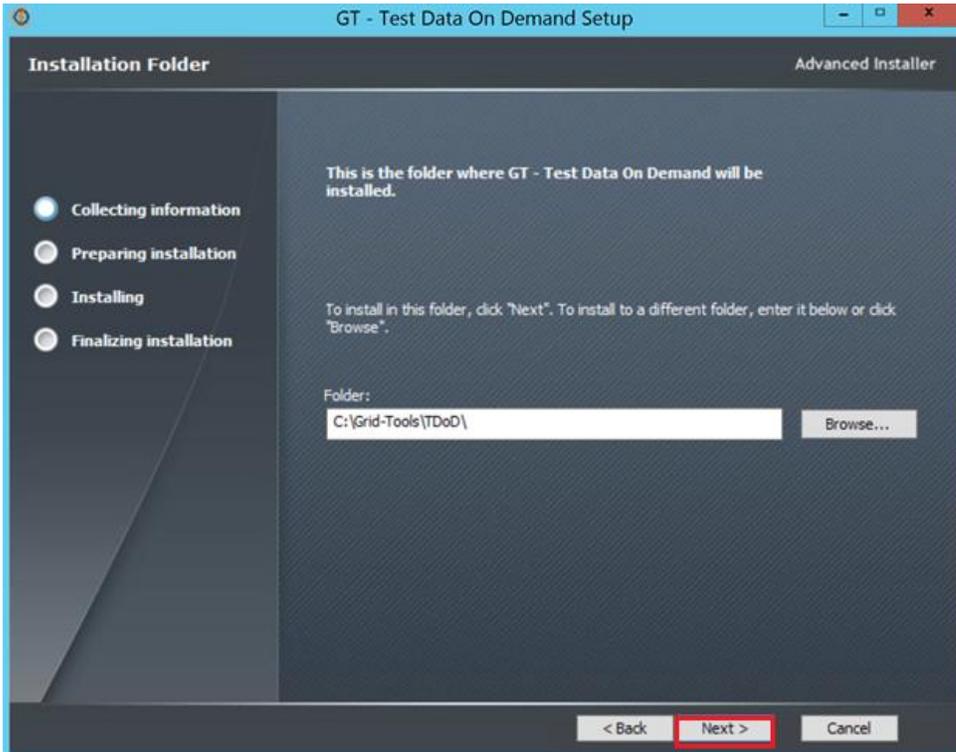


Test Data on Demand Installation

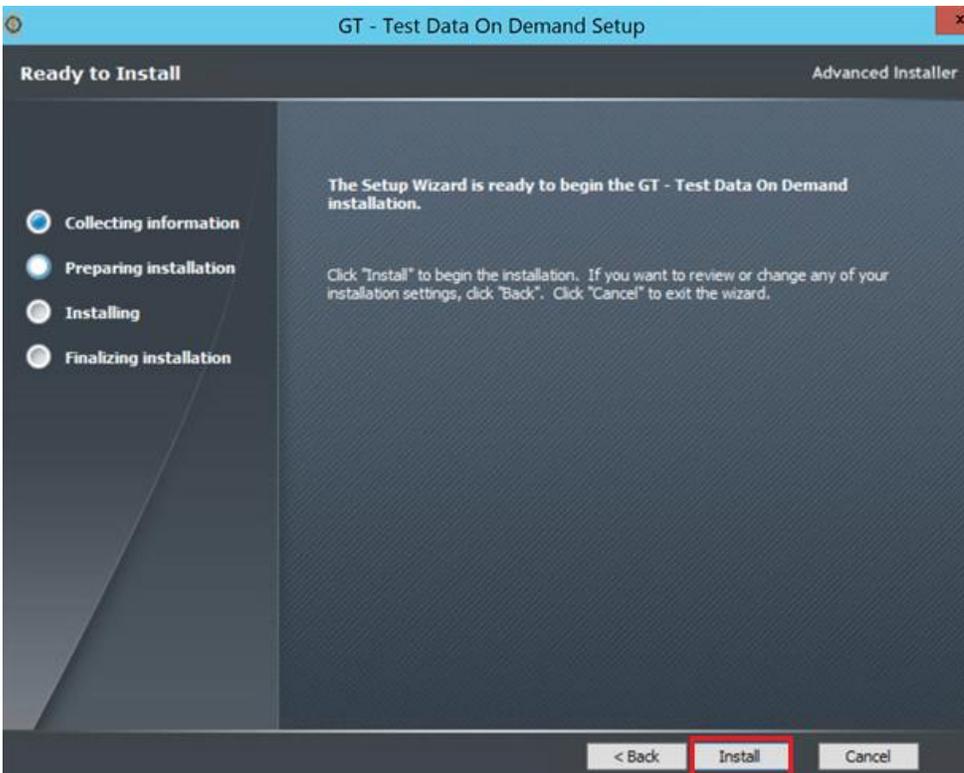
- Select **“Next”** to continue the installation



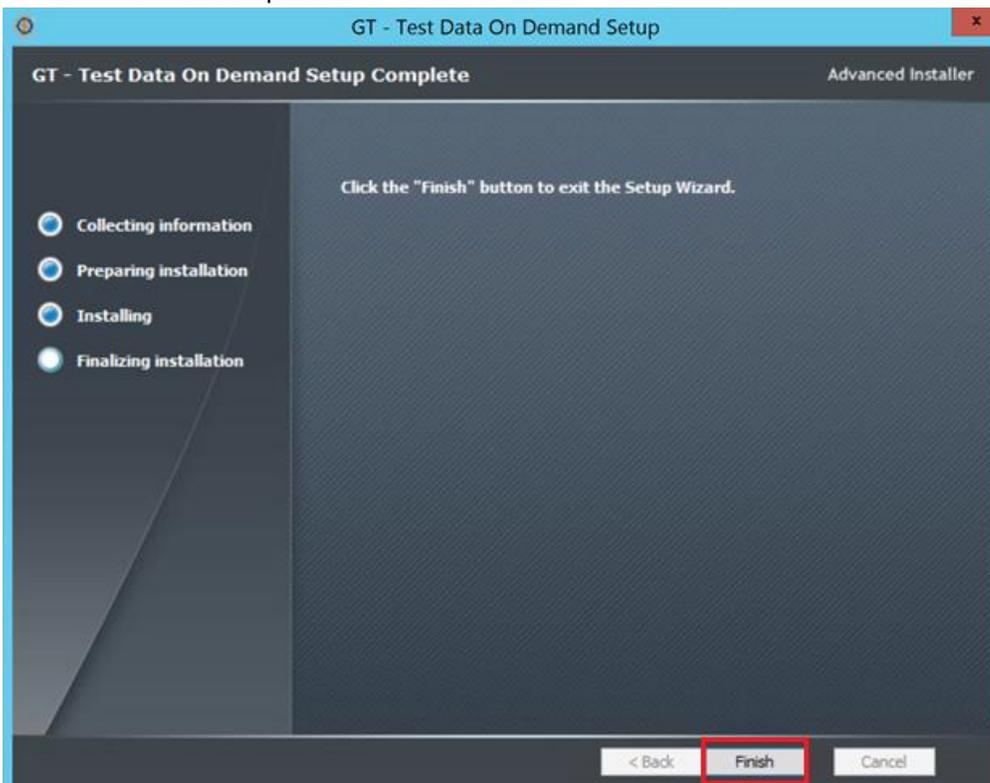
- Select **“Next”** to continue the installation



- Select **“Install”** to continue the installation

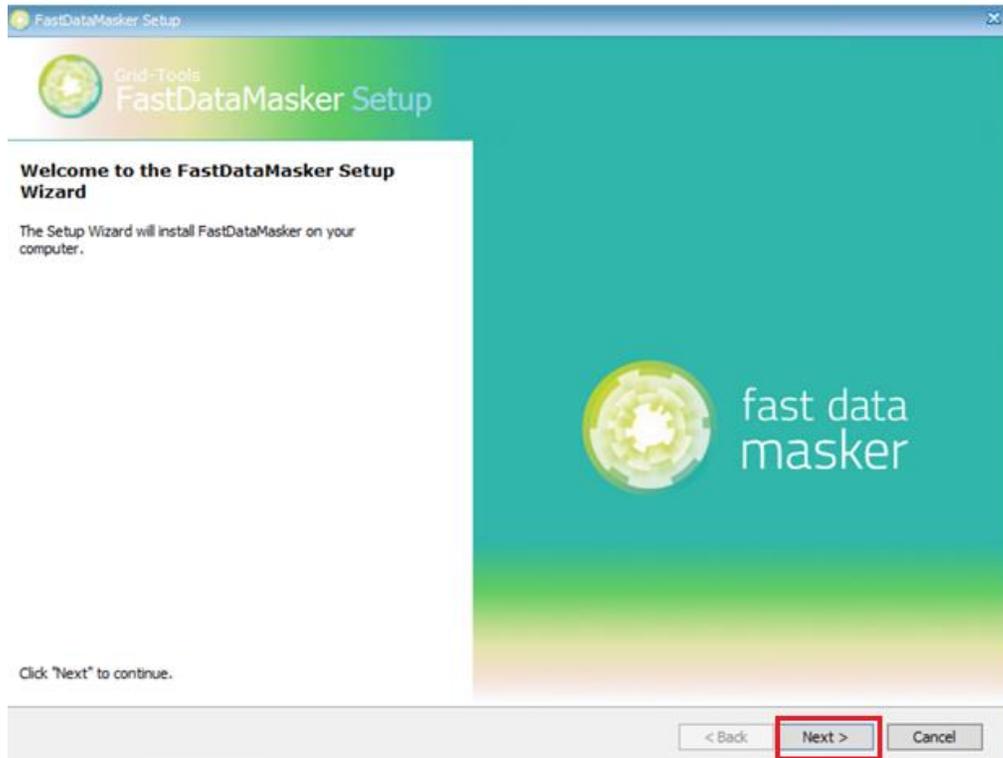


- Select **“Finish”** to complete the installation

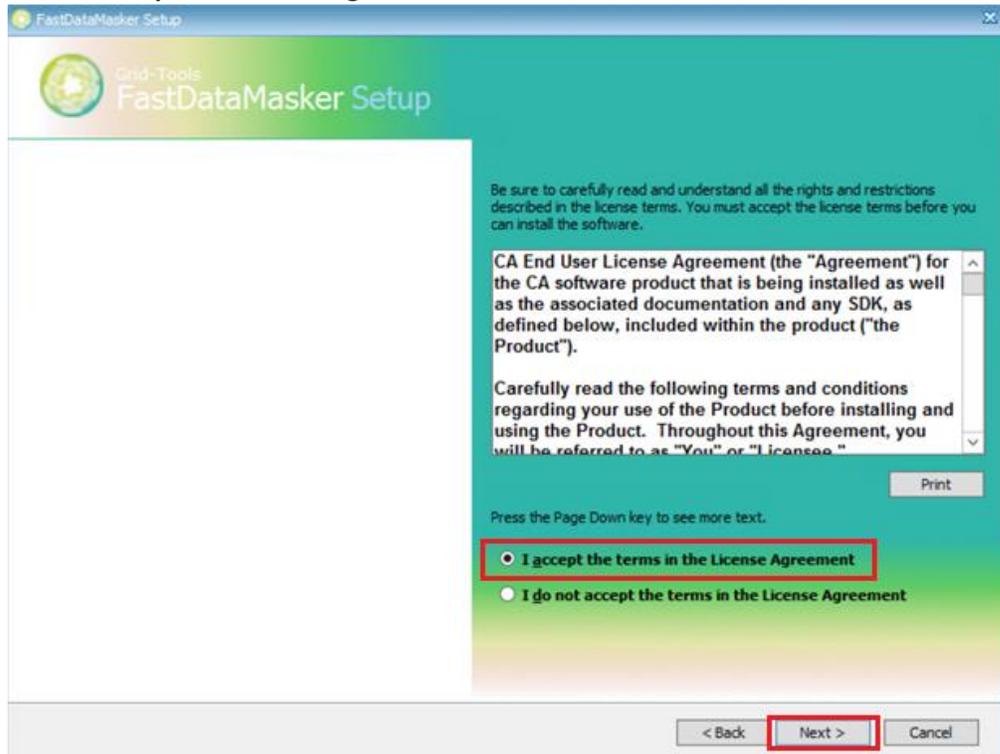


Fast Data Masker Install

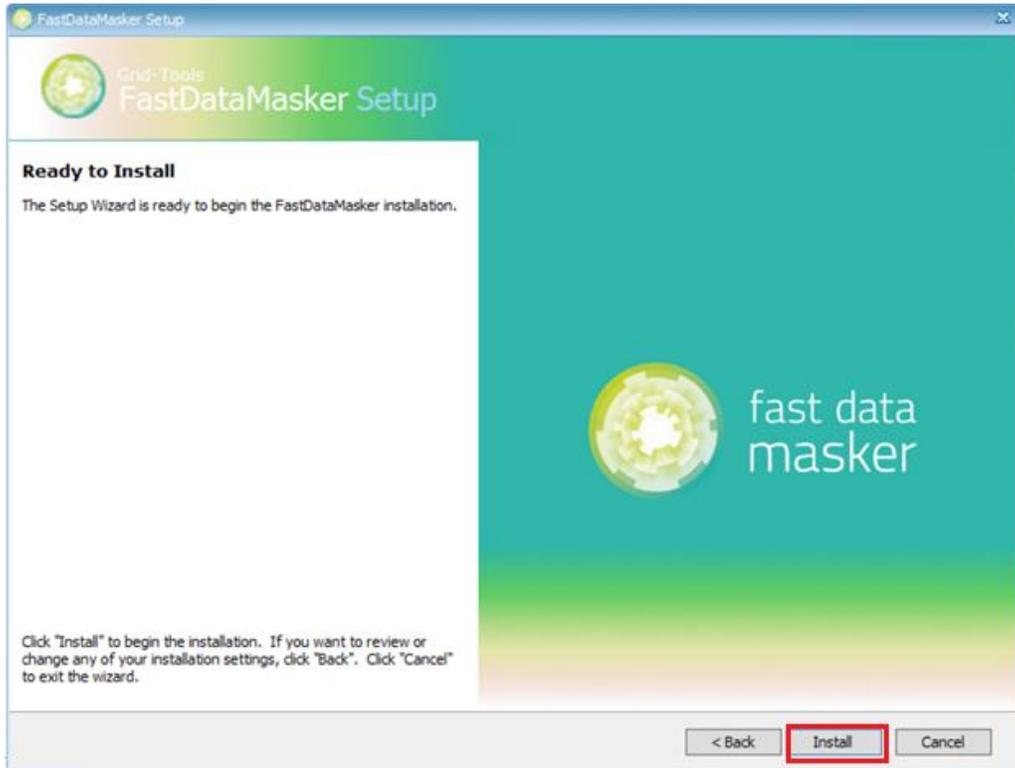
- Select “Install” to continue the installation



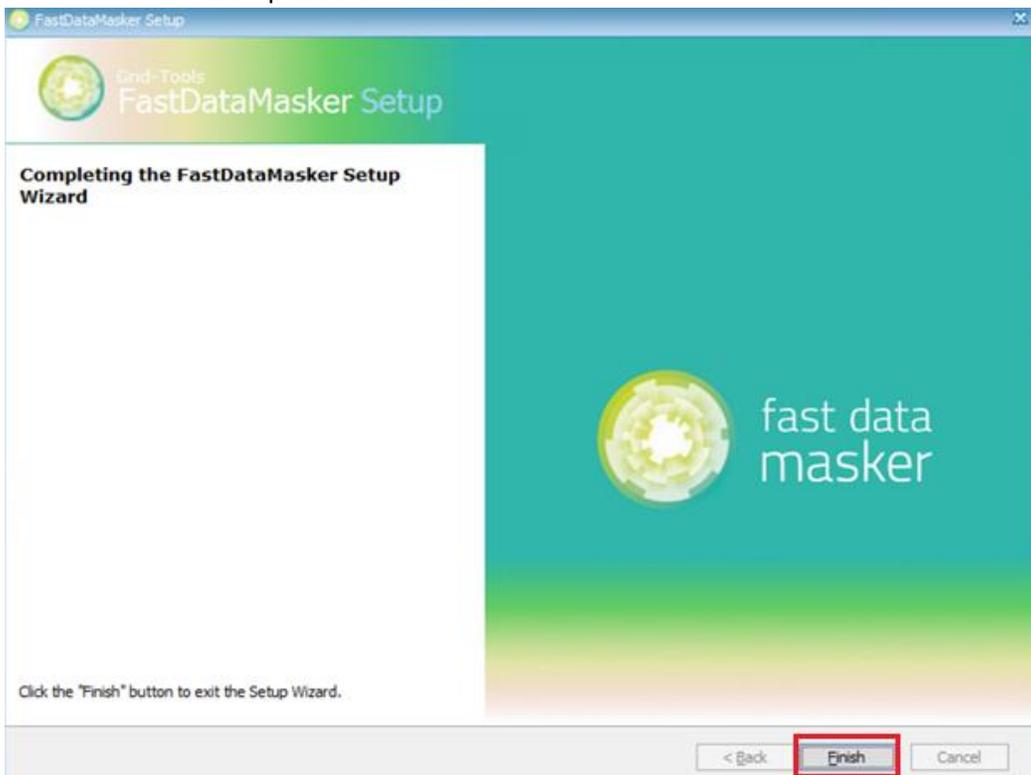
- Select “Accept the License Agreement” and select “Next” to continue the installation



- Select **“Install”** to continue the installation

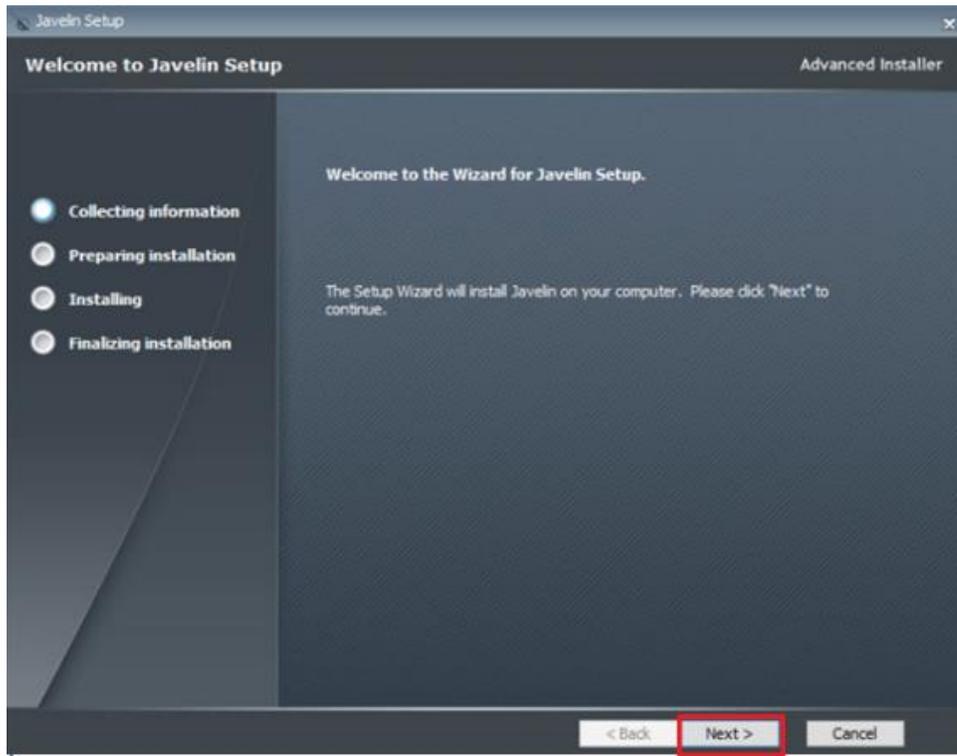


- Select **“Finish”** to complete the installation

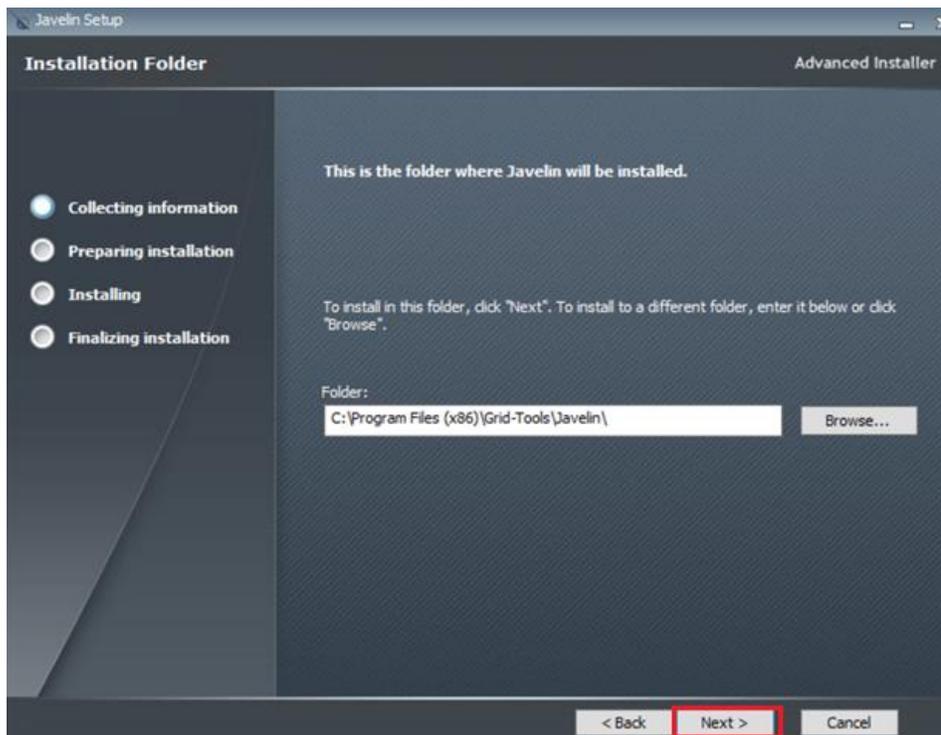


Javelin Install

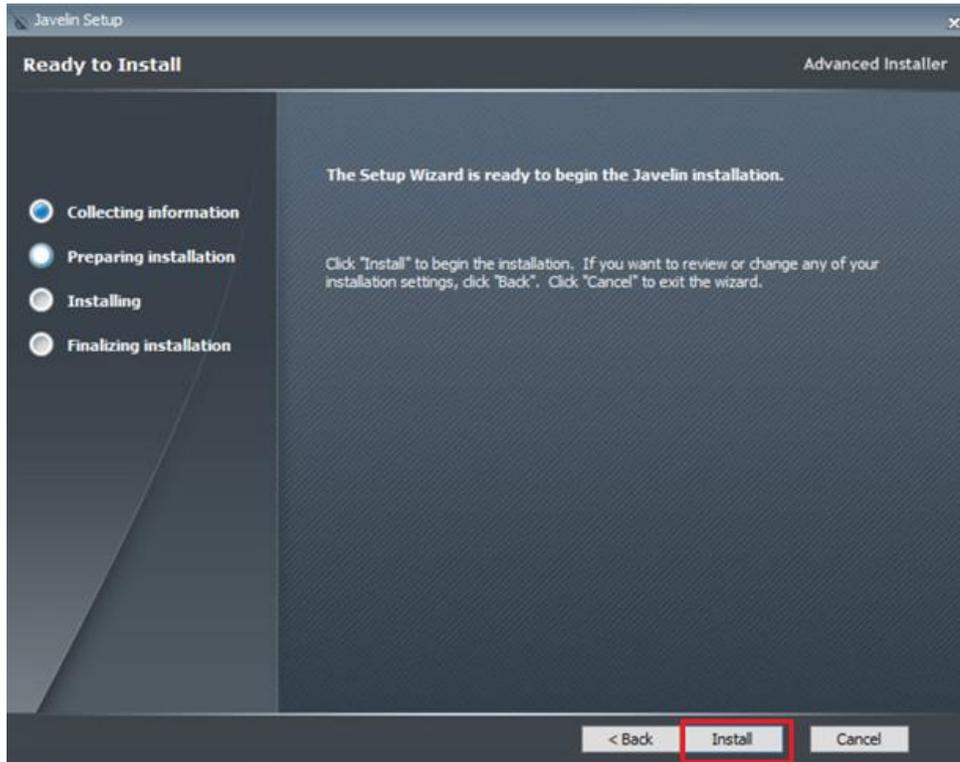
- Select “**Next**” to continue the installation



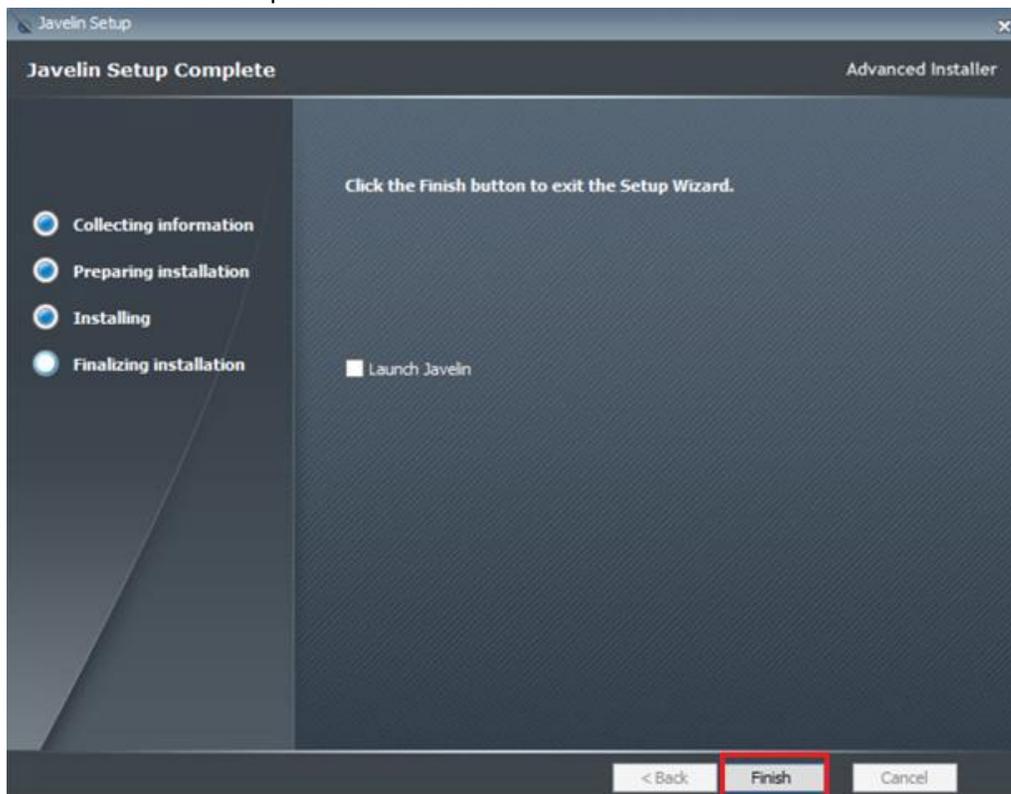
- Select “**Next**” to continue the installation



- Select **“Install”** to continue the installation

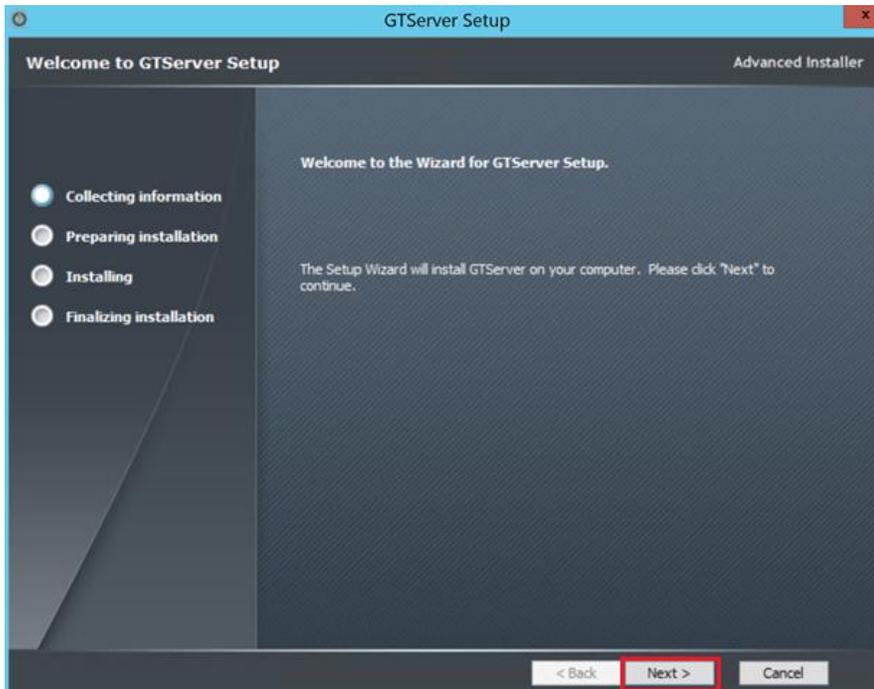


- Select **“Finish”** to complete the installation

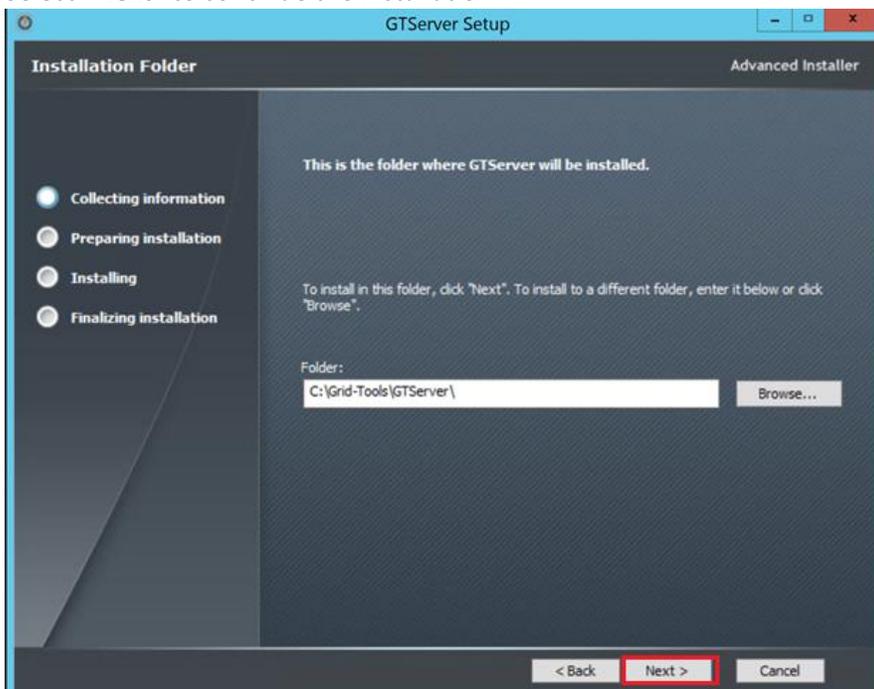


GT Server Install

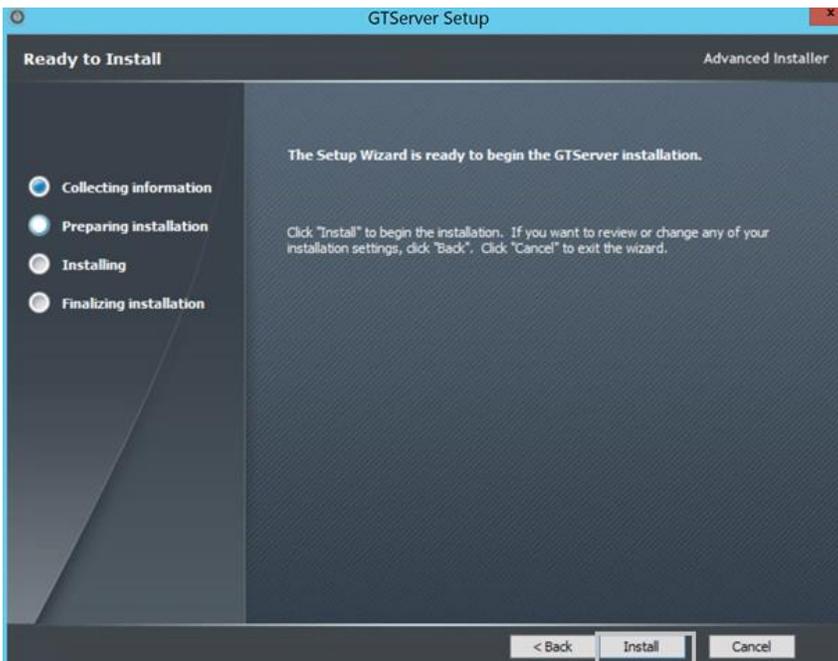
- Select “**Next**” to continue the installation



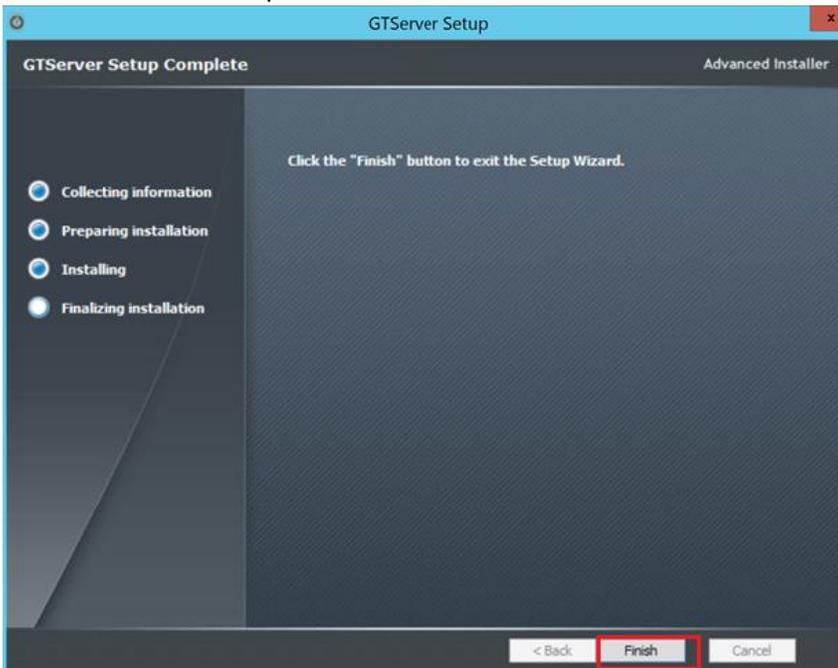
- Select “**Next**” to continue the installation



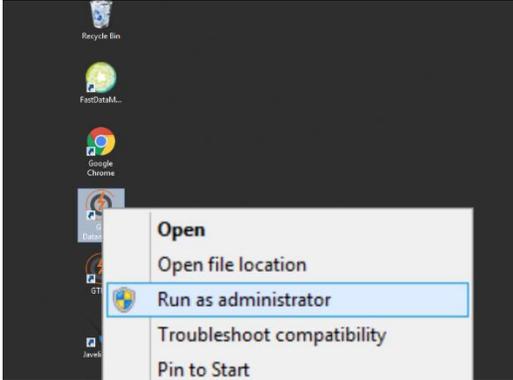
- Select **“Install”** to continue the installation



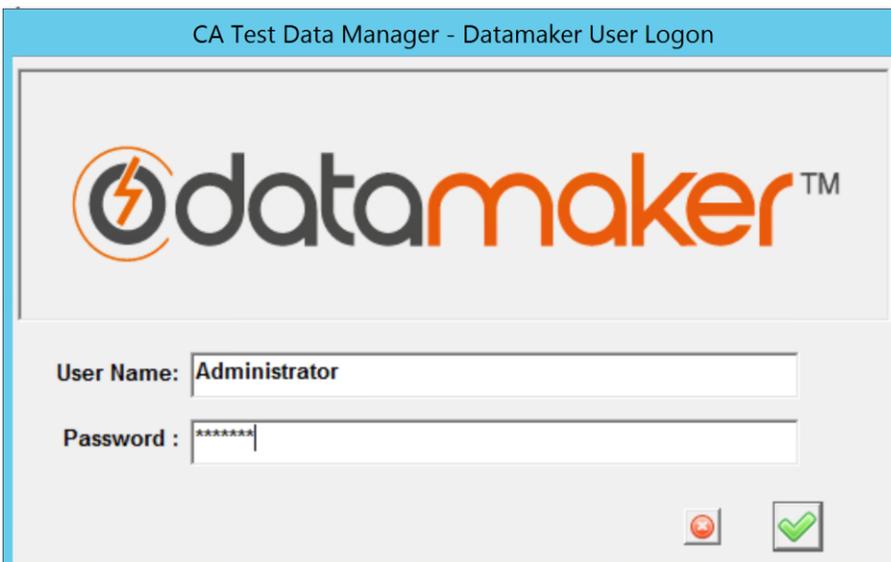
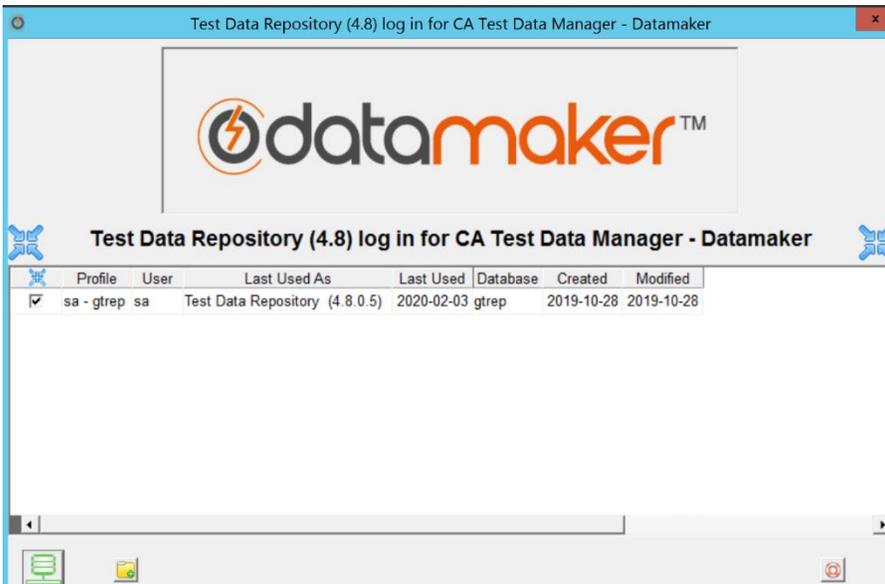
- Select **“Finish”** to complete the installation



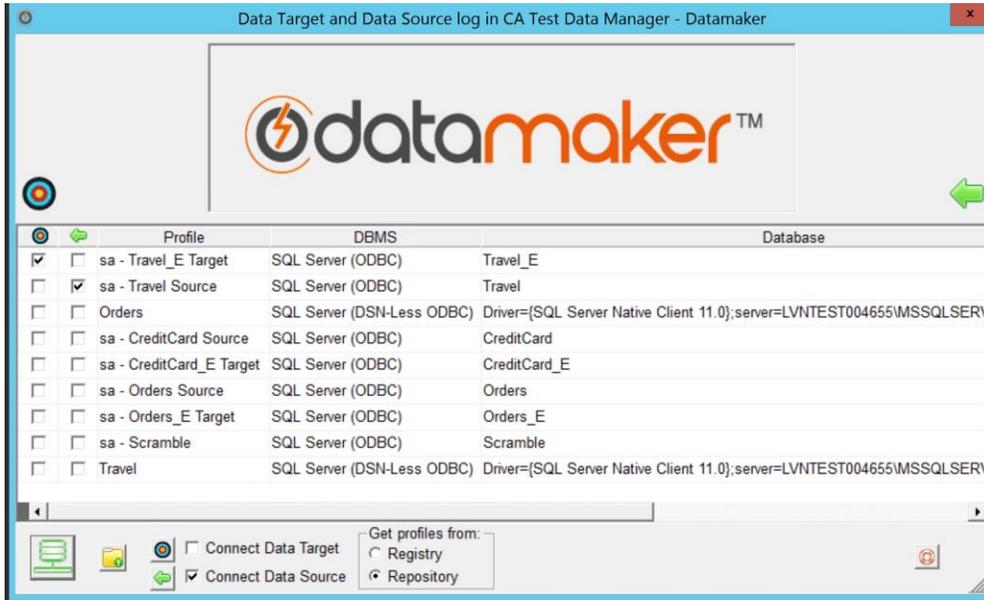
- Open the Datamaker , Right click and Run as Administrator



- Connect to the GTREP Profile



- Connect to the Source and Target Profiles



- Validate the version on the DataMaker



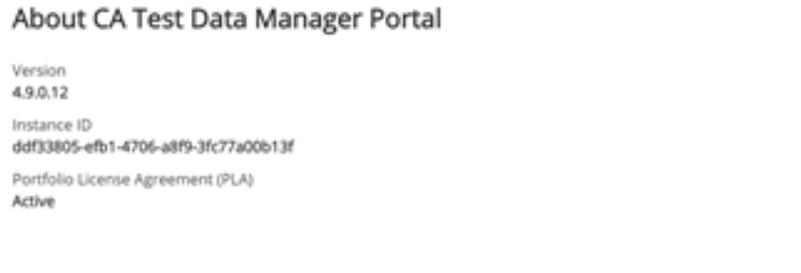
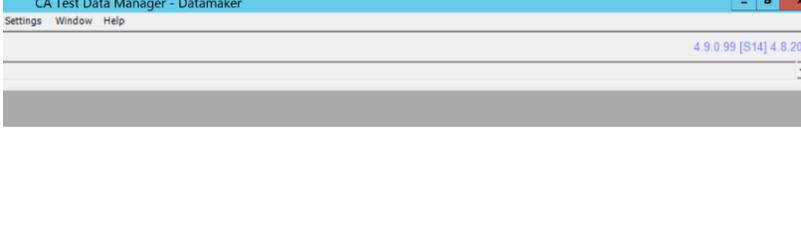
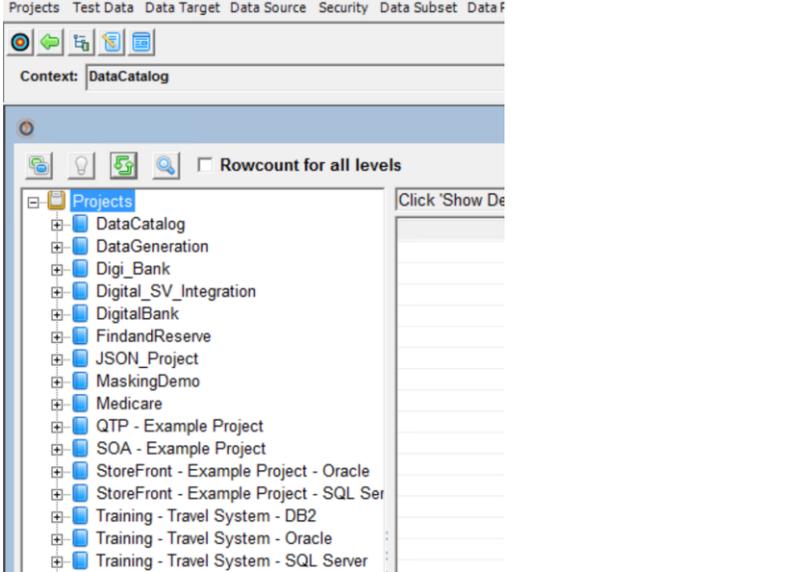
Post Upgrade Process

Changing Portal Logs Directory: [Link](#)

Configuring the Telemetry: [Link](#)

Upgrade Validation

Note: Common examples for validation are explained below, you can have your own validation process depending on your environment.

Validation	Comment	
1	Check the Version of TDM Portal -> Should match the version of the TDM Portal Installer	
2	Check the Version of GT DataMaker -> Should match the version of the GTServer Installer	
3	Validate the Projects in TDM Portal and DataMaker	

<p>4</p>	<p>Check the Connection Profiles</p>	<table border="1"> <thead> <tr> <th>Profile Name</th> <th>Database Name</th> <th>Server</th> <th>DBMS</th> <th>M...</th> </tr> </thead> <tbody> <tr> <td>cdd</td> <td>cdd</td> <td>LVNTTEST001182:1433</td> <td>SQL Server</td> <td>Oc</td> </tr> <tr> <td>Digi_bank_profile</td> <td></td> <td>localhost</td> <td>SQL Server</td> <td>Oc</td> </tr> <tr> <td>digibank_shredder</td> <td>DigitBank_Shredder</td> <td>localhost</td> <td>SQL Server</td> <td>Oc</td> </tr> <tr> <td>Digital_Bank_new</td> <td>Digital_new</td> <td>10.74.88.178</td> <td>SQL Server</td> <td>Oc</td> </tr> <tr> <td>DigitalBankDB</td> <td>digitalbank</td> <td>LVNTTEST001182</td> <td>SQL Server</td> <td>Oc</td> </tr> <tr> <td>Medicare</td> <td>Medicare</td> <td>LVNTTEST001182</td> <td>SQL Server</td> <td>Oc</td> </tr> <tr> <td>Order</td> <td>Orders</td> <td>LVNTTEST001182</td> <td>SQL Server</td> <td>Oc</td> </tr> <tr> <td>Order_e</td> <td>Orders_E</td> <td>LVNTTEST001182</td> <td>SQL Server</td> <td>Oc</td> </tr> <tr> <td>Travel</td> <td>Travel</td> <td>LVNTTEST001182</td> <td>SQL Server</td> <td>Oc</td> </tr> <tr> <td>Travel_E</td> <td>travel_e</td> <td>LVNTTEST001182</td> <td>SQL Server</td> <td>Fel</td> </tr> </tbody> </table>	Profile Name	Database Name	Server	DBMS	M...	cdd	cdd	LVNTTEST001182:1433	SQL Server	Oc	Digi_bank_profile		localhost	SQL Server	Oc	digibank_shredder	DigitBank_Shredder	localhost	SQL Server	Oc	Digital_Bank_new	Digital_new	10.74.88.178	SQL Server	Oc	DigitalBankDB	digitalbank	LVNTTEST001182	SQL Server	Oc	Medicare	Medicare	LVNTTEST001182	SQL Server	Oc	Order	Orders	LVNTTEST001182	SQL Server	Oc	Order_e	Orders_E	LVNTTEST001182	SQL Server	Oc	Travel	Travel	LVNTTEST001182	SQL Server	Oc	Travel_E	travel_e	LVNTTEST001182	SQL Server	Fel
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Reference Documents:

- [Upgrade Documentation](#)
- [Broadcom Support](#)