Migrating CA Test Data Manager from

On-Premises to Cloud

SWAT TEAM



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# Introduction

The purpose of this document is to provide steps to migrate TDM from On-Prem to Cloud Platform.

**Note**:

* This guide deals with database instance being migrated from physical machine or internal virtual machine to the cloud infrastructure.
* Procedure followed here in only with respect to Test Data Management and Cloud Security should be followed as per the cloud recommendation.
* The network between TDM and Database should be stable and available all the time for best performance.
* Please make sure all the ports are enabled

# TDM Architecture Diagram

The below diagram shows a basic TDM logical system architecture.



# Migration Tasks

 This is a high level summary of the tasks required to complete when planning a migration from a TDM on-premise implementation to a cloud platform.

1 Ensure that the cloud TDM environment meets the following requirements -

<https://techdocs.broadcom.com/content/broadcom/techdocs/us/en/ca-enterprise-software/devops/test-data-management/4-9/installing/install-test-data-manager/system-requirements.html>

1 Ensure that the TDM server in the cloud environment has network connectivity to the cloud based TDM Repository Database server. The ports required are listed in the following section.

2 Shut down the on premise TDM services before backing up the TDM Repository and OrientDB

3 Backup TDM database (Repository) from on-premise location

4 Backup TDM OrientDB from on-premise location

5 Restore TDM database (Repository) to cloud instance

6 Install TDM software on cloud platform

7 Stop TDM Portal Service

8 Restore TDM OrientDB to cloud environment

9 Copy any TDM customisations from on-premise to cloud instance

 a Custom Certificates

 b Additional Drivers

10 Start TDM Portal Service

11 Ensure that the TDM server in the cloud environment has network connectivity to the cloud based managed Database server. The ports required are listed in the following section

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## TDM Server system port Requirements

 The following table summarizes the defaultports used by TDM:

### TDM Component Ports

|  |  |  |
| --- | --- | --- |
| **From**  | **To**  | **Port**  |
| ARD  | TDM | TCP 8090  |
| TDM PortalData Maker Remote Publish ServiceService Layer – TDOD Service | Repository  | JDBC MSSQL 1433 /Oracle 1521ODBC MSSQL 1433 /Oracle 1521ODBC MSSQL 1433 /Oracle 1521ODBC MSSQL 1433 /Oracle 1521 |
| TDM PortalDatamaker | Active Directory | LDAP 389 / LDAPS 636LDAP 389 / LDAPS 636 |
| TDM PortalRemote Publish Service | Email Server | SMTP – TCP 25SMTP – TCP 25 |
| TDM Portal | OrientDB | TCP 2424 |
| TDM Portal  | Find and Reserve Database  | JDBC MSSQL 1433 /Oracle 1521 (Location - TDM Repository as the default configuration) |
| Data Maker | Mainframe | FTP – TCP 22 |
| TDM Portal | Masking Messaging Container | TCP 5671 |
| Masking Messaging Container | Masking Container | TCP 5671 |

### Source and Target Database Ports

|  |  |  |
| --- | --- | --- |
| TDM PortalDataMaker | Oracle | TCP 1521 |
| TDM PortalDataMaker | MS SQL | TCP 1433 |
| TDM PortalDataMaker | IBM DB2 AS400 | TCP 446 |
| TDM PortalDataMaker | IBM DB2 z/OS | TCP 446  |
| TDM PortalDataMaker | Teradata | TCP 1025 |
| TDM PortalDataMaker | PostGres | TCP 5432 |
| TDM PortalDataMaker | MySQL | TCP 3306 |

# TDM Repository Migration

* Backup and Restore the Repository
* Create New Repository and move projects.

**NOTE**: Upgrade and Installation procedure would be same as the procedure followed on premises version. You can follow TDM Upgrade Center for relevant upgrade documents.

**Reference Link:**

[TDM Upgrade Center](https://community.broadcom.com/enterprisesoftware/viewdocument/test-data-manager-upgrade-center?CommunityKey=819b4000-faf4-464f-b1d3-061dfcadee1a)

## Backup and Restore the Repository

We recommend that you backup your **GTREP TDM 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.

Suggested Process:

* Clean up the Projects in Repository – Remove the unwanted projects

**Reference Link:**

[Deleting the Projects](https://techdocs.broadcom.com/content/broadcom/techdocs/us/en/ca-enterprise-software/devops/test-data-management/4-9/provisioning-test-data/defining-test-data/defining-test-data-using-the-ca-tdm-portal/create-and-edit-projects.html)

* Backup the TDM Repository on the Database Server

**Reference Link:**

[Backup the Repository](https://techdocs.broadcom.com/content/broadcom/techdocs/us/en/ca-enterprise-software/devops/test-data-management/4-9/installing/upgrade-product-components.html)

* Restore the TDM Repository on the new Database Server
* Install the TDM portal server with reference to the new Database Server
* Create new connection profile to the new database server details.
* Install Datamaker and make the necessary connection

## Create New Repository and move projects

This procedure can be followed if you don’t want to reuse any projects from old environment or have very few projects.

* Setup new server TDM REPOSITORY on new Database server on Cloud with proper access control.
* Install TDM Portal on the new server using the TDM Repository database server details.
* Create the TDM Portal connection profile
* Install the Data Maker and make the required connection
* If there are any project you need to move from older environment, you can follow moving the Projects from one repository

**Reference Link:**

[Copy Remote Repository](https://techdocs.broadcom.com/content/broadcom/techdocs/us/en/ca-enterprise-software/devops/test-data-management/4-9/administrating/repository-administration/copy-remote-repository.html)

# TDM OrientDB Migration

Before Migrating the TDM OrientDB database the OrientDB service should be stopped by running the following command

net stop OrientDB

Once the OrientDB service is stopped the database files can be copied from this default location:

c:\ProgramData\CA\CA Test Data Manager Portal\orientdb\databases

The OrientDB service can now be restarted

 net start OrientDB

 To restore the OrientDB databases to the cloud environment copy the backed up database files to the cloud TDM Server and reverse the procedure