



Informatica® Test Data Management
10.2.1

Release Guide

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Preface

The *Test Data Management Release Guide* lists new features and enhancements, behavior changes between versions, and tasks that you might need to complete after you upgrade from a previous version.

Informatica Resources

Informatica Network

Informatica Network hosts Informatica Global Customer Support, the Informatica Knowledge Base, and other product resources. To access Informatica Network, visit <https://network.informatica.com>.

As a member, you can:

- Access all of your Informatica resources in one place.
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- View product availability information.
- Review your support cases.
- Find your local Informatica User Group Network and collaborate with your peers.

Informatica Knowledge Base

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Informatica Product Availability Matrixes

Product Availability Matrixes (PAMs) indicate the versions of operating systems, databases, and other types of data sources and targets that a product release supports. If you are an Informatica Network member, you can access PAMs at

<https://network.informatica.com/community/informatica-network/product-availability-matrices>.

Informatica Velocity

Informatica Velocity is a collection of tips and best practices developed by Informatica Professional Services. Developed from the real-world experience of hundreds of data management projects, Informatica Velocity represents the collective knowledge of our consultants who have worked with organizations from around the world to plan, develop, deploy, and maintain successful data management solutions.

If you are an Informatica Network member, you can access Informatica Velocity resources at <http://velocity.informatica.com>.

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Part I: Test Data Management

10.2.1

This part contains the following chapters:

- [New Features and Enhancements \(10.2.1\) , 9](#)
- [Changes \(10.2.1\), 10](#)

CHAPTER 1

New Features and Enhancements (10.2.1)

This chapter includes the following topic:

- [New Features and Enhancements for Version 10.2.1, 9](#)

New Features and Enhancements for Version 10.2.1

This section describes the new features and enhancements for version 10.2.1.

Import Metadata from the Model Repository

You can import metadata from the Model repository into the TDM repository.

For information about how to import metadata from the Model repository, see the *Test Data Management 10.2.1 User Guide*.

SSN Randomization

You can choose to randomize the nine-digit Social Security number in an SSN masking operation.

Use the SSN randomization technique to mask a Social Security number.

For information about SSN randomization, see the *Test Data Management 10.2.1 User Guide*.

Data Domain Assignments Import and Export

You can import a data domain assignments file into Test Data Manager and export data domain assignments from Test Data Manager.

For example, you can export a data domain assignments file from Secure@Source and import the data domain assignments file into Test Data Manager.

You can import a data domain assignments file in CSV format and export data domain assignments as CSV files.

For information about how to import and export data domain assignments, see the *Test Data Management 10.2.1 User Guide*.

CHAPTER 2

Changes (10.2.1)

This chapter includes the following topic:

- [Changes for Version 10.2.1, 10](#)

Changes for Version 10.2.1

This section describes the changes for version 10.2.1.

Test Data Manager Service Creation

Test Data Management version 10.2.1 works with Informatica domain service.

The Test Data Manager Service does not require a PowerCenter Integration Service or a PowerCenter Repository Service.

Effective in version 10.2.1, you do not select a PowerCenter Integration Service or a PowerCenter Repository Service. You cannot choose a Test Data Warehouse Service or an Analyst Service for the Test Data Manager Service.

Previously, you selected a PowerCenter Integration Service and PowerCenter Repository Service in the domain when you created a Test Data Manager Service. You could optionally choose to enter a Test Data Warehouse Service and an Analyst Service.

For information about how to create a Test Data Manager Service, see the *Test Data Management 10.2 .1 Installation Guide*.

Infacmd TDM Command Reference

Effective in version 10.2.1, you do not specify a PowerCenter Repository Service or a PowerCenter Integration Service when you create the Test Data Manager Service. You cannot choose a Test Data Warehouse Service or an Analyst Service.

The following properties are removed from the *Infacmd tdm CreateService* command to create the Test Data Manager Service:

- `<-PCRSServiceName|-pcrs> power_center_repo_service`
- `<-PCISServiceName|-pcis> power_center_int_service`
- `<-TDWServiceName|-tdw> test_data_warehouse_service`
- `<-AnalystService|-at> analyst_service`

Previously, you specified a PowerCenter Repository Service and a PowerCenter Integration Service in the domain during Test Data Manager service creation. You could optionally choose to enter a Test Data Warehouse Service and an Analyst Service.

For information about how to use the *Infacmd tdm CreateService* command, see the *Test Data Management 10.2.1 Installation Guide*.

Part II: Test Data Management

10.2.0

This part contains the following chapters:

- [New Features and Enhancements \(10.2.0\), 13](#)
- [Changes \(10.2.0\), 18](#)

CHAPTER 3

New Features and Enhancements (10.2.0)

This chapter includes the following topic:

- [New Features and Enhancements for Version 10.2.0, 13](#)

New Features and Enhancements for Version 10.2.0

This section describes the new features and enhancements for version 10.2.0.

Advanced Parameterization in Test Data Manager

You can create parameters for connections, owners, and criteria in a Test Data Manager project. Use the parameters in plans and entities to perform TDM operations.

Create parameters in a project and assign default values. You can update the parameter values in the workflow to create different results. Use parameters in a plan to create different test data output from the same plan without changing the plan.

For information about how to create and use parameters in Test Data Manager, see the *Test Data Management 10.2.0 User Guide*.

Parameter Files in Test Data Manager

You can create a parameter file in Test Data Manager.

A parameter file lists the parameters that you include in a plan. The file contains the default values that you assign when you create the parameter.

Create a parameter file before you generate and run a workflow to review the parameters in the workflow and to update parameter values. Update ignore flags for criteria parameters to include or exclude criteria parameters in a workflow. Choose to use the parameter file in the workflow to include the changes in the workflow. You can update a parameter file and run a workflow multiple times to create different test data output from the same plan.

For information about parameter files, see the *Test Data Management 10.2.0 User Guide*.

Edit Parameters and Parameter Values in a Workflow

You can update parameters and parameter values when you generate and run a workflow.

Update parameters and parameter values in a workflow to create different test data output from the same plan. Include or exclude different criteria parameters in the workflow to change filter criteria in a workflow without updating the entity or plan.

For information about how to edit parameters and parameter values in a workflow, see the *Test Data Management 10.2.0 User Guide*.

Batch Update for Recursive Executor

You can choose to update rows in batches in a data subset operation that contains tables with cyclic or tending to cyclic constraints.

If you choose to use batch updates in a plan, you must specify a batch size. Test Data Manager updates the records in the staging table in batches of the size you specify. The plan executor logs contain log records for the recursive executor batch updates. You can view the log files to monitor the status of the update.

For information about how to enable batch updates in a plan, see the *Test Data Management 10.2.0 User Guide*.

Computed Columns

You can include tables with columns that contain computed data in a TDM operation.

You cannot apply data masking or data generation rules to computed columns. The database populates data in the computed column based on data in the columns that it depends on.

For information about computed columns, see the *Test Data Management 10.2.0 User Guide*.

Delete a Table

You can delete a table from a project if you added too many tables or the tables that are not necessary after a period of time. You can delete one table at a time.

You can directly delete an orphan table that is not related to any other tables and does not contain any assignments. If you try to delete a table that contains assignments, a warning message appears. If a plan, an entity, or a group includes the table or if an assignment depends on the table, Test Data Manager displays the list of affected components.

For information about deleting tables within a project, see the *Test Data Management 10.2.0 User Guide*.

Hadoop HDFS Connection

You can create and use Hadoop HDFS connections in Test Data Manager. A Hadoop HDFS connection type is an HDFS connection that uses PowerCenter mappings to perform a TDM operation.

You can perform data group movement and data masking operations on Hadoop HDFS connections. Use a Hadoop HDFS data source in a TDM plan to generate PowerCenter mappings and write to the target.

You can perform the write operation in the following cases:

- Source is a relational database such as Oracle, Microsoft SQL, Sybase, and DB2 for Linux, UNIX, and Windows and the target is a Hadoop HDFS connection type
- Source is a flat file and the target is a Hadoop HDFS connection type

- Both the source and the target are Hadoop HDFS connection types
- Source is a Hadoop HDFS connection type and the target is a flat file

You cannot perform a write operation when the source is a Hadoop HDFS connection type and the target is a relational database.

For information about Hadoop HDFS connection properties, see the *Test Data Management 10.2.0 Administrator Guide* and *Test Data Management 10.2.0 User Guide*.

Hive Inplace Masking

You can perform an inplace masking operation on Hive data sources.

Use a Hive or a Spark execution engine to run the mappings in the cluster. You can use all the data masking techniques while you perform an inplace masking on Hive data sources with a Hive execution engine. When you use a Spark engine, you cannot perform shuffle and substitution masking.

For information about Hive inplace masking, see the *Test Data Management 10.2.0 User Guide*.

Spark Execution Engine

Use a Spark engine to run mappings in a Hadoop cluster.

When you run a Hadoop plan, the Data Integration Service can use the Spark engine on a Hadoop cluster to run mappings. You can move data into the target with Avro and Parquet resource formats when you use a Spark engine.

The Spark engine has the following limitations:

- You cannot use a Spark engine when the sources are relational databases such as Oracle, Sybase, Microsoft SQL Server, and DB2 for Linux, UNIX, and Windows.
- You cannot perform shuffle and substitution masking with a Spark engine.
- With the Spark engine, you cannot perform data masking operations on the Binary data type in Hive.

For information about Spark execution engine, see the *Test Data Management 10.2.0 Administrator Guide*.

Data Extraction from Hadoop Sources to Flat Files

You can extract data from Hadoop sources such as Hive and HDFS to a flat file in a Hadoop plan.

You can perform the following TDM operations when the source is Hive or HDFS and the target is a flat file in a TDM plan:

- Data movement in groups
- Data masking

You can use a Blaze, a Spark, or a Hive engine to run the mappings in a Hadoop environment.

For information about extracting files from Hadoop sources to flat file targets, see the *Test Data Management 10.2.0 User Guide*

Cluster Configuration for TDM

You can use cluster configuration objects when you perform TDM operations on Hadoop, Hive, and HDFS sources.

In the Administrator tool, you must create a cluster configuration object for the Hadoop clusters. The cluster configuration enables the Data Integration Service to push mapping logic to the Hadoop environment. You must specify the cluster configuration object when you create a Hadoop, Hive, or HDFS connection.

For information about cluster configuration for Hadoop sources, see the *Test Data Management 10.2.0 Administrator Guide*.

Sorter Transformation

When you create a plan, you can choose to add a Sorter transformation to the mapping that the plan generates.

Choose to add a Sorter transformation in a plan that contains source and staging databases that have different sorting techniques. A workflow fails if the source and staging databases use different sorting techniques. When you choose the Platform Sorter option, the mapping uses the Sorter transformation when it reads data from the source and the staging databases.

For information about the Sorter Transformation option in a plan, see the *Test Data Management 10.2.0 User Guide*.

SSN Masking

In SSN masking, you can use the SSN randomization technique to mask a Social Security number.

The Social Security Administration developed a method to randomize the nine-digit SSN. This method eliminates the geographical significance of the first three digits of a Social Security number and protects the integrity of the Social Security numbers. When you configure SSN masking parameters, you can choose the SSN randomization technique.

You can also use substitution masking to mask Social Security numbers that are not valid. TDM dictionary files include the InvalidSSN file that you can use in a substitution masking rule. The masked SSN format might or might not conform to SSN semantics issued by the US Social Security Administration.

For information about SSN randomization and invalid SSN, see the *Test Data Management 10.2.0 User Guide*.

Data Masking Transformation Session Properties

You can configure the session run-time properties to increase performance.

Configure the session run-time properties within a project or a plan.

You can configure the following Data Masking transformation session properties:

- Cache Size
- Cache Directory
- Shared Storage Table
- Storage Commit Interval
- Encrypt Storage
- Storage Encryption Key

For information about the Data Masking transformation session properties, see the *Test Data Management 10.2.0 User Guide*.

Data Generation and Test Data Warehouse for MongoDB

You can perform data generation operations on MongoDB data sources.

You can perform data subset, data masking, data discovery, and data generation operations and store the results in a test data warehouse. When the target is test data warehouse, you can perform TDM operations on the supported data types for MongoDB.

For information about data generation and Test Data Warehouse for MongoDB data sources, see the *Test Data Management 10.2.0 User Guide*.

Trigger Management

You can choose to disable DML triggers in the target database when you configure a plan.

Loading data to a target might take less time if you disable triggers. When you choose this option, the workflow disables DML triggers in the target before loading data and enables the triggers after it loads data into the target database. You can disable triggers on Oracle, Microsoft SQL Server, Sybase, and DB2 for Linux, Windows, and UNIX, connection types. You can disable triggers on the ODBC connection type if the database type is Oracle, Microsoft SQL Server, Sybase, or IBM DB2.

For information about how to disable DML triggers in a plan, see the *Test Data Management 10.2.0 user Guide*.

Unschedule a Job

You can remove a job that you scheduled to run at a later time.

In the **Monitor** view, you can click **Unschedule** to permanently remove the job.

For information about removing a scheduled a job, see the *Test Data Management 10.2.0 User Guide*.

CHAPTER 4

Changes (10.2.0)

This chapter includes the following topic:

- [Changes for Version 10.2.0, 18](#)

Changes for Version 10.2.0

This section describes the changes for version 10.2.0.

Adding Parameters in a Plan

Effective in version 10.2.0, to include parameters in a plan, you must first create the parameter within the project.

When you choose to enter the connection or owner property as a variable in a plan, you select the parameter name from a list of parameters.

Previously, you did not create parameters in Test Data Manager, and entered the parameter name in the value field.

For information about how to use parameters in a plan, see the *Test Data Management 10.2.0 User Guide*.

ilmcmd

Effective in version 10.2.0, the ilmcmd command line program contains the following change:

- The workflow command contains an additional option `-pf`. The option takes the name of the parameter file that you want to use in the workflow.

Previously, you could not select a parameter file when you run a workflow.

For information about how to include a parameter file in a workflow, see the *Test Data Management 10.2.0 User Guide*.

Entity Creation

Effective in version 10.2.0, you perform an additional step to add filter criteria to an entity.

The **Add Filter Criteria** window has an additional **Attribute** column. Select **Value** or **Parameter** from the list of attribute options. If you choose to enter a parameter, you can then select the parameter name from the list in the **Value** column. If you choose to enter a value, you can then enter a value in the **Value** column. To select a parameter, you must first create the parameter in Test Data Manager.

Previously, you entered the parameter name manually.

For information about how to create entities , see the *Test Data Management 10.2.0 User Guide*.

Workflows

Effective in version 10.2.0, if a workflow contains parameters, the **Generate and Execute** workflow contains an additional step.

You choose the location from which the workflow uses parameter values or edit parameter values in the step.

Previously, there was no option to choose a parameter file location or edit parameter values when you run a workflow.

For information about how to run a workflow that contains parameters, see the *Test Data Management 10.2.0 User Guide*.

Monitor Performance

Effective in version 10.2.0, Test Data Manager lists the workflow jobs and session logs in a separate tab.

After you run a workflow, you click the Execute Workflow job ID from the global or the project **Monitor** view. The job ID opens in a separate tab and lists the workflow jobs and session logs. If an Execute Workflow job contains many workflows, TDM lists all the workflow jobs in a separate tab and thereby improves the performance of TDM.

Previously, the workflow jobs and session logs were displayed in the global **Monitor** view. When an Execute Workflow job had many workflows, TDM took a long time to load all the details at once on the same screen and the performance of TDM decreased due to the heavy load of multiple workflows.

For information about how to view the workflow jobs and session logs after you run a workflow, see the *Test Data Management 10.2.0 User Guide*.