

Test Data Management

A process of planning, designing, storing, managing the software or the source codes of an application for testing is called Software test data management. The main objective of the test data management is to check and test the quality of the software. During the entire software testing life cycle, it controls the files, rules, etc. that are produced during processing.

It separates the test data from production data. It minimizes and optimizes the size of software testing data and creates the testing reports. To implement the process of the test data management, test data tool is used.

Tool used for TDM

- [K2View](#)
- [Avo iTDM](#)
- [DATPROF](#)
- Informatica
- CA Test Data Manager (Datamaker)
- Compuware's
- InfoSphere Optim
- HP
- LISA Solutions for
- Delphix
- Solix EDMS
- Original software
- vTestcenter
- TechArcis
- SAP Test Data Migration Server
- Double

#1) [K2View](#)



K2View is the leading test data management (TDM) solution for enterprises with complex environments. Testers can quickly provision test data subsets on demand from any number and type of production source while preserving referential integrity. Extensive API-enabled integration into DevOps CI/CD automation pipelines.

Sensitive data (PII) is discovered and masked at rest or in transit. The software also provides synthetic test data generation, versioning, subset reservations, reporting, authentication layer, and more.

On-premises, in the cloud, or hybrid deployments are available.

#2) Avo iTDM – Intelligent Test Data Management



Avo's intelligent Test Data Management (iTDM) helps you generate reliable and relevant production-like test data with a few clicks. This synthetic data enables teams to fast-forward their entire testing process. The solution automatically identifies and manages PII (data discovery), secures sensitive data for PII compliance (data obfuscation), and offers data provisioning and generation.

It supports open architecture with easily-pluggable custom modules. Built and deployed on open-source technologies and container frameworks, it can handle billions of records on commodity hardware.

With iTDM, you can:

- Speed up application delivery by expediting testing.
- Identify non-compliant data in non-production environments.
- Comply with continuously evolving on-demand and configurable data privacy regulations.
- Generate and provide only relevant data downstream.

#3) DATPROF – Test Data Simplified



DATPROF is a top tool that provides, data masking, synthetic test data generation, Test Data Subsetting technologies, and a test data provisioning platform. DATPROF that there is no need for complex tools for test data management. All the customers love the simplicity of our software and the amazing technology that solves the necessary test data issues.

DATPROF also offers self-service portals so teams are able to refresh their own test environments or integrate test data provisioning within your CI/CD pipeline with the API.

#4) Informatica Test Data Management



Informatica Test Data Management Tool is a top tool that provides automated data subsetting, data masking, data connectivity, and test data-generation capabilities. It automatically detects sensitive data locations. This is fulfilling the increasing demand for test data.

It also completes all the demands of the application owner, infrastructure, developers, testers, etc. Informatica provides a non-production dataset that completes the requirements of the development team. It also provides integrated sensitive data discovery that increases the security of test data.

#5) CA Test Data Manager (Datamaker)



CA Test Data Manager is another top tool that provides highly synthetic data generation solutions. The design of this tool is very flexible to simplify the functionality of the testing. It is a product of CA technologies. It acquires the DataMaker of Grid-tools. It is also called Agile Designer, DataFinder, Fast DataMaker, and DataMaker.

It provides high-performance data subsetting, data masking, test matching, etc. The tool generates, store, and reuse the test data in the test data repository. According to the need, we can access the data using the on-demand service of the tool.

#6) Compuware



Compuware's Test data tool is another popular testing tool that provides optimized test data mgt. Through this tool, we can easily create test data. The tool provides masking, translating, generating, aging, analyzing, and validating testing data. The new feature of the tool is that it fulfills all the conditions of the mainframe test.

It supports all standard types of file. With all these features, it provides complete data privacy. This data privacy influences the file and data management solutions of the industry and provides efficient access to test data.

#7) InfoSphere Optim



IBM InfoSphere Optim tool has a built-in workflow and on-demand service facilities. This feature helps in continuous testing and agile software development. The tool provides real-time data testing, uses right-sized test databases that optimize, and automate the process of test data mgt.

The tool speeds up the application development process of the organizations reduces costs and speeds up application delivery. On the demand of developers and testers, it analyses and provides refresh test data to them. All these features give a comprehensive testing solution and reduce the risk that can occur during the testing or training process.

#8) LISA Solutions



LISA Solutions is an automatic testing tool that creates a virtual dataset that gives a high level of functional accuracy. The tool can import test data from different types of data sources such as excel sheets, XML, log files, etc. Tester or developers can easily manipulate the test data and integrate it into a single place.

Automatic data masking protects sensitive data without violating any security policy. It also provides dynamic data stabilization that validates the test data according to the business rules. Another feature of the tool is self-heal of virtual test data which increases its viability of virtual test data.

#9) Delphix



Delphix Test data tool provides high quality and faster testing. During development, testing, training, or reporting, redundant data is shared across all this process. This sharing of data is called data virtualization or virtual data. The virtual data of the tool provides complete, full size and real data sets in a few minutes that takes very few spaces.

It also reduces storage costs. The tool improves productivity by providing automatic delivery and configuration of applications and databases. The tool works on public and private cloud infrastructure means provides services and pay per usage of services.

#10) Solix EDMS



Solix test data tool automatically creates test data subsets for testing, development, masking, patching, training, and outsourcing. The tool also creates and manages clone production data subsets from large databases.

These clone data subsets are created according to the organization-defined business rules that will reduce the creation time and infrastructure cost by up to 70%. These correct and realistic data subsets give results that are more accurate. The tool eliminates the need for unnecessary security risks and saves time and storage.

#11) Original Software



Original software data management tool regulatory control and protects data. The tool effectively creates test data that reduces risks like disk space, data verification, confidentiality of test data, etc.

The tool also uses the principle of Accurate Quality Management [AQM]. Manual implementation of AQM is not possible. AQM checks visible test results and database effects. TestBench from Original Software supports AQM that uniquely controls and manages test data.

#12) vTestcenter



vTestcenter tool is a scalable data testing tool that confirms data consistency and reusability and generates powerful test reports. Scalable means from small teams to large workgroups can use vTestcenter. Testing specifications, implementation, and execution or reporting, all require full traceability and vTestcenter fulfill this.

The open interface of the tool easily integrates with the existing test tool landscape. To quickly access and manage the relevant data is done by the convenient cockpit function. It also provides a multi-user capable platform through which the tester or developer can easily integrate the different data such as test scripts, models, and test or test results.

Additional Tools

#13) TechArcis



TechArcis test data tool is an easy to use and effective tool that automatically creates complete, accurate, and secure test data. The tool performs a customized test data mgt that provides flexibility in the testing environment. It regularly updates the whole test data delivery process.

The tool reuses the baseline test data and data selection criteria that increase the delivery process. Masking increases the security of the data and maintains referential integrity. It generates a report, such that meets the real production data and systematically evaluates the system behavior.

#14) SAP Test Data Migration Server



SAP test data management server creates a small test data subset and provides a non-production environment for development, testing, and training. It increases data extraction that reduces infrastructure expenditures and storage space in the testing environment.

The Sap server provides the latest test data for testing and their test teams and uses sensitive data in the training system. We can use and refresh a single client in the SAP system which increases flexibility. It easily adapts to the changing requirements and innovations like SAP HANA or cloud solutions.

#15) Doble



Doble test data eliminates manual and redundant work processes and provides data-focused solutions. These solutions include data clean-up, data conversion, test plan creation, etc.

This saves time and ensures consistent test data for regulatory reporting. The tester or developer can select the required option based on the need of the organization. The tool prepares and supports large-scale initiatives and asset management programs.

Test Environment

The most important factor for the test environment is to replicate it as close to the end-user environment as possible. Commonly, end users are not expected to perform any configuration or installations by themselves as a complete product or system is shipped out to them. Hence, by that definition, even the test teams need not explicitly perform such configurations.

