Accelario

The Ultimate Test Data Management Checklist

Choose the right TDM solution for you and your DevOps and R&D Team.

Any organization competing in today's software development industry needs an effective Test Data Management (TDM) solution. High-quality test data is crucial for accurate and reliable testing, and the right TDM solution reduces costs, enhances collaboration and accelerates product delivery. Use this checklist to help you determine what TDM features are most important to you and your DevOps and R&D teams.

Understand Your Goals

While the development and financial benefits of TDM can make the decision to incorporate this solution seem easy, it's important to take your time and define your specific goals. Understanding your goals sets the foundation for selecting the right TDM solution for your needs. It's also critical that your key stakeholders are aligned on those goals.

Start with:

1 Map Development Lifecycle:

Outline your software development process from concept to release, encompassing maintenance and updates for a comprehensive understanding of the role of test data in the development lifecycle.

2 Pinpoint Test Data Usage:

Identify specific stages in the development lifecycle where test data is employed, spanning unit testing, integration testing, system testing, and acceptance testing. Also, consider its role in CI/CD pipelines and post-deployment scenarios.

3 Analyze Data Flow:

Examine the flow of test data, from creation and storage to retrieval and deletion. Understand who requires access, when, and under what conditions, shedding light on the test data lifecycle within your development processes.

4 Generation and Sourcing Methods:

Investigate how test data is generated—whether manually, automatically, or sourced from production environments. Each method influences test effectiveness and management requirements.

5 Compliance and Security:

Understand compliance requirements for test data, especially if it involves personal or sensitive information. Implement security measures at each stage to prevent data breaches.

6 Identify Additional Pain Points:

Recognize challenges or inefficiencies in current test data processes, such as time-consuming preparation and/or difficulties simulating real-world scenarios.

Choosing a TDM Partner Checklist

Before selecting a Test Data Management (TDM) solution for your organization, it's crucial to conduct a thorough evaluation to ensure it aligns with your specific requirements and contributes to the efficiency of your testing processes. The following checklist encompasses key aspects to consider when assessing TDM solutions. From core features and scalability to compliance, each criterion plays a vital role in determining the suitability of a TDM solution for your unique testing environment. This checklist aims to guide you in making an informed decision that not only meets your current needs but also positions your testing infrastructure for future challenges and innovation.

Overall:

- ☐ Promises a quick, rapid onboarding process, API integration, and compatibility with various CI/CD pipelines
- ☐ Offers a self-service portal for your team to access or make requests
- ☐ Supports hybrid multi-cloud, on-premises solutions, and universal delivery across development environments
- ☐ Provides significant storage footprint reduction and storage cost savings

Data Virtualization:

- ☐ Aggregates data from diverse sources, providing a single, unified view
- ☐ Offers a combination of virtual and physical data technologies with real-time visibility into test data
- ☐ Promises to quickly reduce the time it takes to create virtual database copies for your team
- ☐ Provides users with an always-ready personal R&D copy
- ☐ Facilitates real-time access to data from various systems without the need for data replication
- ☐ Offers version control, data state rewinding, replication, and easy sharing across teams

Data Masking:

- ☐ Provides clear indications of your privacy exposures
- ☐ Automates data masking tasks using AI and/or templated policies
- ☐ Adherence to data privacy laws and regulations such as GDPR, HIPAA, and CCPA, etc.
- ☐ Substitutes or anonymizes sensitive information
- ☐ Offers an intelligent data search that:
  - ☐ Scans an environment with on-click, compliant with GDPR, CCPA, PCI, HIPAA
  - ☐ Automatically assigns masking rules to the correct sensitive columns/keys, ensuring referential integrity
  - ☐ Provides a detailed view and masking rules editing capabilities for selected sensitive data
- ☐ Includes a manual interface for viewing and modifying sensitive columns, enabling the manual assignment of masking rules to specific data fields

By carefully considering these factors, you can create a solid foundation for choosing the right Test Data Management solution for your R&D and DevOps team.

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About Accelario

Accelario has engineered the next generation of test data management technology, enabling teams operating in R&D, DevOps, microservices, ML/AI, and/or cloud-based environments to work more efficiently and effectively. We accelerate application delivery by enabling shift-left testing with AI-powered masking, providing high-quality, production-based test data with full privacy compliance leveraging both virtual and physical data technologies at a lower cost. The result is faster and simpler development processes, higher-quality releases, and increased business growth.