

Informatica Test Data Management

Benefits

The Informatica Test Data Management solution can rationalize testing productivity by:

- Facilitating a shift-left software testing approach, performed earlier in the lifecycle
- Improving overall software quality with better test data
- Reducing costs by enabling outsourcing and offshoring of test/development with de-identified sensitive data
- Ensuring regulatory compliance and protecting test data environments
- Enabling DevOps with automated test data lifecycle management
- Providing self-service test data
- Supporting collaboration among multiple testers working on the same test environment

Driving Testing Efficiency and Compliance

Software development today faces enormous challenges. You need to develop, test, and release software to meet demanding delivery schedules and complex requirements. In addition, development teams must coordinate their efforts across multiple geographies to ensure compliance with various data privacy regulations. Informatica Test Data Management is a key solution for achieving on-time, high-quality results for continuous delivery of software while ensuring the development and testing process does not expose sensitive data to unauthorized access or use. What matters most is getting the right test data to the right teams as accurately and quickly as possible, without violating internal policies or regional and industry regulations.

Focus on Test Data Quality and Privacy

Test engineers should focus most of their energy on testing rather than on preparing test data sets and provisioning them. But they actually spend as much as half their time on tasks that are unrelated to software testing—and as teams transition to Agile development, that takes a toll on testing's efficiency and effectiveness. Yes, Agile practices allow you to fail faster and surface bad practices sooner, but they also do the same for bad consequences.

Testers need tools for automating data discovery and creating, subsetting, and resetting test data sets if they hope to respond rapidly to new scenarios and test requirements. Informatica Test Data Management, ranked “a leading player in this market” by Bloor Research International (“Test Data Management Market Update,” 2017) provides the following:

- Automates test data provisioning to enable continuous delivery and continuous testing
- Automates discovery of data relationships and sensitive data in production databases to ensure the creation and maintenance of functionally intact test data sets
- Improves test data coverage with automated test data generation to complement production data
- Visualizes test data coverage to understand where there is missing data
- Provides self-service tools for finding test data
- Maintains test data sets for reuse, which ensures high-quality, on-time software delivery

- Speeds compliance reporting, provides faster data science, and optimizes data risk by masking and protecting sensitive data
- Supports deployment on-premises and in multi-cloud configurations

Key Features

Test Data Warehouse

With Test Data Warehouse, organizations can save, reset, tag, search, and reuse test data sets. You can automatically push these data sets to testing tools, making them readily available for consumption by test scripts. You can also share the data sets with other projects and teams, encouraging collaboration. Test Data Warehouse saves hours in test data creation, builds efficiency and automation into the testing process, minimizes the risk of exposed sensitive data, and ultimately reduces costs associated with testing.

Self-Service Portal

Test Data Warehouse increases testing productivity by offering self-service abilities, such as a self-service portal that lets testers request, manipulate, and provision their own data sets on new or existing nonproduction environments without help from a testing engineer.

Integrated Test Data Automation

Informatica Test Data Management offers a command-line utility to enable automated execution of subset, masking, and synthetic data generation. The utility offers integration with configuration management, workflows, test automation, test case management, source code controls, and sanity, regression, and integration testing, such as Jenkins, Selenium, Chef, Puppet, and HP ALM.

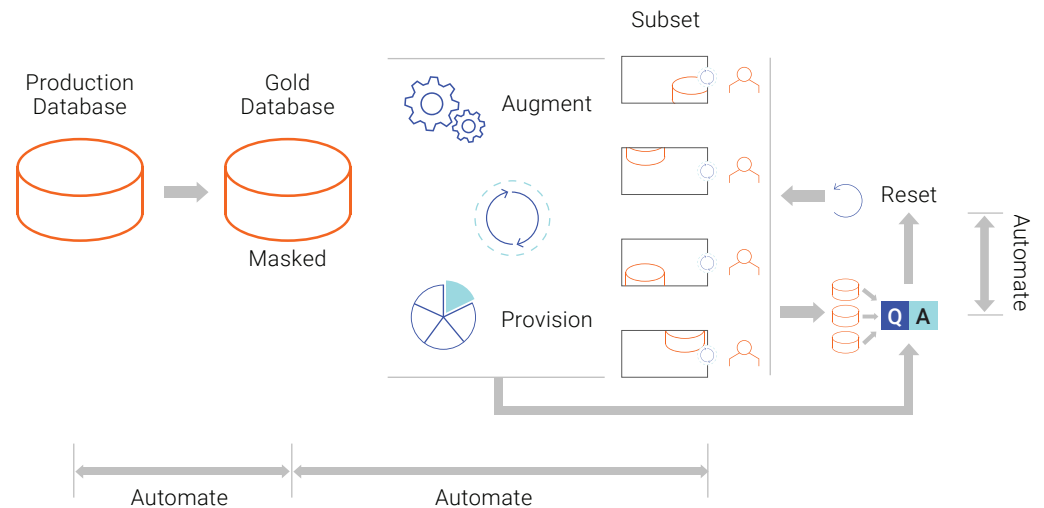


Figure 1. High-level solution architecture of Informatica Test Data Management automation

Ensure Data Privacy and Regulatory Compliance with Desensitized Production Data

Testers can create test data sets on-premises or on cloud repositories using real data cloned from production. Before releasing the environments for consumption by development and testing teams, test data administrators can use Informatica Persistent Data Masking to desensitize customer and vendor names, addresses, email, and national identifiers such as Social Security numbers.

Sensitive data masking mitigates compliance risk with regulations such as General Data Protection Regulation (GDPR), Comprehensive Capital Analysis and Review (CCAR), and Basel Committee on Banking Supervision standard number 239 (BCBS 239), avoiding fines and data breach costs. Additionally, masking sensitive data elements in test and training environments eliminates the risk of Federal Communications Commission (FCC) and Customer Proprietary Network Information (CPNI) noncompliant test data.

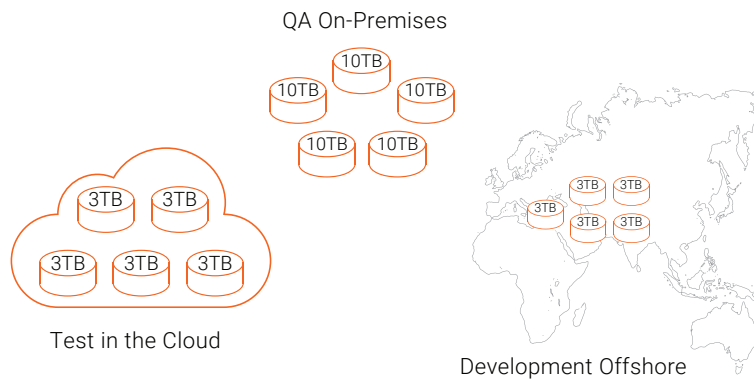


Figure 2. Testers can create test data sets on-premises or on cloud repositories using real data cloned from production.

Key Benefits

Secure Testing

Some companies run IT environments with waterfall methodology, while others adopt Agile or leverage the full automation power of DevOps. Informatica Test Data Management is designed to meet the different requirements of any organization.

Informatica Test Data Management is scalable and highly visual software that lets the IT organization define subsets of test data from production environments or a gold copy, with desensitized PCI, PHI, and PII data. Persistent Data Masking provides advanced masking of sensitive data for heightened privacy and regulatory compliance.

Informatica Test Data Management also includes automated data discovery, which allows test data architects to find sensitive data elements and relationships between tables and to understand the data existing in the production system. It includes data validation to ensure that sensitive data is masked and to support the comparison of expected results with the results of test scripts.

About Informatica

Digital transformation changes expectations: better service, faster delivery, with less cost. Businesses must transform to stay relevant and data holds the answers.

As the world's leader in Enterprise Cloud Data Management, we're prepared to help you intelligently lead—in any sector, category or niche. Informatica provides you with the foresight to become more agile, realize new growth opportunities or create new inventions. With 100% focus on everything data, we offer the versatility needed to succeed.

We invite you to explore all that Informatica has to offer—and unleash the power of data to drive your next intelligent disruption.

Test engineers can generate data for new use cases and corner cases with Test Data Generation. Test Data Generation improves data privacy and mitigates sensitive data risk by creating synthetic testing data to fill in production data gaps. Together with data discovery, Test Data Generation can generate secure production-quality data based on existing data distribution in production environments.

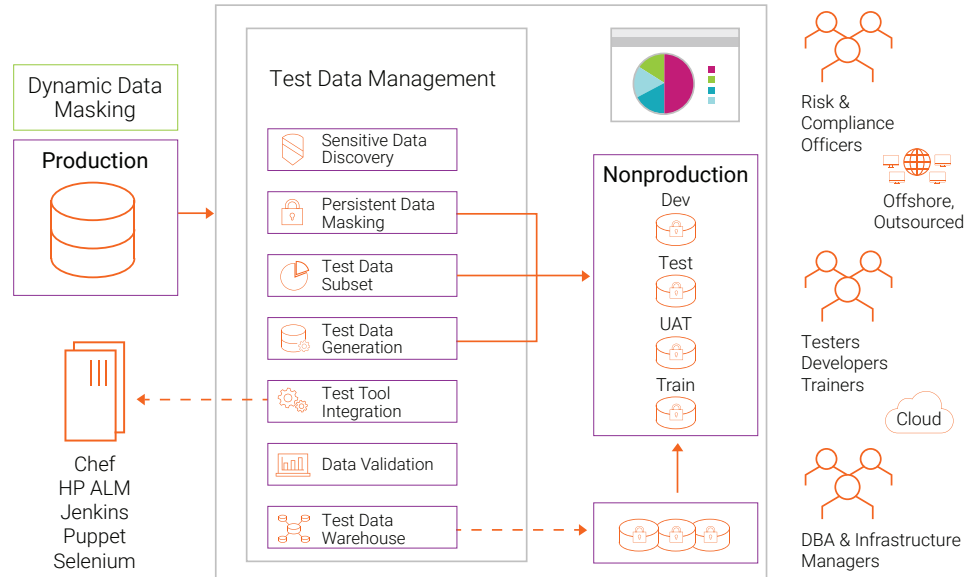


Figure 3. Components of secure testing with Informatica Test Data Management

Informatica Test Data Management includes the following key operations:

- High performance and scalable subset and masking to secure production data in test environments
- Centralized administration and management
- Sensitive data discovery
- API for DevOps integration
- Data visualization
- Connectivity to relational, NoSQL, and mainframe databases
- Masking of relational and mainframe data
- Masking of NoSQL, Hadoop (HDFS), and Hive source data
- Integration with testing tools (Chef, HP ALM, Jenkins, Puppet, Selenium)
- Data validation
- Test Data Warehouse
- Test Data Generation

A command-line interface is available for generating data, data subset and masking, storing test data in Test Data Warehouse, resetting test data, and importing incremental test data changes.

For more information, visit the [Informatica Test Data Management product page](#).



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IN06_1120_03234