Informatica Test Data Management

Driving DevOps Excellence with Agile Test Data Management

When enterprises adopt Agile practices for software development, their approach to testing must change. In legacy waterfall methodology, quality assurance is a standalone, isolated step, but in Agile development, it’s part of a sprint, with tests repeated weekly, if not daily, by testers who need on-demand self-service test data to meet aggressive delivery schedules.

Embedding test data into the DevOps process through Test Data Management is key to achieving on-time, high-quality results for continuous delivery of software. What matters most is getting the right test data to the right teams as accurately and quickly as possible.

Focus on Test Data Quality

Test engineers should focus most of their energy on preparing test data sets, 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 the right automation tools for data discovery, resetting test datasets in an existing test database or generating non-combinatorial rows if they hope to respond rapidly to new scenarios and test requirements. Informatica Test Data Management provides these tools:

- Automation of test data provisioning
- Automated discovery of data relationships and sensitive data to ensure the creation and maintenance of functionally intact test data sets
- Better test data coverage with automated test data generation to complement production data
- Test data coverage visualization to understand where there is missing data
- Self-service tools for finding test data
- Maintenance of test data sets for reuse, which ensures high-quality, on-time software delivery

Benefits

Informatica Test Data Management solution can rationalize testing productivity by:

- Facilitating shift-left testing
- Improving overall software quality with improved test data quality
- Enabling DevOps with automated test data lifecycle management
- Reducing cost by enabling outsourcing and offshoring of test/dev with de-identified sensitive data
- Providing self-service test data
- Supporting collaboration among multiple testers working on the same test environment
Self-Service Test Data for Testers

A Test Data Warehouse increases testing productivity by offering self-service abilities that let testers request, manipulate, and provision their own datasets on a new or existing non-production environment. These datasets can be shared with other projects and teams, encouraging collaboration. Test datasets can also be tagged with test cases for quick search and integration with test tools.

Support DevOps with Integrated Test Data Automation

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

Reduce Cost and Enable Outsourcing with Desensitized Production Data

Testers can create test datasets on premise or on cloud repositories using real data cloned from production. Before releasing the environments for consumption by development and testing teams, testers can use Informatica Persistent Data Masking, which Gartner calls the market-leading data masking solution¹, to desensitize customer and vendor names, addresses, e-mails, and national identifiers.

¹Gartner 2015 Magic Quadrant for Data Masking Technology
Informatica Test Data Management for Customers with Different Requirements

Some companies are running IT with waterfall methodology, while others have adopted Agile or are leveraging the full automation power of DevOps. Informatica Test Data Management is offered in two editions to meet the different requirements of all these organizations.

Informatica Test Data Management Standard Edition
Informatica Test Data Management Standard Edition is a scalable and highly visual Test Data Management software that lets IT define subsets of test data from production environments or a gold copy, with desensitized PCI, PHI, and PII data. This edition 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 sensitive data has been masked and to support the comparison of expected results with the results of executing test scripts.

These Test Data Management operations are also supported by command line APIs, allowing integration with DevOps tools such as Jenkins.

Informatica Test Data Management Advanced Edition
Informatica Test Data Management Advanced Edition is designed for organizations ready for Agile testing. In addition to all the features of Standard Edition, the Advanced edition also includes support for reset, tagging, and collaboration of test datasets with Test Data Warehouse. These datasets can be pushed automatically to testing tools like HP Application Lifecycle Management (ALM), making them readily available for consumption by test scripts.
About Informatica

Informatica is 100 percent focused on data because the world runs on data. Organizations need business solutions around data for the cloud, big data, real-time and streaming. Informatica is the world’s No. 1 provider of data management solutions, in the cloud, on-premise or in a hybrid environment. More than 7,000 organizations around the world turn to Informatica for data solutions that power their businesses.

Test engineers can also generate data for new use cases and corner cases with Test Data Generator, part of Test Data Management Advanced Edition. Together with Data Discovery, Test Data Generator can generate data based on existing data distribution in production environments.

All these operations are also supported by command line API for automation.

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<th>STANDARD</th>
<th>ADVANCED</th>
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<tr>
<td>High Performance and Scalable Subset and Masking</td>
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