

# Using Test Data Manager to Speed SAP S/4HANA Upgrades

## Key Benefits

- Connect and locate data within the SAP/4HANA database
- View referential integrity (foreign key and primary key values)
- Automate test data identification
- Mask test data from the SAP S/4HANA database
- Generate synthetic test data that matches SAP data
- Copy data objects using Javelin
- Maintain compliant data (GDPR, HIPAA, PCI, and so on)
- Establish strong data quality services
- 25% reduction in test data costs through automation and reuse
- 40% time saving in test data masking
- 30% increased productivity with TDM governance
- 90% cycle time reduction for test data availability

## Locate, Mask, and Generate Test Data for SAP S/4HANA Environments for Improved Feature Testing and Migrations

The Test Data Management solution from Broadcom is an advanced test data management system that allows testers to locate, build, and manage SAP test data through a web-based portal. The solution employs a single point of reference for all test and development efforts.

## At a Glance

Having the right test data at the right time is crucial to developers and testers for application development, QA and product updates. Companies that utilize packaged applications such as SAP often perform rigorous testing prior to performing a version upgrade. This is necessary to avoid serious disruption to their supply chain activities when upgrading their production system.

To help clients perform test data management functions in an SAP S/4HANA environment, Test Data Manager from Broadcom, has employed client connectivity API's such as JDBC, ODBC and SQL from SAP. The integration between Test Data Manager and SAP S/4HANA brings a new level of support to help companies test features prior to an upgrade. A test data engineer can find and mask SAP test data or generate new test data synthetically. The tester can use the TDM portal to find and reserve SAP test data for their particular testing purposes. This streamlined process allows teams to manage the SAP testing process, especially during migrations and upgrades.

## SAP S/4HANA Enables a New Level of Test Data Management

The release of SAP S/4HANA and their browser-based tools and API's has opened up new access to SAP data. This means that IT, developers and testers have more ways to view, extract, and manage SAP test data. It also means that tools such as Test Data Manager can be employed more easily to speed the testing and customization of SAP.

SAP S/4HANA offers simplifications, increased efficiency, and compelling features that customers are looking for in this newest version. The clock is also ticking for users of previous SAP versions which is causing many to look at the pros and cons of upgrading. However, the upgrade process can be slow and painful and this is where doing the right testing with the right test data becomes absolutely essential.

## SAP S/4HANA Enables a New Level of Test Data Management (cont.)

As part of any upgrade process, a company must identify and rank all the functions of their application and determine their priority for testing. They may look at the number of transactions performed during a certain timeframe to determine which ones are used the most or have the greatest impact on the business. Once they have a priority list, they can begin to test these aspects of the SAP system. Efficiently performing tests, results in a faster upgrade. Therefore, the use of Test Data Manager to quickly find, build and manage test data becomes a key component in the upgrade process.

To help customers address their challenges and transform how they locate and generate test data for SAP environments. The main capabilities of this solution include the following:

- Automate processes and improve testing cycles: Quickly locate and evaluate data within the SAP database for testing purposes.
- Subset and mask test data: Quickly subset and mask (obfuscate) SAP data for any variety of testing needs.
- Clone test data: Retain core characteristics of the data, and maintain cross-application integrity when copying test data.
- Generate synthetic data: Create test data from scratch that matches the characteristics of your original SAP data.
- Generate negative test scenarios: Generate outliers that can stress test your applications beyond using good test data.
- Test Data Manager ships with SAP Business Module templates to support data model discovery filters allowing Test Data Engineers to focus discovery of SAP.
- Test Data Manager ships content for SAP Applications that streamlines PII discovery within the SAP HANA database to more precisely identify PII data and automatically prescribe masking rules minimizing the time.
- Find and reserve data: Locate and reserve a list of pre-fetched SAP test data through the TDM portal.
- Deliver test data through a self-service portal: Testers can view and access the test data they need. Test data engineers can configure what test data the testers will see and use.

Figure 1: TDM and SAP integration employs the SQL client/application layer, and the JDBC and ODBC APIs for communication.

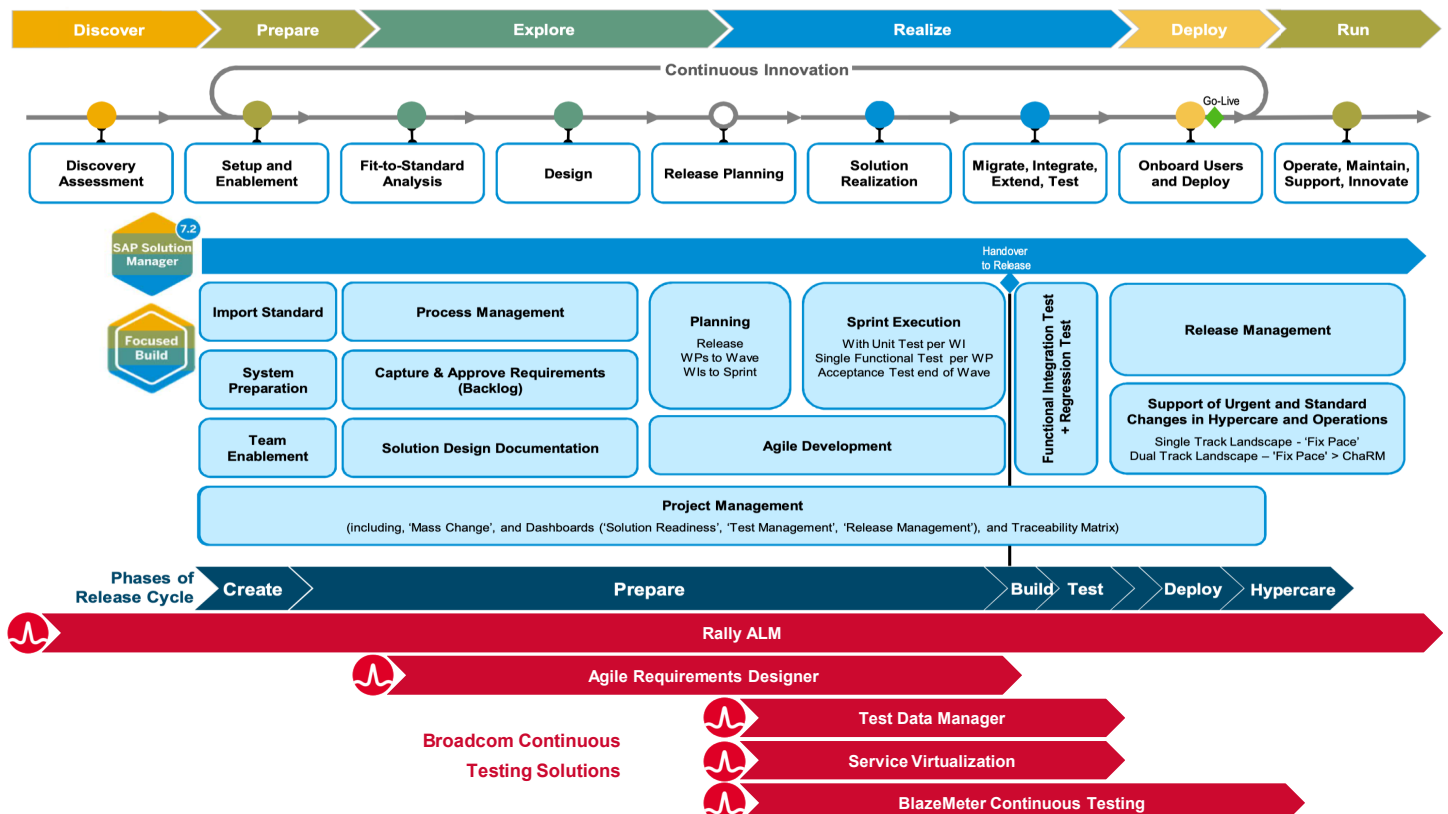


Figure 2: Continuous Testing Platform for SAP S/4HANA

