

DataStage Upgrade from v11.5 to v11.7 for Department Store Chain

ORGANIZATION

XTIVIA's client is a department store chain with nearly 300 locations in 16 states offering apparel, shoes, accessories, cosmetics, home furnishings, and wedding registry.

CHALLENGE

As part of DataStage v11.5 EOS (End of Support), IBM would stop providing any support for DataStage 11.5 without buying extended support and IBM would stop any new development (patches, upgrades, etc.). DataStage v11.7 has many enhancements compared to v11.5. Our client wanted to eliminate the risks from DataStage v11.5 end of support and leverage the new features of v11.7 including easier implementation of High Availability. In addition to this, v11.5 which was on AIX would be migrated over to v11.7 on Red Hat Linux.

The scope of migration included 550+ DataStage master sequences involving 3,000+ DataStage jobs and 118+ AIX shell scripts for migrating to Red Hat Linux. Our client engaged XTIVIA to plan and execute this migration since they did not have the resources for this.

TECHNICAL SOLUTION

XTIVIA collaborated with the client to understand the magnitude of the migration including the dependencies and created a plan to migrate the DataStage jobs and AIX shell scripts in two-week sprints. Listed below is the approach followed by XTIVIA for a successful migration

- Exported the DataStage jobs from v11.5 PROD and imported them into v11.7 Dev
- Compiled the jobs in v11.7 Dev
- Dry ran the jobs in v11.7 just to ensure the jobs run without any errors or warnings.
- Jobs with a successful dry run in v11.7 Dev were uploaded to Bitbucket and migrated to the v11.7 QA environment with a unit test document.
- Jobs in the v11.7 QA environment were run with production-like data from AutoSys. v11.5 jobs were also run with the same data inputs. The outputs were compared to ensure the v11.5 and v11.7 jobs produce the same output.
- v11.7 jobs that successfully ran in the QA environment were migrated to the v11.7 Stage environment.
- DataStage jobs in the v11.7 Stage environment were also executed with production-like data from AutoSys.
- During the above process, any issues related to data, connectivity, infrastructure, etc. were logged and XTIVIA coordinated with the client's infrastructure and data SMEs to resolve the issues. The failed jobs were retested after the root cause was fixed.

- The successfully executed jobs from the v11.7 Stage were deployed in v11.7 Production.
- A similar process was followed for migrating Shell Scripts from AIX to Red Hat Linux.
- Created the Datastage v11.7 Autosys JILs and boxes to simulate the Datastage v11.5 to capture the execution results.
- Installed the Infosphere Information Server v11.7 on the Linux server, configured database connectivity, and coordinated with infrastructure teams to have all the requirements complete for DataStage ETL jobs to run
- Created required directories and links on the v11.7 Linux server to match the v11.5 AIX server to prepare for DataStage ETL jobs and Shell scripts execution
- Provided detailed test results documentation to the client along with the evidence of data validation, and execution status.

BUSINESS RESULT

Our client realized the following benefits from the above migration effort.

- Avoid risks associated with DataStage v11.5 End of Support
- Seamless migration from DataStage v11.5 to v11.7
- Availability of new and enhanced features in higher version (v11.7)
- The client was able to engage their internal resources in more strategic development efforts

KEYWORDS

DataStage Upgrade, DataStage Jobs Migration, AIX to Linux Migration

SOFTWARE

DataStage v11.7, v11.5, AutoSys, AIX, Red Hat Linux, Bitbucket, DB2, Oracle

HARDWARE/PLATFORM

Linux

ABOUT XTIVIA

XTIVIA is a proven technology integration and innovation company known for delivering leading-edge technology solutions to our clients' specific requirements, regardless of project complexity. We bring next-level business operations to reality through Application Development, Business Intelligence, Data Warehousing, Database Support & Management, Enterprise Information Management, Digital Experience Solutions, and Enterprise Resource Planning. Our success stems from a demonstrated ability to deliver deep expertise via professional services, empowering clients to leverage their chosen technology successfully, competitively and profitably. XTIVIA has offices in Colorado, New York, New Jersey, Missouri, Texas, Virginia, and India. www.xtivia.com