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Automated workload transformation from Autosys to Amazon Managed Workflows for Apache Airflow (MWAA)

Are you looking to transition from Autosys to Amazon Managed Workflows for Apache Airflow (MWAA) to eliminate concerns about patching, scaling, or securing instances but are worried about business disruption?

Enterprises are transforming their AutoSys workloads to Amazon MWAA to reduce costs while optimizing performance.

LeapLogic, Impetus' automated cloud migration accelerator can help you achieve this by ensuring a smooth transition from Autosys to Amazon MWAA, allowing the data pipeline operations in the cloud at scale.

Here is a demo of how LeapLogic simplifies migrating Autosys orchestration jobs to Amazon MWAA from comprehensive assessment to automated transformation, validation, and operationalization.

LeapLogic first thoroughly assesses your existing Autosys inventory, providing valuable data-driven insights.

This includes a summary of the Autosys orchestration jobs, such as their type, associated files, start time, and more, helping you plan your workloads' migration journey more efficiently.

Once the assessment is complete, you can view the results. Under the Analysis tab, visit the Files section for a comprehensive summary of databases, dashboards, worksheets, etc., for each source file. Here, you can view the overall summary of the data sources, including different types of connections, databases, associated files, and more.

You can also download a detailed report from here for offline access. The detailed report provides information about jobs, job commands, dependencies, and more. The report summary provides information about all the generated artifacts. The report also includes different sheets, including:

- **Volumetric info:** Contains a summary of the aggregated inventory after analyzing source files.
- **Job details:** Provides detailed information regarding Autosys jobs, including job types, schedule information, dependencies, and so on.
- **Dependency:** You can view the dependency details of jobs in the source files, including child jobs, job types, conditions, etc.
- **Job commands script:** Here you'll get detailed information about the various job commands.

You can also download reports that provide actionable prescriptive insights from LeapLogic.

Next, the AutoSys to Amazon MWAA transformation pipeline automatically converts Autosys workloads end-to-end to Amazon MWAA.

Drag the orchestration stage to the board and click on it. Then, select the script type as Autosys and upload the orchestration scripts you want to transform. Lastly, select the target as Amazon MWAA, and save the orchestration stage and the pipeline. You can execute the pipeline from here.

The Orchestration stage transforms Autosys jobs to Amazon MWAA-equivalent jobs.

You can now have a look at the migration report.

All Autosys jobs along the business logic are successfully transformed to Amazon MWAA-equivalent scripts.

You can view the Amazon MWAA-equivalent output here. You can also download the converted artifacts containing the Amazon MWAA-equivalent code.

Now, let's log in to the AWS portal, initiate the Amazon-managed workflows for the Apache Airflow service, and import the converted Python code.

Click on Managed Apache Airflow to view the Amazon MWAA environment, including its name, status, created date, Airflow version, and other details. Simply click on a name, such as "SampleAirflow." You can also view all details associated with the Amazon MWAA environment, such as status, Airflow UI, ARN, and more.

The Amazon S3 bucket stores your Directed Acyclic Graphs (DAGs) and supporting files.

You must add the artifacts to the DAGs folder in your S3 storage bucket and run the converted artifacts in Amazon MWAA.

Once you have uploaded the artifacts, open the Airflow UI from the main Airflow environment section.

You can see that the DAG has been successfully created in the environment. Amazon MWAA syncs the latest artifacts from the Amazon S3 bucket, which will update the DAG automatically. You can also view the DAG summary, including details for operators, tasks, DAG IDs, description, file location, parsed time, etc.

You can also visualize the workflow of the converted artifacts. Each node represents a task, and edges indicate the dependencies between different tasks.

Under the code section, you can view the transformed code. Next, you can trigger the DAG. You can see that the AutoSys-equivalent code has been successfully transformed into the target Amazon MWAA environment.

LeapLogic's holistic approach further includes validating and operationalizing migrated work-loads on Amazon MWAA.

Explore LeapLogic's automation capabilities for the end-to-end transformation of data ware-house, ETL, Hadoop, analytics, and reporting systems to cloud-native stacks – faster, at a lower cost, and with minimal risk.

It's more than the next step. It's a leap into the future of your business.