migVisor by EPAM for Microsoft Azure

BACKGROUND INFORMATION

In 2019, EPAM acquired NAYA Technologies, a US- and Israel-based consultancy firm specializing in complex cloud migrations and data platform management services. With the addition of NAYA Tech, EPAM also acquired migVisor, an automated database migration assessment product for heterogeneous and lift-and-shift cloud migrations. As one of the only database migration assessment tools of its kind on the market, migVisor by EPAM enables a full range of cloud engagements and accelerates time-to-value from weeks or months to days for clients who are looking to move faster toward cloud-native solutions. Using migVisor, businesses can quickly and accurately plan cloud database migrations by analyzing source database configurations, attributes, schema objects and proprietary features that impact migration so they can better understand which databases would be easier or more difficult to migrate.

WHERE IS THE OPPORTUNITY?

With the increasing pressures of digital transformation, many organizations are migrating commercial engines, such as Oracle or Microsoft SQL Server, to open source, cloud-native solutions to achieve greater agility, security and scalability while simultaneously reducing technical debt and IT cost. By adopting cloud-native databases, clients can also increase overall performance, stability and high availability of their database architecture. Other drivers for database migration include:

- Reducing commercial database licensing
- Breaking vendor lock-in
- Adopting a cloud strategy and open source stack that leverages next generation database technologies
- Modernizing legacy applications
- Retiring legacy databases

HOW DOES MIGVISOR BY EPAM WORK?

SOURCE DATABASE DISCOVERY

Automate the profiling and detection of the exact features, specifications, artifacts, business logic and objects that exist in source databases and determine how they impact a client's migration complexity.

MIGRATION COMPLEXITY EVALUATION

Use dashboards and metrics that rank the databases based on migration complexity scores and assess the migration difficulty to multiple target technologies with the potential to re-host, re-platform or re-factor each database. Highlight the proprietary features that may cause vendor lock-in and increase database migration complexity, suggesting workarounds where applicable.

QUICK WINS

Identify the databases that have the highest migration potential and lowest migration complexity. These are ideal for 'first wave' migrations or proof of concepts.

MIGRATION METRICS

Scan the client's fleet of source databases, view in-depth metrics and visualize how to accelerate their existing application modernization processes through database re-factoring to cloud-native database technologies.

SCHEMA-LEVEL ANALYSIS

In addition to holistically analyzing databases, migVisor provides support for schema-level insights, displaying the migration complexity on a per-schema level. This is useful for 'splitting' large monolithic source databases into smaller target databases as part of a phased migration initiative.

APPLICATION INSIGHTS

Detect and display the applications that rely on each source database. These are applications that will likely need to be migrated with the database itself.

WORKLOAD & SIZING ANALYSIS

Provide information regarding the workload and sizing characteristics of the database, such as the number of CPU cores used, memory, storage, detecting OLTP versus analytics queries and overall query complexity. This information is important for target instance sizing and estimating the effort needed for performance tuning.

BENEFITS OF USING MIGVISOR BY EPAM

OBJECTIVELY ANALYZE THE RIGHT DATABASE MIGRATION

By using migVisor, clients can receive an independent view and assessment of the source and target databases, ensuring an objective analysis to help businesses make the right database migration decisions.

MAKE COMPLEX TECHNOLOGY INSIGHTS ACCESSIBLE & EASY TO UNDERSTAND

migVisor allows even non-database experts to fully understand their 'migration journey' and why some databases would be more complicated to migrate than others.

INCREASE TIME TO MEASURABLE BUSINESS IMPACT & DECREASE COSTS

migVisor reduces the amount of time needed to get a client's database migration project started and obtain measurable ROI by identifying the ideal migration paths for adopting cloud database technologies.

ACCELERATE THE PATH TO CLOUD-NATIVE DATABASE TECHNOLOGIES

Traditionally, companies spend months on inventory, discovery, assessment, mapping and planning for large-scale database migration projects. Using migVisor, most of the database migration discovery and assessment process can be completed in a matter of days, leaving more time for the successful execution of the migration itself while also dramatically increasing client's migration rates.

REDUCE COMMERCIAL DATABASE LICENSE COSTS

migVisor accelerates the path to cloud-native database technologies, allowing clients to break free from expensive commercial database licenses and reduce their overall IT spend.

ADDITIONAL ADD-ON SERVICES PROVIDED BY EPAM

With our innovative strategy, consulting and engineering capabilities combined with migVisor, EPAM's end-to-end expertise enables our clients to seamlessly transition to the cloud, optimizing their enterprise platforms to achieve greater flexibility, scalability and agility. As cloud experts, we provide the following add-on services:

DETAILED DATABASE MIGRATION ASSESSMENT & MIGRATION SERVICES

Depending on the clients' database complexity and business needs, we can delve deeper into high-level assessment conducted by migVisor to provide a detailed migration timeline and identify the required resources for each database. Additionally, EPAM can migrate existing source databases to IaaS, PaaS and cloud-native database technologies through re-hosting, re-factoring or re-platforming.

APPLICATION MODERNIZATION ASSESSMENT & OPTIMIZATION SERVICES

EPAM can go beyond the initial migVisor assessment to analyze applications for modernization and cloud migration. From there, we work with our clients to modernize their applications to the cloud and re-factor any existing legacy databases to open source, cloud-native technologies, while creating a modern, scalable and secure application architecture.