# Migrating GE Digital's APM to the cloud: A services blueprint



GE Digital will provide expert-level services at every step to achieve a successful and effective migration within the shortest timeframe possible. Our professional services team is global and can support customers across the time zones.

We start with a cloud migration assessment done during in the design phase to evaluate existing complex customizations in APM. GE Digital's services team provides guidance in mapping these customizations into product workflows.

### Ease of migration

GE has helped several customers migrate and can evaluate your specific situation to develop a plan. For example, we have data loader export/import tools, can actively participate in data migration to the cloud, upgrade data to new database versions in the cloud, work with customer APM configurations, including business rules, and migrate to new versions in the cloud. With translation and migration scripts, GE Digital can make migrating to the cloud more efficient, less costly and less risky.

# Migration phases and steps:

### Design Phase:

- 1. Study as-is state of application, database, and configuration / customizations.
- 2. Conduct a workshop with user group to demonstrate features in GE Digital APM in Cloud, compare use cases to perform fit gap analysis and build Design Specification / requirement document.
- 3. Listing of all existing Rules and Macros, comparing them with baseline features in APM. Wherever mandatory GE Digital team will help to provide solution using Policies and Field Behavior configurations.
- 4. Finalize workflow design and demonstrate proof of concept wherever necessary and sign off Design Specification for implementation.

#### Implementation Phase:

- 1. Prepare Database for Cloud Migration which includes cleansing, merging and separation and harmonizing of existing data.
- 2. Set up APM Tenant in Cloud, customer database, users' profiles, Deploy policies and field value behavior configurations.
- 3. IT & OT Data Connectivity: Set up for time series data ingestion, deploy suitable adapters to extract data from PI or other systems using PI Web API / PI SDK / OPC UA/DA/HDA etc.
- 4. Update Advanced Business Application Program add-on to match latest APM release and update Talend Interface jobs on APM Connect Server.
- 5. Conduct Factory Acceptance (FAT) and User Acceptance Testing (UAT) along with customer representatives as per agreed Test Process Plan during the Project Planning phase prior to GO Live cutover.

#### High-level architecture **BEFORE** Customer's IT landscape **GE Digital APM Solution EAM System** SAP, Maximo or **GE Digital APM Connect Server** Third Party **GE Digital APM Application Server OT System** OSI PI. GE Historian GE Digital APM Database Server and others **AFTER** Customer's IT landscape **GE Digital Predix EAM System GE Digital Edge Solution** SAP, Maximo or GE Digital APM Connect APM Application **Cloud Client** Third Party **APM Database OT System** Server **GE Digital Predix Edge** OSI PI, GE Historian VM w/ Edge OS and Timeseries and others Adapters Database **Public Internet on HTTPS**

# Go-live, training and support:

- 1. Perform catch-up data load if needed and go live.
- 2. Conduct training session with user group and application maintenance teams for handover the system.
- 3. Support to resolve any issue for 30 days.







# Duration for a Migration Project:

Duration of the migration project depends on various factors including size and complexity of the enterprise. Many customers will have a very easy path to migration, and for larger, more complex enterprises, GE Digital will work in close collaboration with your time to make it as smooth and quick as possible.

### Single maintenance plants

site and single EAM system with **simple or no customization:** ~ 3 months site and single EAM system with **moderate customization:** ~ 4 Months site and single EAM system with **complex customization:** ~ 5 Months

### Multiple maintenance plants

site and single/multiple EAM system with **moderate customizations:** ~ 6-9 Months site and single/multiple EAM system with **complex customizations:** ~ 9-12 Months

### **Hardware and Software requirements:**

- For an existing customer using APM Connect and PDI servers on prem, GE Digital will repurpose same hardware for use as Edge machines in new environment
- Any specific requirements noted in the workshop will be determined in design phase
- GED will provide all technical documents and procedure to be followed by customer IT team to achieve satisfactory connectivity to GE Digital Unified APM.

## Project team

A successful migration requires close collaboration between GE Digital services experts and your team members. The project team usually includes:



#### **Customer Team**

- Project manager/ owner
- User group representatives
- IT team/ application managers
- EAM administrators
- Network and security team members



#### **GE Digital Team**

- Project manager
- Functional consultant
- Technical consultants
- Integration consultant
- Dev/ Ops
- QA team members



Gain speed and flexibility, reduce costs and strengthen security

Learn more about migrating to GE Digital APM in cloud

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