

Enertia Software A Collaborative Approach to Fortifying Esri

he Environmental Systems Research Institute (Esri) is on the brink of a revolution with emerging new technologies integrated with the cloud having a significant impact on the Geographic Information Systems (GIS) capabilities. As a mainstream for the consumer market, GIS today is a tierone business system for the oil and gas industry where a location is at the heart of operations. Oil and gas companies have begun to embrace geospatial data in order to deploy their entire GIS business systems on the cloud. However, this deployment is limited by technical barriers created by the non-flexible legacy desktop- and webbased management applications that numerous enterprises continue to rely on. On par with the growing demand for robust enterprise management applications, Nic Burtea, a visionary with in-depth knowledge of mechanical and software engineering, embarked on a journey with Enertia Software to bring cloud-based Esri applications.

Upon joining Enertia Software in 2000 as a software developer, Burtea contributed to the design, development, and implementation of an enterprise management application for oil and gas producers. Backed by five years of project management experience, Burtea guides the growth and development of cloud-based Esri applications at Enertia Software today.

In an interview with CIO Applications, Burtea, the CTO of Enertia Software, shares his insights on the company's value proposition, and the enterprise-grade Esri solution it brings to the table.



How has Enertia Software positioned itself in the Esri solution space?

Enertia Software—fortified by right technology and rich experience captures, organizes and processes large amounts of critical data pertaining to production, financial information, ownership of wells, and lease and contract information obligation payments. We analyze, visualize and present this data to our end users as an Esri suite of GIS products that excel at data mapping visualization and analysis. Enertia Software values its collaboration with Esri offerings to amplify the ease of use for its end users. We have recently engineered an Enertia Toolbox that can be used to link our land application to the geospatial data in an Esri geodatabase. Enertia's new LandMan web application is designed for easy online access to land data with intuitive functionality, map-driven navigation, an obligation workflow interface, and reporting capabilities.

What are the challenges brewing in today's Esri solution space, and how does Enertia Software address them?

Enertia Software's cloud-based serviceoriented architecture mitigates the challenge of migrating from legacy products like ArcMap to ArcGIS Pro and ArcGIS online. The LandMan application runs via web technology and utilizes cloud-based services for spatial data access and computations via our Enertia quartering tool. Our experience with Esri products can assist with implementations given our extensive background with land and mapping pertaining to the energy industry.

Kindly elaborate on the features and benefits of your Esri solution.

We are at the forefront of developing fully integrated enterprise solutions for the upstream oil and gas industry. Our core strength lies in financial and production data analysis. We also capture land information specific to lease and contracts, and well ownership. This is where integration with Esri becomes significant to us. We integrate our clients' visualization tools with our applications and present that data to our end users.

Our LandMan application integrates all aspects of a land system with a mapping interface hosted on Esri technology. This approach provides our customers with easy access to pertinent information in an intuitive way.

We will add new features on the Enertia Toolbox that make it easy to convert spatial data between our latest LandMan and LandBroker applications, and the Esri data storage formats. This will allow our customers utilizing Esri to easily migrate data between the two platforms.

Instead of developing our own visualization tools, we utilize ArcGIS Online Basemaps for integrating with the clients' apps through the ArcGIS API for JavaScript. Our Enertia LandMan and LandBroker applications offer clients access to a map with relevant information and KPIs for quick data visualization and analysis via raw data, charts or graphs. This enables our land users to connect with a map, understand, and visualize right away.

What are the distinctive features that give Enertia Software a competitive edge?

We are in line with Esri's move to transfer desktop offerings to ArcGIS Pro by ensuring our newest tools run on both ArcMap and ArcGIS Pro. Furthermore, the Enertia Software database consolidates valuable information such as land, production, revenue, and accounting data that is immensely useful for mapping visualization.

Enertia Software takes pride in its flexibility to meet the clients' needs without forcing a 'one size fits all' approach. We have the tools to seamlessly link Enertia data and present it in our clients' Esri products while providing a mapping visualization in the Enertia application.





One of our clients, Sinclair Oil, recently deployed our Enertia Toolbox, which significantly improved their ability to extract and visualize land and spatial data inside Esri Enterprise. We have also received great feedback from OlaniyiOyebode at Endeavor who has been impressed with the Enertia Toolbox's ability to link spatial data with critical attribute information in our Enertia database. This on-premise solution brought a whole new level of information into the Esri maps.

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What does the future hold for your organization?

In addition to strengthening our core application with emphasis on managing wells, financial and production data, we are continuously expanding our integration capabilities with thirdparty applications. Despite countless other apps necessary to efficiently run oil and gas businesses, we aim to smoothly integrate with their enterprise ecosystems.

We aim to leverage cloud-based, AI-powered analysis tools and further enhance our data analysis capabilities. We look forward to developing solutions around Power BI and Azure ML. **CA**