

UNLIMITED DATA. INSTANT INSIGHTS. ON-DEMAND ANALYSIS.

## TECTONIX TECHNOLOGY AND DEPLOYMENT OVERVIEW

### **Put Your Data to Work**

In the geospatial field, ROI is all about making smarter, more informed decisions — and the faster you can make them the better. To ensure your organization can harness the power of our unparalleled analytics toolset to accomplish your mission, we offer a variety of deployment, pricing and integration options.

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What We Do

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Deployment Option 1: On-Premise (Fully Bare Metal)

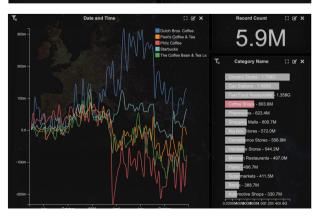
Deployment Option 2: On-Premise (Hybrid S3-Compliant Store)

Deployment Option 3: C2S Cloud (Fully Cloud-Based)

Recommendations + Next Steps











# What We Do

Built specifically for performance at scale, Tectonix allows for point-and-click insights across global geospatial data sets ranging upwards 150+ Billion records.

Tectonix separates data and compute functions, thus dramatically increasing flexibility and scalability for a truly unique, on-demand analysis experience.



#### Track Trends

Understand patterns and spot complex anomalies in seconds



#### **Discover Deep Insights**

Build custom cohorts and explore interactively with exclusive tools



#### **Optimize ROI**

Drastically reduce wasted spend on hardware, software & man hours





# **Tectonix Overview**

The Tectonix architecture is composed of three primary tiers: A lightweight graphical UI, "Vision", a collection of stateless functional interfaces (APIs), and the back-end persistence layer and query engine. The power and scalability of the system lies with the Engine, which can be deployed in a massively parallelized compute cluster to handle extremely large data sets.

#### **Trend Analysis at Scale**

Start with the whole corpus & slice down to find critical insights in seconds.

#### **Limitless Cohort Tracking**

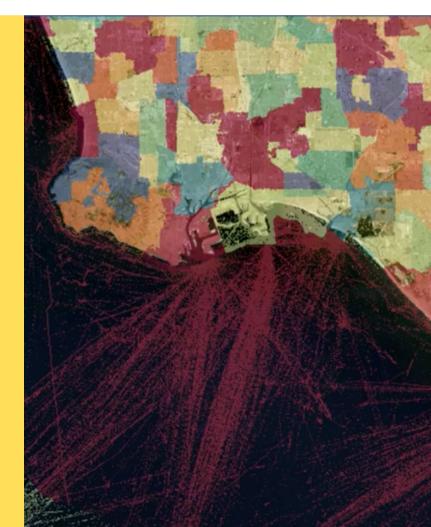
Select any criteria set and see cohort footprints in NRT — even worldwide.

#### Launch Data On Demand

Go from rest to fully interactive in minutes, no matter the cluster size.

#### Layered Analysis Made Simple

Discover complex correlations with simple, multi-layered dashboards





# **The Tectonix Engine**

The Tectonix engine functions as a data warehouse built to seamlessly ingest, organize, and securely store massive data sets and provide users with on-demand access no matter the complexity of the query.

#### **Extreme Performance**

Leverage every ounce of compute power to render data with incredible efficiency.

#### **Data Agnostic Architecture**

Ingest any location data, filter by any attribute and integrate with your existing tech stack.

#### **Open Standards**

WMS-based API enables consumption by most modern mapping clients.

#### **Rapid Data Ingest**

Parallelized ingest across multiple servers at millions of records per second.

#### **Time Trend Capacity**

Low-latency response times are highly suited to visualizing animated patterns over time.

#### World-Class Data Security

High-performance, multiattribute row level security trusted by top DoD organizations



### Deployment Option 1: On-Prem (Fully Bare Metal)

Using this option, the Tectonix software and ingested data would reside 100% on-premise via dedicated, bare-metal hardware. Tectonix engineers would support setup, data integration, and data management. Hardware procurement and maintenance, however, are not supported by Tectonix.

#### Benefits

- 24/7 uptime with instant end-user analysis
- Customer DevOps team has complete control over the hardware and can administer and monitor it as it sees fit

#### Considerations

- Costly hardware purchase, setup, maintenance
- Lengthy setup/time to value
- Fixed capacity; may require additional resources for future scale demands

#### Cost Breakdown

- Software License (Select Plan)\*
- Engineering Support: (As needed)\*
- Purchase + Maintenance of Necessary CPU Cores\*\*
- Additional Hardware (NVME Drives, Load Balancers, etc.)\*\*

\*Tectonix Cost \*\*Additional Projected Costs Incurred



### Deployment Option 2: On-Prem (Hybrid S3-Compliant)

The Hybrid option separates the data storage from the compute cluster; still utilizing a dedicated on-premise/bare-metal cluster to handle and process queries, however underlying data is stored in an S3-compliant object store — either a separate on-premise cluster or a GovCloud/C2S cluster.

#### Benefits

- 24/7 uptime with instant end-user analysis
- Increased scalability as data needs grow
- Simplified maintenance and support needs

#### Considerations

- Costly hardware purchase, setup, maintenance
- Lengthy setup/time to value
- Capacity limitations when compared to full cloud setup
- Small additional cloud costs

#### Cost Breakdown

- Software License (Select Plan)\*
- Engineering Support: (As needed)\*
- Cloud Storage Cost (Dependent upon usage)\*\*
- Purchase + Maintenance of Necessary CPU Cores\*\*
- Additional Hardware (NVME Drives, Load Balancers, etc.)\*\*

\*Tectonix Cost \*\*Additional Projected Costs Incurred



### Deployment Option 3: C2S Cloud (Recommended)

In this option, both the storage and compute components would fully utilize the GovCloud Commercial Cloud Service (C2S). This option would require no additional hardware and could be implemented immediately by the Tectonix engineering team.

#### Benefits

- No additional hardware costs
- Immediate implementation and deployment
- Unlimited scalability
- 100% On-Demand (any size cluster fully interactive in ~5 minutes)

#### Minimal maintenance required

#### Cost Breakdown

- Software License (Select Plan)\*
- Engineering Support: (As needed)\*
- Cloud Storage Cost (Dependent upon usage)\*\*

\*Tectonix Cost \*\*Additional Projected Costs Incurred

#### Considerations

- C2S Storage costs are incurred
- Security or integration policies may pose challenges, however all Tectonix FTEs are fully cleared

### Recommendations

While we firmly believe that a fully cloud-based deployment is the most cost-effective, flexible and scalable option, our team has years of experience working in the Intelligence Community — that is why we have modeled Tectonix to be deployed in any manner that fits your unique needs and supports Mission.

### What's Next?

#### Select a Deployment Strategy

Determine which setup option is most ideal for your organization and what resources need to be procured. The Tectonix team can act as expert consultants throughout this process.

#### **Finalize Terms and Necessities**

Work with our team to determine data scale needs, pricing breakdowns/projections, timelines and any final contract stipulations.

#### Let Us Get to Work

Our engineers will immediately begin working with your team to ingest data, connect APIs, train your staff, consult in dashboard building, and even build out custom features, reports and analytics.

