



Trend Trakker - Enterprise Deployment

1.0 Trend Trakker (TT) Capabilities

TT is currently a desktop open source intelligence (OSINT) data trending and news visualization production and authoring tool, whose configured information services are delivered via the web browser on the web, or via desktop display components. The integration, configuration and deployment of the TT platform for clients is priced according to the effort needed to meet developed client requirements.

For each client vertical data services case, an automated user-tunable collection of web scanning agents and data presentation user interfaces are readily configured and spawned (commissioned) to deliver current vertical news and trend analytics of interest.

The system is currently keyword based, and can be directed to collect highly specialized and peripheral topics of any focus from a current and growing set of new data set sources. Associated trend tracking tools can generate continually updated highly nuanced comparative market-voice and technical-voice trending. Multiple trend data sets from many sources can be compositely mapped with normalized trend line dynamics across political, economic, market, scientific and engineering spectra selected by the user.

Solutions are provided as a reconfigurable pipeline web SOA components, delivered as fully integrated service (SaaS – software as a service) for automated and manual OSINT search, Geospatial display, Trending, and Niche Indexing. (For more detail, continue).

The IGF Trend Trakker system uses the Navagent Trenddex technology, which is a BETA release system cooperatively developed by Navagent Inc. for Energy Voyager and the Institute for Global Futures.

The system is a fairly robust, extensible, and multiple commercial client fielded tested system for supplying geospatial news and news and financial trending. Trend Trakker targets and the Trenddex development platform are not yet ruggedized or hardened for mission critical applications, which would require a system re-coding for the desired applications environment. This could be accomplished in under 6 months for full deployment, based on the current scope of capabilities, features, and benefits of the system.

1.1 Front end Web 2D UI targets

TT is currently supplied off-the-shelf with a proprietary javascript based web deployment target. Java applet based, Google Maps, Google Earth, and Nasa Worldwind based targets are under development.

1.2 Front end Desktop UI targets

TT geonews is currently deployed as a 3D display UI for PCs, as a C++, and using OGL native PC graphics.

1.3 Desktop Trending Producer UI

TT with geo news and trending is currently authored using the Trenddex desktop C++ Producer platform. The Trenddex authoring environment enables dedicated professional, but non-programmer users to:

- establish search criteria
- script new OSINT recognizers for trending data sourcing
- launch spiders
- script recognizers to collect open source data
- call on private databases to import data sets
- execute article analysis to geo-locate
- manage multiple watchdog operations that collect web data
- categorize results into desired groups, issue multiple vertical news geo mapping channels
- produce composite trend graphs
- develop niche composite trends
- design weighted niche trend indices
- execute visualization prep
- set up search scheduling
- designate UI targets
- livewire testing and diagnostics
- production throughput pipeline monitoring

As most of our enterprise client's wish to receive turn-key configured systems, we are available at our standard nominal labor rates to rapidly script, test, and deploy turn-key system solutions. Otherwise, licensed Trenddex desktop trend and news publishing system client key users can be trained by our trainers.

1.4 Back end server needs

TT can be completely deployed as an outsource SaaS (software as a service) web application service, requiring *near zero interaction* with the client IT group, except for setting up secure access, and or importing enterprise local or internal data. If the client has a substantial number of private data sets and sources already in hand, we work with the data managers and IT group to rapidly script adaptors to import private data sets.

1.5 Future TT capabilities and features

TT, while fairly robust, flexible and crash-free, is being re-coded to provide it with more extensibility, specifically to support a wider variety of database formats, including reading excel documents, to upgrade the desktop authoring platform, and to deploy the authoring system entirely via the browser which then enables more collaborative intelligence production.

2.0 TT Standard Deployment Requirements

TT is deployed following a sequence of phone meetings and an optional in-person meeting. From these interactions a scope of work is discussed, desired staging is established, initial client launch requirements are identified, a functional straw man may be mocked up, business workflow and operational process interfaces are defined, data sources are compiled, and data pre-processing and analysis needs are detailed. The output of this process is a functional job specification for the initial stages of deployment. The primary two ways we deliver to requirements is as a SaaS web-based service outsource, or as a fully licensed development platform.

2.1 Requirements analysis

2.2 Functionality objectives

2.3 Business workflow process

2.4 Data sources collection design tasking

2.5 Data analysis design tasking

3.0 TT Configuration & Deployment

The TT functional job spec is scheduled for implementation and configuration, and required manpower resources are allocated.

3.1 Data chain and tool chain configuration processing

The TT authoring platform special interfaces, adaptors and recognizers for both new OSINT and private data set collection are coded and tested. Once all the required deployment pipeline components are fully integrated and tested, the non-programmer user enters search terms, associates icons to search terms, designates internal and external data sources to collect from, and finally sets up output to desired geo mapping and trending target output formats (2D, 3D, web, desktop, etc.). Once initially configured, the platform can be managed using a standard applications software scheduling tool. As developed trending and geo news projects or ‘channels’ are provisioned and commissioned by either IDF or the client...

3.2 Web and desktop outsource services model

3.21 Web 2D Map and Trend UI

3.22 Enterprise IT interfacing and secure access

3.3 Desktop authoring platform

3.31 Open source content source search scripting

3.32 Enterprise database content import scripting

3.33 Search manual drill down

3.34 Geospatial visualization set-up

The current TT is delivered ready to data mine news sources available through Yahoo news sources only for Geonews display targets. Most online open source news wire sources typically provide news for the last 30 to 60 day window. These sources to date include:

Associated press, Business Wire, Reuters, Agency French Press, International Herald Tribune, Business Wire, PR Newswire, and Primezone.

To add more news sources within Yahoo’s extensive aggregated news feed and news wire sources is fairly rapid turnaround. Adding sources outside of Yahoo’s news aggregation service, is to be determined for the client’s data feed situational requirements, including required client private data adapters and or other external source data feed adaptors, for indexing a changing population of website data feeds.

3.35 Trend visualization set-up

The current TT is delivered ready to data mine news sources for short or long term trending data sources available to date for the system include:

Google News, BBC News, NY Times, Looksmart, and BlogPulse, which various sources include date range searchable news article archives that can yield trend data for the last 10 to 50 years. To add more sources to this list from anywhere on the web for the most part is fully accommodated by the provided simple scripting language which permits configuration of acquiring additional open source news sources in less than a few hours of effort per source by a non-programmer or amateur programmer. The scripting system provides a straightforward uniform methodology to incorporate new trending data sources from the web into the Trenddex authoring system.

4.0 TT Ongoing Support Services

TT SaaS or In-House deployments both include ongoing remote maintenance

5.0 TT Business Engagement Process

If TT is being deployed under our SaaS model, all authoring platform work is done by us following initial and ongoing instruction, the visualization UI's are deployed via web or to the individual client user desktop.

If TT In-house is being deployed under our authoring system license some or all initial set up and configuration testing is done by us, and then transferred to client servers for private in-house usage and continuing content maintenance.

We are available to implement new recognizers and adaptors, scripting for new data set sources as desired by the client. We train the client's trainer who then trains in-house staff on the use of the TT resource.

5.1 Pricing - TT SaaS follows a 3 stage sequence:

- 5.11. Requirements analysis - \$10k to \$40k
- 5.12. Configuration and deployment - \$10k to \$30k
- 5.13. Support and Maintenance – Per seat per quarter subscriptions

5.2 Pricing - TT In-House follows a 3 stage sequence:

- 5.11. Requirements analysis - \$25k to \$55k
- 5.12. Configuration and deployment - \$25k to \$85k

5.13. Support and Maintenance – Company wide annual license cost – \$30,000/year

These rates do not include travel, lodging or special projects, or third party content data feed licensing costs.

5.3 Project Deployment Scheduling

TT SaaS can be initially deployed within 30 days.

TT In-House can be initially deployed within 90 days.

6.0 Trend and News Sources

The TT trending and geo news tools can generate continually updated highly nuanced comparative market-voice and technical-voice trending. Trend data may be mapped across political, economic, market, scientific and engineering spectra selected by the user. Examples of trend data sets we are currently collecting include:

6.1 News trends, blog trends, discussion trends, opinion trends (e.g. lithium-ion technology);

6.2 Business indicator trends (e.g., price trends in stocks, indices, funds, currencies, commodities);

6.3 Scientific development trends (e.g., patent and IP trends, expert domain knowledge trends, and engineering and scientific research trends);

6.4 Environmental data trends

7.0 TT Features List – Please see the *IGF Trend Trakker Brochure*

Trend Trakker Features

- Geo spatial real-time situational aggregated news and event alert displays. Visualization twweb and desktop clients, and targets include proprietary 2D web, open source Nasa Worldwind GIS desktop, and 2D web maps. Extensible to Google Maps and Google Earth.
- Short and long term trending data visualization, with default multi-trend dynamics normalization.
- Search keyword based news and trend data set search. Extensible capability for importing automated semantic categorization to generate optimal search engine keyword clouds.

- Customize trend data filtering per trend or per trend group using adjustable low-pass, high-pass, band-pass as applied to raw or averaged data over multiple data points, Q control. Control absolute and relative normalization of trend lines for optimal dynamics display
- Trend display setting control for selecting sample, jogging through collecting trend sample and launching browser window(s) to view linked data sources
- Production pipeline live wire target output and browser linked data test controls for validation and verification of system performance
- Customize graphics color, 3D slice data viewing, geospatial desktop monitoring, and time-slice sequencing and looping. Control loop rate, time, size, amplitude, color, exponential view, titling, descriptions, resource linking, map linking, number of stories initially viewed
- Provision and commission focused news map and trend “channels” as projects. Chain situation event tracking geo-spatial and time trending “channels” or projects, and aggregate results to produce integrated ‘back-end’ monitoring operations to produce visual data ‘front end’ data visualization
- Open source internet news data collection from news search engines, news wires, and news article aggregators
- Simple scripting language for adding internet news data sources
- Simple scripting language for building composite niche dynamically weighted indexes for stocks, events, outcomes
- Financial data sets indexed via Yahoo Finance – includes all global stocks, options, currency exchange rates, market indices, funds, etc
- News sources now indexed including Google News, Looksmart, Yahoo News, BBC News, NY Times, Associated Press, Reuters, Agency France Press, Intl. Herald Tribune, Business Wire, PR Newswire, Primezone Newswire
- Extensible to add any type of online accessible public and private real-time updating data set sources, such as for example environmental sensor monitoring, and other situational vital sign indicators
- Customize and configure map news icons and event icons
- Configure multiple background GIS maps as standard jpg, bmp, gif, tiff, targa images for 2D and 3D desktop visualization UI targets

- Extensible to configure and integrate automated search engine agents
- Extensible to integrate with Web 2.0 collaborative platforms, including RSS feeds, social tagging, blogs and wiki social knowledge environments
- Extensible capability for future predictive analytics applications integration



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