Omnis Insight

Big Data Analytics at the Speed of Thought for Faster Network Insights and Smarter Business Decisions

Omnis Insight is an add-on to Arbor Sightline that enables advanced analytics by applying big-data technologies to maximize the degree of correlation of traffic volume with various network and business data sources to bring even more meaning to traffic analysis. Insight also enables high fidelity historical and forensics analysis by retaining raw traffic flows for as long as storage allows providing a photographic memory of high-detail historical traffic patterns as well as facilitating DDoS and other security investigations.

Advanced Analysis Requires More Correlations

For service providers and other large network operators, the network is the business. And having comprehensive network visibility is essential to understanding the health of the network but also understanding the value of connectivity the network provides. This requires expansive volume measurement from across the network, but also requires correlations with network parameters and other factors that uniquely identify the nature of the traffic and the exact components of infrastructure involved. And while some amount of correlation is good, more is always better. This is where Insight can elevate traffic visibility and analysis to advanced traffic analytics.

How Big Data Makes a Big Difference in Analysis

Knowing that advanced traffic analytics builds on maximizing correlations, a new approach is needed that combines a variety of high-volume data sources and stores them for as long as possible with no compromises in terms of choosing what to save and what to discard. Not knowing what is needed ahead of time means storing all traffic data and making it available when running an analysis. The new big-data technologies that have come about in recent years take advantage of the increased ubiquity of hardware resources while also enabling multi-dimensional access over all stored data, meaning that any combination of any number of correlations can be retrieved and analyzed with a simple yet powerful data exploration interface. When bigdata can be applied to traffic analysis, the traditional limits fall away, and advanced traffic analytics can be achieved. This is the essence of the innovation behind Insight.

Insight Adds Multi-dimensional Analysis to Network Operations

Omnis Insight makes it easy to apply multi-dimensional analysis to many existing network visibility challenges. For instance, when conducting peering analysis, multi-dimensional analysis brings ASN Origin, peers, routers, interfaces, customers and more aspects together all at one time and makes it easy to see traffic move from the source to the destination and how it touches the intermediate steps. Similarly, multi-dimensional analysis helps peel-away the layers of ambiguity when trouble-shooting service degradation and quickly identify the cause by allowing each aspect to be added individually and seeing which reveals the anomaly all within one view.

Omnis Insight Assists with Smarter and Faster Network Visibility Decisions

Omnis Insight builds on the industry-leading Arbor Sightline network visibility platform. Insight's big-data capabilities add the power of multi-dimensional analysis with enriched raw flow data. Leverage Arbor Sightline's unique flow annotations and integrated UI enabling you to conduct agile, multi-dimensional searches of raw and enriched data with unlimited filtering. Insight provides the ability to maintain granularity over time, enabling detailed retrospective drill-downs and effortless pivots from graphical to tabular visualizations. Applied with new visual analytics tools, operators have the clarity to make smarter and faster decisions about their network. Omnis Insight elevates network visibility to advanced traffic analytics.
Arbor Sightline + Omnis Insight Comparison

Omnis Insight is designed to enhance the capabilities and workflows of Arbor Sightline. Together, they enable network operators to gain even more pervasive network visibility and conduct agile, multi-dimensional, visual analysis against a combination of binned and annotated raw flows.

<table>
<thead>
<tr>
<th>Reporting</th>
<th>Filtering</th>
<th>Accessing Data</th>
</tr>
</thead>
</table>
| Arbor Sightline | - Structured Workflow  
- Pre-Configured  
- 2-Filter Combinations | - Max=2  
- Report Format Dictates Combination  
- Structured Investigations | - Global visibility with AIF  
- MO-Dependent Binned  
- Fast Queries, Fast Detection |
| Omnis Insight | - Ad-Hoc, Interactive  
- Unlimited Filter Combinations | - Unlimited Filter View  
- Unlimited Time Range View  
- Allow Intuitive Combinations | - Determined by User’s Storage Needs  
- Detailed Queries  
- Raw Flows |

Omnis Insight Adds Advanced Traffic Analysis

Omnis Insight is an add-on to an Arbor Sightline deployment. All raw network flows, with annotations and metadata from Arbor Sightline are sent to customer supplied storage for real-time or historical, unstructured highly visual analysis.

KEY FEATURES & BENEFITS (CONTINUED)

Elevate Traffic Exploration

Store all raw network flows, with correlated annotations and metadata, for as long as your organization needs for real-time or historical, unstructured analysis. Discovering trends and anomalies in your network traffic becomes easy.

Traffic Calculations

Explore traffic though set time periods. See your traffic in periods pertaining to the last traffic logged, average of all traffic, maximum of all traffic and the 95th percentile of all traffic.

Requirements

- Arbor Sightline v9.3 with Flex Licensing
- Omnis Insight is an optional software extension to Arbor Sightline and requires an external database compute and storage infrastructure which is supplied by customer.
- The scale of the required compute/storage hardware environment is a function of:
  - Network flow rates
  - Desired historical flow storage
  - Desired query times and volumes
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>System</th>
<th>INS-8000 (Insight)</th>
<th>nBA appliances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rack Unit</td>
<td>2 Rack Units (2RU)</td>
<td>3 Rack Unit (3RU)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>3.43 in (87 mm) Height</td>
<td>5.2 in (132 mm) Height</td>
</tr>
<tr>
<td></td>
<td>17.58 in (447 mm) Width</td>
<td>17.2 in (437 mm) Width</td>
</tr>
<tr>
<td></td>
<td>28 in (711 mm) Depth</td>
<td>25.5 in (648 mm) Depth</td>
</tr>
<tr>
<td>Weight</td>
<td>Ingest: 40 lbs (18 kg)</td>
<td>82 lbs (37.19 kg)</td>
</tr>
<tr>
<td></td>
<td>Storage: 56 lbs (25 kg)</td>
<td></td>
</tr>
<tr>
<td>Input Power Requirements (AC)</td>
<td>V100-127V / 200-240V AC, 47-63 Hz</td>
<td>1000W: 100-127V, 15-12A, 50-60Hz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1200W: 200-240V, 8.5A-7A, 50-60Hz</td>
</tr>
<tr>
<td>Power Draw</td>
<td>Ingest: 400W (max.) / 375W (nom.)</td>
<td>100V, 9.8A, 1000W</td>
</tr>
<tr>
<td></td>
<td>Storage: 550W (max.) / 475W (nom.)</td>
<td></td>
</tr>
<tr>
<td>Heat Dissipation</td>
<td>Ingest: @ 375W, 1280 BTU/H</td>
<td>(DC) 3554 BTU/Hr</td>
</tr>
<tr>
<td></td>
<td>Storage: @ 475W, 1620 BTU/H</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>50° to 95°F (10° - 35°C)</td>
<td>50° to 85°F (10° to 30°C)</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>50% - 80% (non-condensing)</td>
<td>8% - 90% (non-condensing)</td>
</tr>
</tbody>
</table>

## WHAT YOU NEED TO KNOW

- Omnis Insight uses Big Data techniques to create a photographic memory of your network traffic activity – allowing deep and wide analytics.
- Arbor Sightline’s unique flow annotations and enrichment (Managed Objects) create context in Omnis Insight by matching this photographic memory to your network topology, customer and traffic patterns.
- Omnis Insight enhances network visibility and DDoS attack forensic uses cases – assuring service availability, reduced operational costs and exposure of new service opportunities.
- ATLAS Intelligence Feed® for Sightline is a new AIF subscription for Arbor Sightline and Omnis Insight. It improves the traffic analytics and visibility provided by Arbor Sightline and Sightline With Insight.