NoviAnalytics™

For Lanner HTCA-6600 MEC Platform

Existing data collection systems primarily focus on ingesting information about the network and host system availability. This gives you a limited view of the health of your systems. NoviAnalytics focuses on the whole platform, ingesting datapoints from the hardware layer up to the application layer giving you visualizations of the operational health of your whole system. When an anomaly is observed, access to the complete stack makes it easy to correlate information from different systems aiding in the troubleshooting. Visualizing data also makes it easy to spot long term trends, issues that may affect service. This enables action to be taken before a loss of service, or to reduce truck rolls through scheduled maintenance.

NOVIANALYTICS HIGHLIGHTS

1. MONITOR: Collect information from the network, Hardware Platform Manager and syslog to visualize health and status of platform
2. MONETIZE: Convert information streams into easily consumable visualizations that are actionable
3. CUSTOMIZE: Fully customizable environment – incorporate virtual appliance information for full stack data collection
4. DEPLOY NOW: Fully integrated into the Lanner HTCA 6600 MEC Platform.

"Green is Go" dashboard

NoviAnalytics ingests hundreds of data streams and millions of data points, but we make it easy to see through the data by visualizing the health of your platform. The dashboards are designed to take all of this information and present it to you with one simple concept "Green is Go!" taking the complexity and time out of understanding the operational health. Quickly scroll through the dashboard to get the aggregate health of all levels of the system.

Flexible pipeline by design

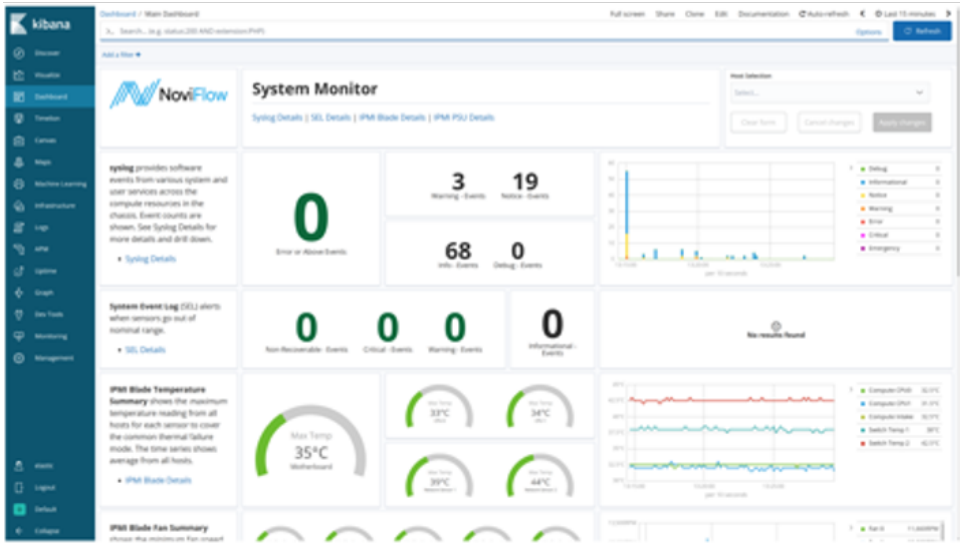
With a flexible data processing pipeline, ingesting new types of datapoints is easy, allowing NoviFlow to adapt NoviAnalytics to fit all of your data collection needs. This same data processing pipeline can be configured to output to multiple sources as well. This allows NoviFlow to integrate NoviAnalytics with other data collection systems in your network.

Escape the tyranny of Big Data

Most data collection systems are centralized and to deal with the load of devices reporting on the network, poll data with a low granularity. The result is that you may not catch events that require more frequent polling. With Visual Analytics, you keep a high granularity of information that is processed at the edge and only send summary reports or anomalies to the centralized network collector. This provides the best of both worlds, a hierarchical data collection with massive time series information at the edge and a centralized reported tool across the whole network.

Drilling down on log files visually

Data ingestion comes in all types of forms, even text-based log files. NoviAnalytics centralizes the repository for system log files and makes them fully searchable. By visualizing log files, we make it easy to find the actionable events in your platform by easy to read time series graphs which highlight the severity of the entry. This allows you to drill down on system events and correlated data across multiple servers. By visualizing log files, you no longer need to read through log files, you see the log files.



System	Device	Datapoint
Hardware	Power Supplies (each)	Voltage In
		Voltage Out
		Current In
		Current Out
		Power In
		Power Out
		Fan Speed
		Temperature
	Server/Switch Hardware	Main Voltage Rails
		Temperature
	Hardware Management	System Event Log
		Non-Recoverable Events
		Critical Events
		Warning Events
	Storage	Temperature
		Bad Sectors
		Pending Sectors
		Spin Retry Count
		Raw Read Error Rate
		Uncorrectable Sectors
		Reallocated Sectors
		Disk Power Cycles
		Powered on (hours)
		Seek Time Performance
		G Sensor Error Rate
		Disk Spin up Time
		Cyclic Redundancy Check
		Load Retry Count
		Power Off Retract Count
Server	Operating System	System Logs – Search / Filtering
		Uptime (hours)
Network	Operating System	CPU Utilization
		Memory Utilization
		Disk Utilization
		Disk iops
		System Logs
	Hardware	Total Throughput
		Rx Bytes per port
		Tx Bytes per port
		Aggregate Packet Errors
		Aggregate Frame Errors
		Aggregate Dropped Packets
	NoviMapper Controller	Log Files
		Load Balancing Distribution
		Round Trip Latency to/from appliance

Minimum Operating Requirements

- Cores – 4 x86 cores
- Memory – 4GB RAM
- Storage – 1TB of storage
- Network – 1Gbps connection to each server
- Operating Environment – Docker Container

Host OS Requirements

- Ubuntu
- Redhat Enterprise Linux
- CentOS

Data Collection Interfaces

- IPMI v1.5 & v2.0
- rSyslog
- gRPC
- SNMP
- REST

Data Collection Tools

- collectd
- rSyslog
- gRPC server/client
- S.M.A.R.T.

Database & Visualization Tools

- Logstash
- ElasticSearch
- Kibana

Qualified Platforms

- Lanner HTCA 6600

Customize NoviAnalytics for your application layer

Do you have a metric or log file that you'd like ingested into NoviAnalytics? NoviFlow can provide customization services to create the exact data analytics platform you need. We can also reach into the application layer inside virtual appliances and create custom dashboards to correlate information with other subsystems. Contact NoviFlow to discuss your requirements and bring your application information to life.

NOVIANALYTICS ORDERING INFO	
800-005-001	Visual Analytics Basic Perpetual RTU License for Lanner HTCA 6600
800-005-002	Visual Analytics Advanced Perpetual RTU License for Lanner HTCA 6600
800-005-003	Visual Analytics Ingestion RTU License (per GB/month)
850-005-001	Visual Analytics Basic Annual (SaaS) RTU License for Lanner HTCA 6600
850-005-002	Visual Analytics Advanced Annual (SaaS) RTU License for Lanner HTCA 6600

For more information, please visit www.noviflow.com™ or e-mail us at contact@noviflow.com

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