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## **TRANSFORMING OPEN ENROLLMENT TRAFFIC MANAGEMENT:** *How C-HIT Achieved a Two-Fold Increase in Volume and a 75% Drop in Noise*

*Open Enrollment is the busiest time of the year for Medicare, our national health insurance program. In past years, increased traffic strained the infrastructure and affected the customer experience. With C-HIT's cutting-edge implementation of Splunk and Portal Operational Intelligence (POI), traffic has doubled and volume-related performance events dropped by 75%.*



To meet the challenges of substantial increases in peak load, C-HIT began by looking at the needs of customers and users: How can system owners make good decisions in real time in multi-domain environment? How can C-HIT improve the user experience? Can C-HIT help stakeholders by delivering technology and information that is accessible and reliable when and where it matters most?

Our customers need real-time, actionable insights driven by machine learning-powered algorithms. Partnering with Splunk, C-HIT's Operational Center of Excellence (COE) is developing tailored solutions to satisfy customer and user needs, which include Key Performance Indicators (KPIs), concise visualizations, and transformative solutions.

### **FROM DATA TO ACTIONABLE INSIGHTS**

C-HIT focuses on turning data into actionable insights by integrating data sources for more informed business decisions. Teaming with Splunk, we reimagined data integration and visualization to provide a single pane of glass view of the health of over 60 integrated applications.

Using Human-Centered Design (HCD) principles, we organized data into clean, KPI-led visualizations with drill-down capability. The outcome: more signal, less noise, faster resolutions, and better collaboration.

### **THE CHALLENGES**

- Lack of full-horizon line of sight across multiple dependent environments
- 10 data centers; 53 applications across the distributed environment
- Critical performance and/or failure issue data is buried or unavailable; securing this data under failure scenarios is challenging, and analyzing data under either condition is difficult
- Since data streams are non-aligned and non-synchronized, analyses of causal relationships are challenging



## C-HIT SOLUTION

- Focuses on the big picture by incorporating machine-generated data from numerous sources into a single view. This enhances information sharing and collaboration across teams.
- Provides real-time monitoring and analysis through a web interface.
- Supports outage prevention using machine learning through operational patterns and trends.
- Uses Artificial Intelligence (AI) to enable predictive analytics, thereby anticipating and preventing outages 20-30 minutes in advance.
- Delivers quicker problem resolution and minimal time-consuming root cause analyses. Faster answers mean happier customers.
- Relies on system-specific KPIs: C-HIT selected the data streams that mattered most to a given team, partnering with the hosting and application teams to understand their thresholds and likely failure points.

## THE SINGLE PANE OF GLASS

POI delivers a single dashboard view of data from multiple sources in a unified display, allowing a rapid assessment of an application's health.

- C-HIT developed comprehensive data visualizations, known as Glass Tables
- The user-friendly design of the Glass Table dashboard allows for easier tracking of problems.
- Coloring scheme of portal components denotes the criticality of issues.
- UI is rendered by aggregating several hundred KPIs across several portal components spanning multiple servers and data centers.

## ENGAGE WITH US

For more information about C-HIT and our capabilities:

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## HOW IT WORKS

C-HIT leverages Splunk to integrate a range of sophisticated enterprise monitoring tools. To implement the CMS Portal, the following tools were deployed to create our enterprise Glass Table:

- Splunk Core
- Security Alerts – Akamai
- Data analytics – Chartbeat
- Application Performance Monitoring – New Relic
- Infrastructure and Synthetic Monitoring – New Relic
- End User Browser Experience
- Automated Performance Monitoring
- Network Monitoring – ExtraHop

Each tool provides distinct insights displayed on different screens and different time scales. While the answers are there, so are hundreds or thousands of other data streams. How does C-HIT separate the signal from the noise?

While focused monitoring tools are useful, these do not convey a uniform overall picture at a glance. Our initial implementation had 10 more screens to monitor a wide variety of feeds.

To unlock the value in these threads, our team partnered with Splunk to fuse a wide variety of data sources into the Splunk Core environment.



C-HIT builds software as a service platforms that use machine learning to harness data in real time to deliver actionable insight that provides value to our customers. Interested in learning how C-HIT can do the same for your business?

For more information about C-HIT's Splunk capabilities, please contact: [Splunk@c-hit.com](mailto:Splunk@c-hit.com).