How to Use Splunk to Automate Troubleshooting In A Call Center Environment

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Key Takeaways

1. How can you fix the problem?
2. What can your results look like?
3. What do you need to set this up?
Nightmare Support Experience
This is where the subtitle goes

| 12 Phone Calls | 36 Repeated Processes | 2 Escalations | 2 On-site Visits | 390 Wasted Minutes |
Who am I?
Travis McBee

- Husband and Father
- Engineering/Legal Background
- 10+ Years In IT Support
- 2 Years Splunk Experience
- Email: Travis.McBee@Cerner.com
What is Cerner?

- Headquarters: Kansas City, MO
- Founded: 1979
- Mission: Contribute to the systemic improvement of health care delivery and the health of communities.
- > 24,000 Associates Globally
- 2016 Revenue: $4.8 Billion
What is Consumer Care?

- 24/7 Inbound Call Center
- Approximately 25,000 Calls / Month
  - 2014: 12,000 Calls / Month
- Non-Technical Clientele
- ~33 Non-Technical Associates
- 3 Tier Support Structure
- Cloud Based Solutions
How Can You Utilize Non-technical Resources To Analyze Technical Logs?
We Have Data But Can Support Use It

Analytics vs. Support

► Big Data Benefits
► Data Sources
  • Log Files (Avg. 6.6 GB/Day)
  • Website Usage Information
  • Database Configurations
Transforming Data To User Knowledge

User Data
- Age, Location, Linked Users

System Data
- Operating System, Browser, Versions

Solution Data
- Usage Logs, Error Logs, Client Information

John Smith

Jane Doe

Bob Jones
Eliminate Technical Need
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1. Translate Log Files (Event Types)
Eliminate Technical Need

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2. Link To Work Instructions (Lookups)
Eliminate Technical Need

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3. Event Monitoring (Alerts)
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2. Link To Work Instructions (Lookups)
3. Event Monitoring (Alerts)
4. Run Automated Scripts

Eliminate Technical Need
Bringing It Together
Bringing Support Information Together

- Mapped to Unique Identifier
- Different Dashboards By Tier
- Transition Process
Bringing Client Information Together

- Integrated Knowledgebase
  - DB Connect
- Client Health Tracking
- Support
- Created/Owned Tools
Bringing Proactive Support To The Table

- Avoid Waiting For Phone Calls
- Easy Reporting
- Potential For Automated Alerts
Our Results
Improved confidence

80% reduction in triaged tickets

“The amount of knowledge we have about our users is amazing. I've never been able to provide this level of support before.”
Cerner associate

209 fewer callbacks per month about open issues

Reduced job complexity

18,602 errors/month reduced (proactive support)

30 second decrease in time pre-call prep

“Our Consumer Care team is using Splunk to take the patient portal to the next level.”
Cerner associate

Better cross-team collaboration

1.5% increase in first contact resolution

Greater understanding of the system
HealtheLife Triages

- Hours Saved: 1,080 / Month
- Money Saved: $34,950 / Month
Eliminating Questions
And Customer Frustration

Before Splunk

- Verify Identity
  - Can I get your first and last name?
  - Can I get your date of birth?
  - Can I get your email address?

- Things In The Data
  - How can I help you?
  - What does the error message say?
  - What type of device are you on?
  - What we browser are you using?
  - …..

After Splunk

- Verify Identity
  - Can I get your first and last name?
  - Can I get your date of birth?
  - Can I get your email address?
Setting It Up In Your Organization
What Do Your Logs Need To Look Like?

Cloud Based Web Applications

- Unique Identifier
  - Request ID
  - Session ID
  - User ID

- System Demographics
  - OS
  - Browser
  - Language

- Tracing Information
  - Clicks
  - Errors
  - Timers

- Historical Information
  - Dates
  - Time

- User Demographics
  - Age
  - Location
Strategy, Design, & Implementation

- Stakeholders
- Tooling
- Communication
- Time Commitment
- Processes
Questions?
Travis McBee

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Thank You

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