splunk> .conf2017

Data Your Way – Unlocking The IBM Z Black Box

Dan Wiegand | Senior Offering Manager, IBM

September 2017 | Washington, DC

Forward-Looking Statements

During the course of this presentation, we may make forward-looking statements regarding future events or the expected performance of the company. We caution you that such statements reflect our current expectations and estimates based on factors currently known to us and that actual events or results could differ materially. For important factors that may cause actual results to differ from those contained in our forward-looking statements, please review our filings with the SEC.

The forward-looking statements made in this presentation are being made as of the time and date of its live presentation. If reviewed after its live presentation, this presentation may not contain current or accurate information. We do not assume any obligation to update any forward looking statements we may make. In addition, any information about our roadmap outlines our general product direction and is subject to change at any time without notice. It is for informational purposes only and shall not be incorporated into any contract or other commitment. Splunk undertakes no obligation either to develop the features or functionality described or to include any such feature or functionality in a future release.

splunk> .conf2017

Digital Transformation: The Perfect Storm Of Computing

COGNITIVE DEVOPS + HYBRID CLOUD + APP MODERNIZATION + COGNITIVE OPERATIONS ANALYTICS

The Mainframe's Vital Role In The Digital Economy

Mainframes process
30 billion business transactions per day

Mainframes enable
$6 trillion in card payments annually

80 percent of the world's corporate data resides or originates on mainframes

91 percent of CIOs said new customer-facing apps are accessing the mainframe

splunk> .conf2017

z Systems Software Strategy For Digital Economy

- Driving ***DevOps approach*** to application development, delivery and management
- Leveraging ***APIs as common language*** in a hybrid world
- ***Modernizing applications*** with Java
- Managing complex hybrid environments with "***Cognitive Systems Management***"

IT Operations Analytics Leads To Operational Excellence

1. **Cost**: Unlock your investments
   - ***Improve efficiency and reduce costs***

     IT Operations Analytics can help you reduce your operational expense and run your Z data center more efficiently
2. **Risk**: Reduce blind spots
   - ***Proactively avoid outages and reduce blind spots***

     Proactively identify issues before they happen and significantly improve mean time to resolution
3. **Agility:** Faster for experts, easier for beginners
   - ***Faster and easier time to market***

     Solve problems faster using the tooling or your choice to aid experienced operators a new starters

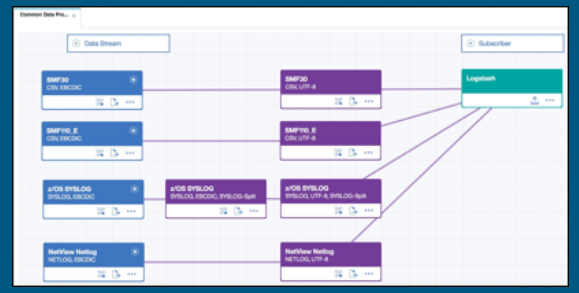
*A recent survey of Z clients showed **cost reduction** and **outage prevention** as the top 2 factors where they want to focus operational efforts*

splunk> .conf2017

IT Analytics Help You Derive Real Value From IT Data

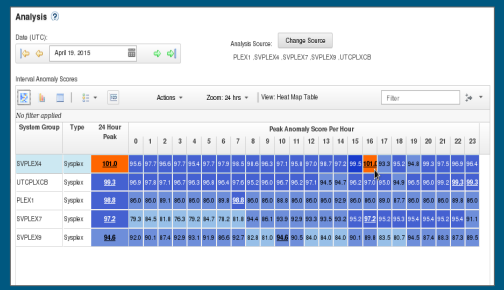
Helping you address pain points including **cost, risk and skills** & agility…

A single source for all operational data streamed to the analytics platform of choice - IBM or 3rd party



Manage the growing complexity of data requests

Detect anomalies before they happen

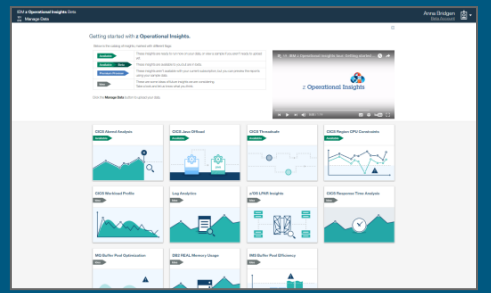


Predict issues instead of waiting for failure

Speed resolution for day-to-day ops issues

Analyze and intelligently search ops data

Optimize for cost and performance



Analyze operations data and see recommended cost saving actions

Your IBM Z data…

Your choice of analytics platforms…

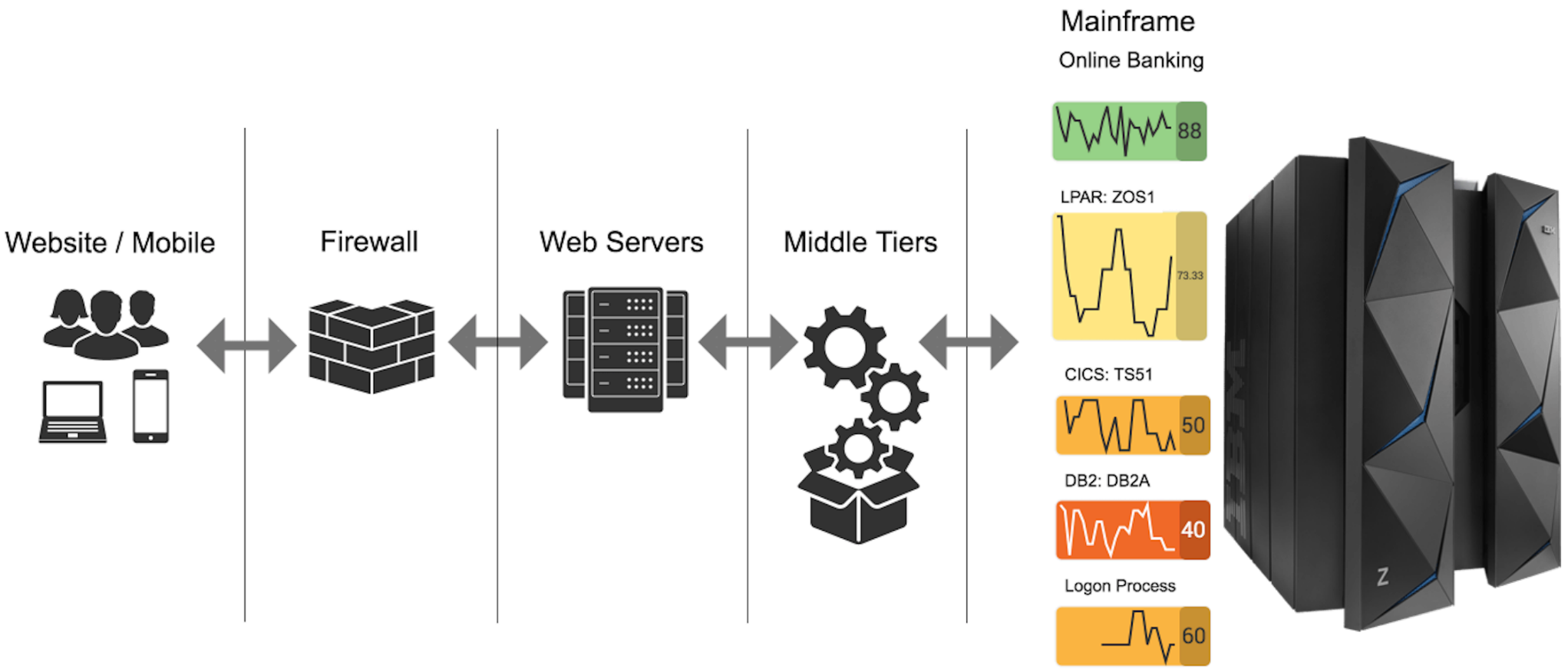
IBM splunk>

With our expert insights

… all with **embedded expertise** and recommended next actions

splunk> .conf2017

View Of Today's Hybrid IT Operations



* Statements regarding IBM future direction and intent are subject to change or withdrawal, and represents goals and objectives only

You Want To Work As A Team To Resolve An Issue ?

Manager

TM Team
CICS IMS

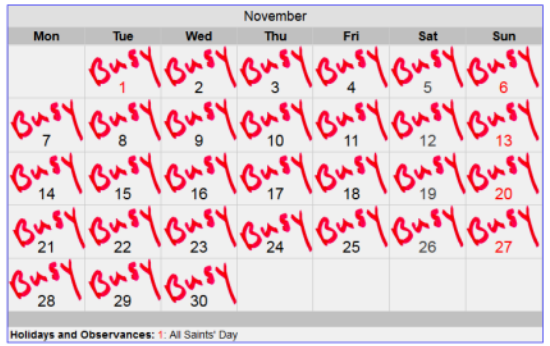
DB Team
DB2 IMS

Support
Level 1

SYSPROG
Team

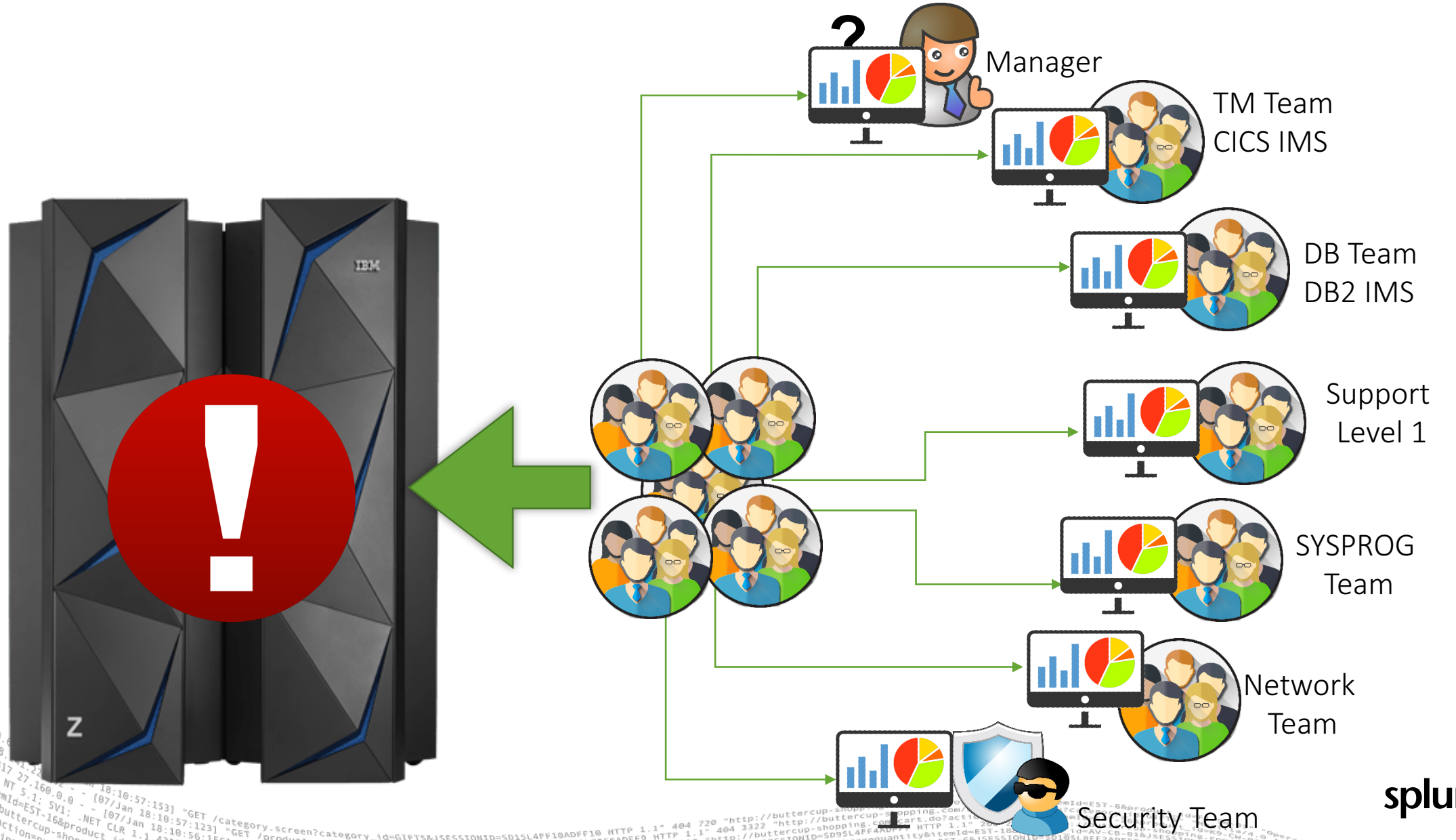
Network
Team

Security Team



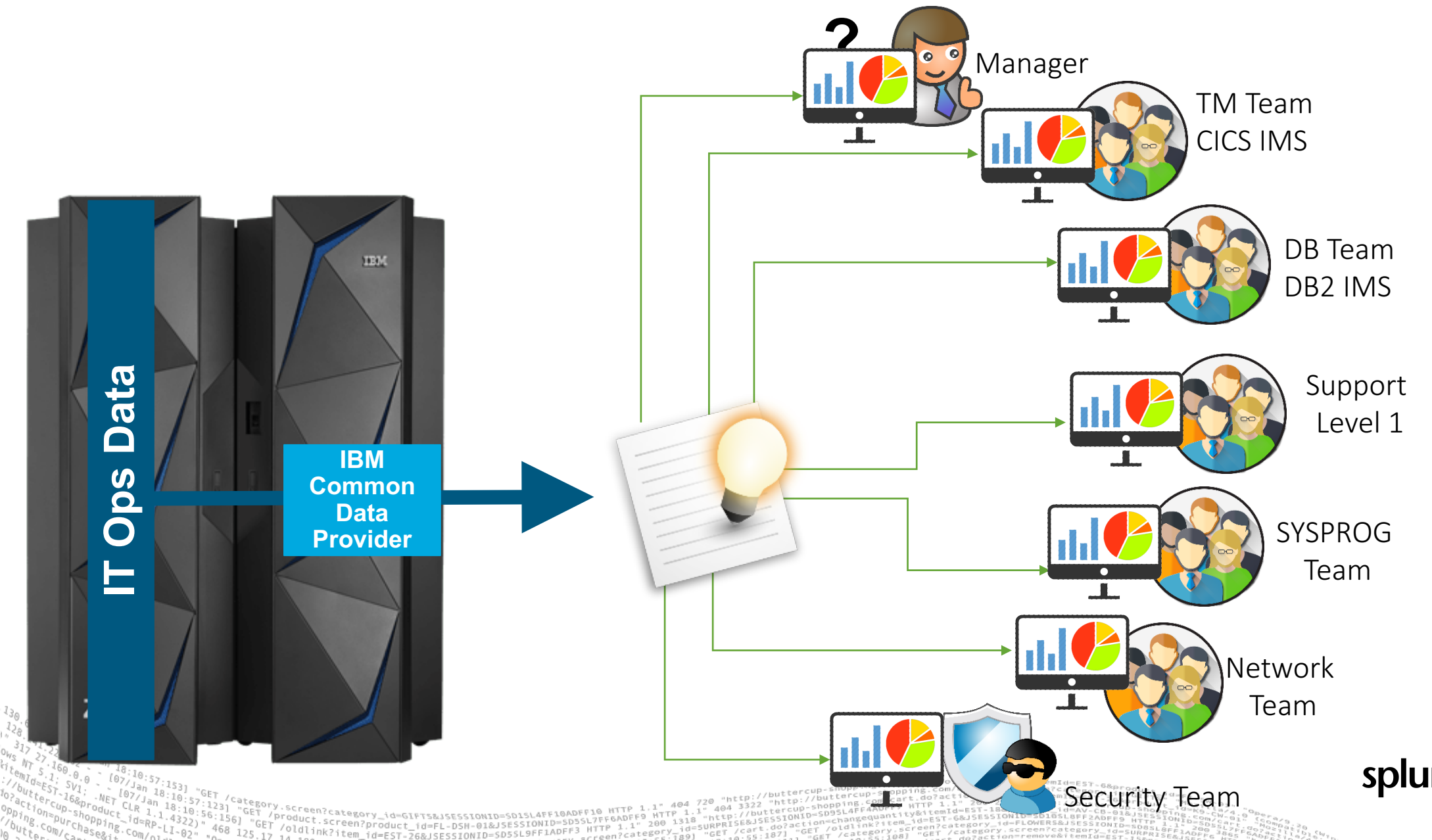
splunk> .conf2017

You Want To Work As A Team To Resolve An Issue



splunk> .conf2017

You Want To Work As A Team To Resolve An Issue



splunk> .conf2017

IBM And Splunk Partnership Announcement For Z Data

With IBM Common Data Provider for z Systems (CDPz) and Splunk clients can:

- **Gain insight** into **hybrid IT operations** by integrating IBM Z operational data with your public cloud and distributed operational data into a single analytics platform, **eliminating blind spots**
- **Visualize impacts** across your infrastructure from **continuously delivering** applications and application enhancements
- Stream the ***widest range of SMF records*** *and* ***Z log data*** *in* ***"real-time"*** to provide diagnostic and resource usage information
- Build Custom ***Enterprise Wide Splunk Apps*** using Z Data
- **Reduce** Splunk ingestion **costs** with ***advanced filtering*** and customer control of SMF and log data
- **Save money** with the CDPz's **fixed pricing model**

Watch **IBM CTO Matt Hogstrom's** and **Snehal Antani's** Solution Overview

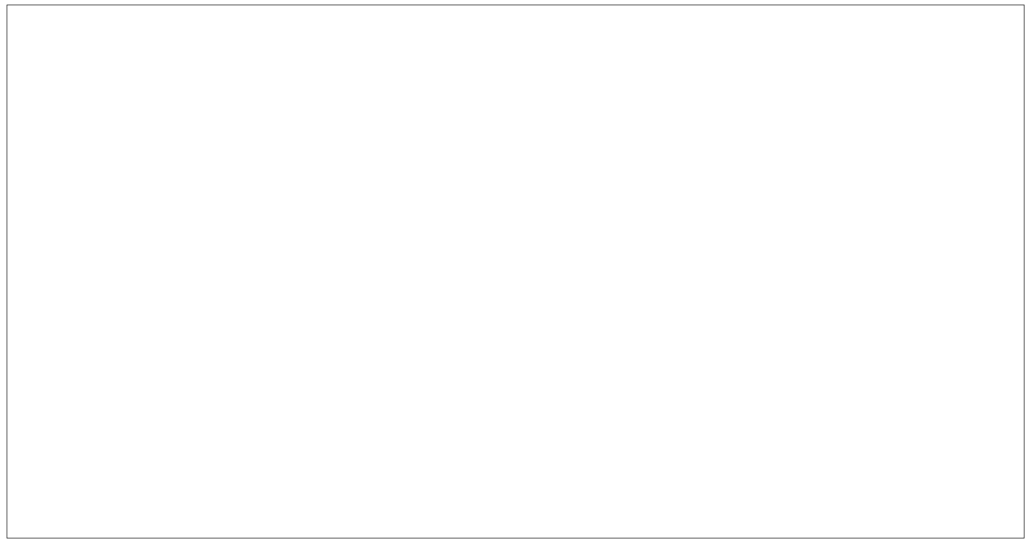
IBM splunk>

splunk> .conf2017

IBM Common Data Provider For Z Systems

A single source for all operational data streamed to the analytics platform of choice

- CDP provides consumable, near real time operational data
- Built to improve the ability to manage the growing complexity of data requests
- Provides data feed into enterprise analytics solutions such as Splunk
- Tivoli Decision Support for z/OS customers can write their SMF data directly to IDAA



- **Reduce Risk to Your Business:**

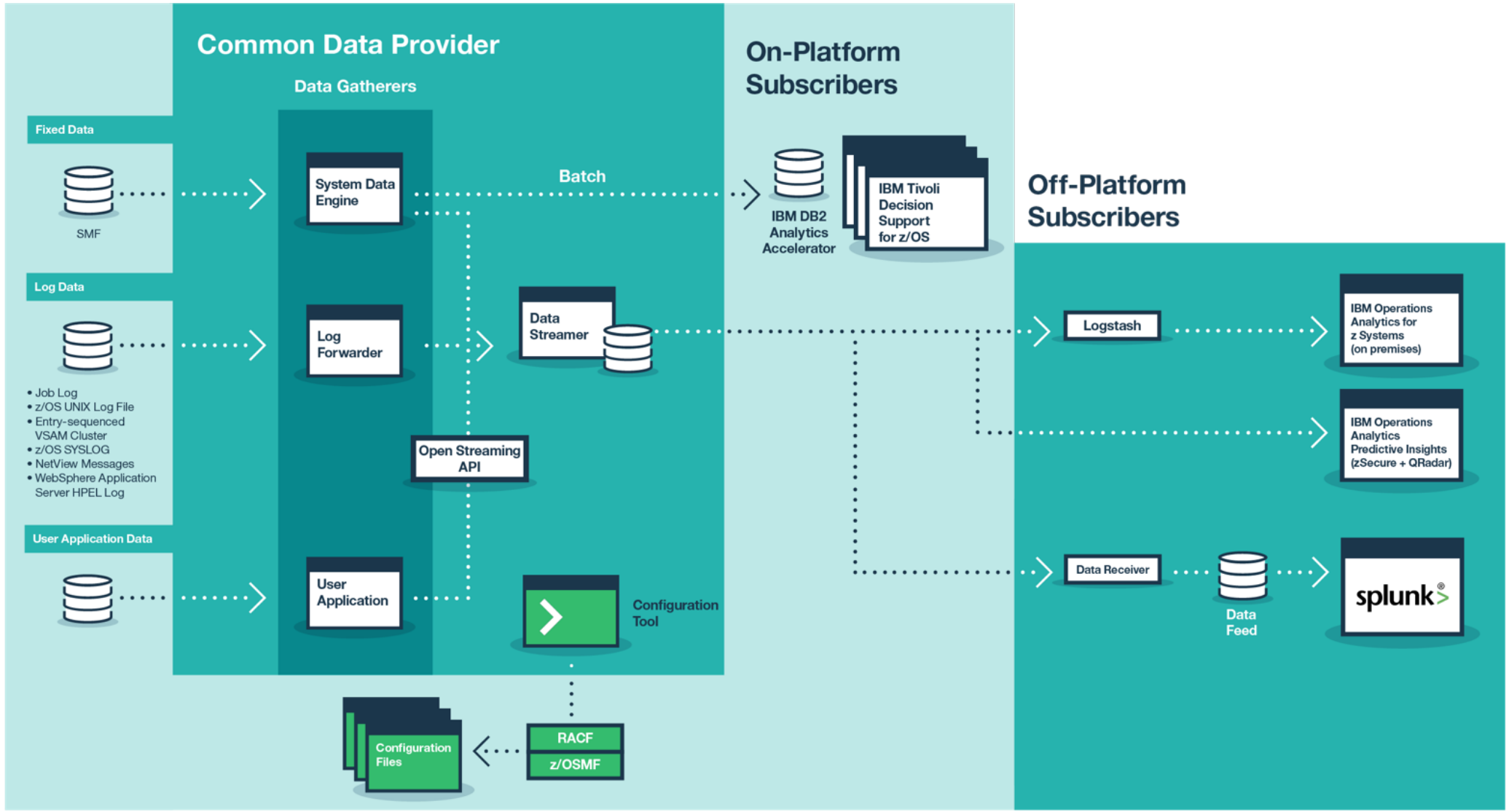
  Detect threats with your Security products using live streaming data
- **Optimize Costs and Efficiencies:**

  Feed all IT Operations data to analytical engines from a single product
- **Prevent Impact to Your Operation:**

  Proactive Analysis of data in near Real Time as an early warning

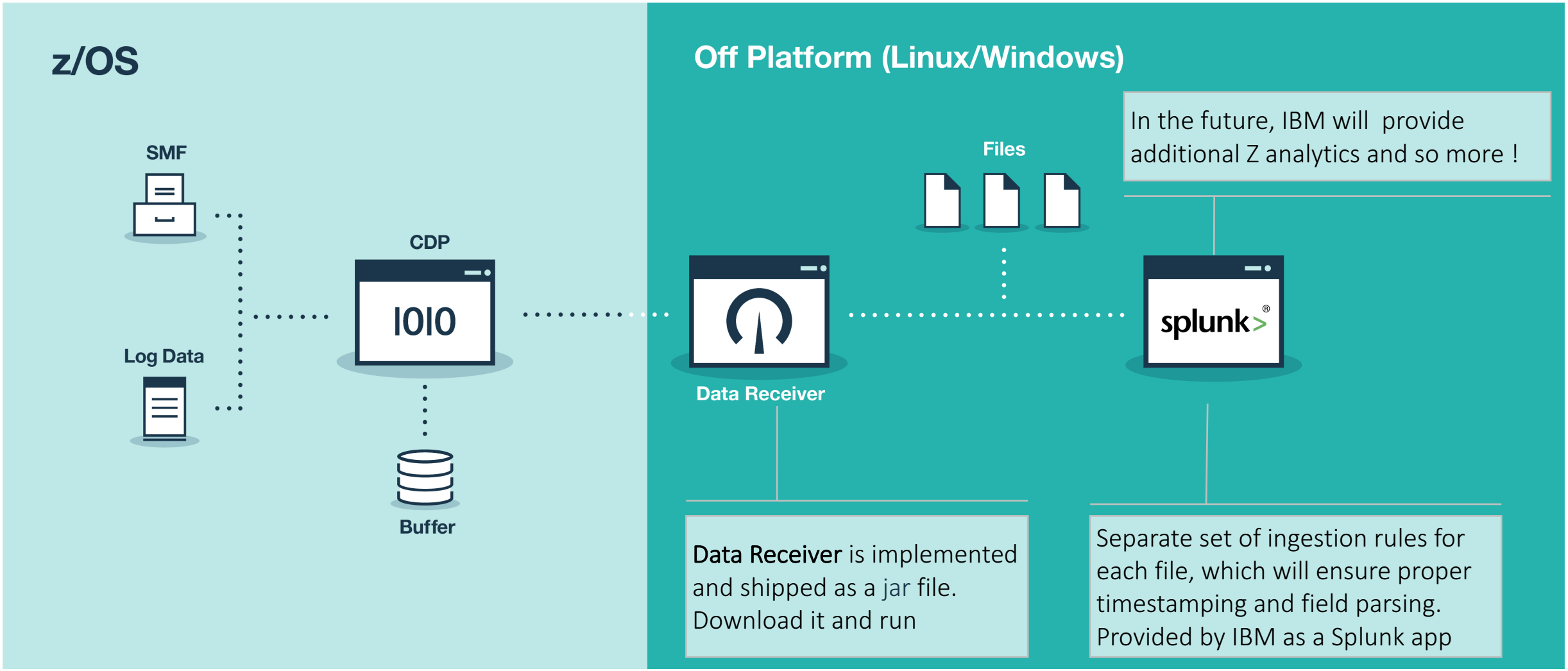
- Simple to install, configure and use
- Multiple data sources
- Flexible output options
- Write to any destination
- Streaming SMF and log data
- Built in filtering to control data volumes

Data Your Way – IBM Common Data Provider For Z Systems



splunk> .conf2017

IBM Cdpz And Splunk - An End To End Solution And More!



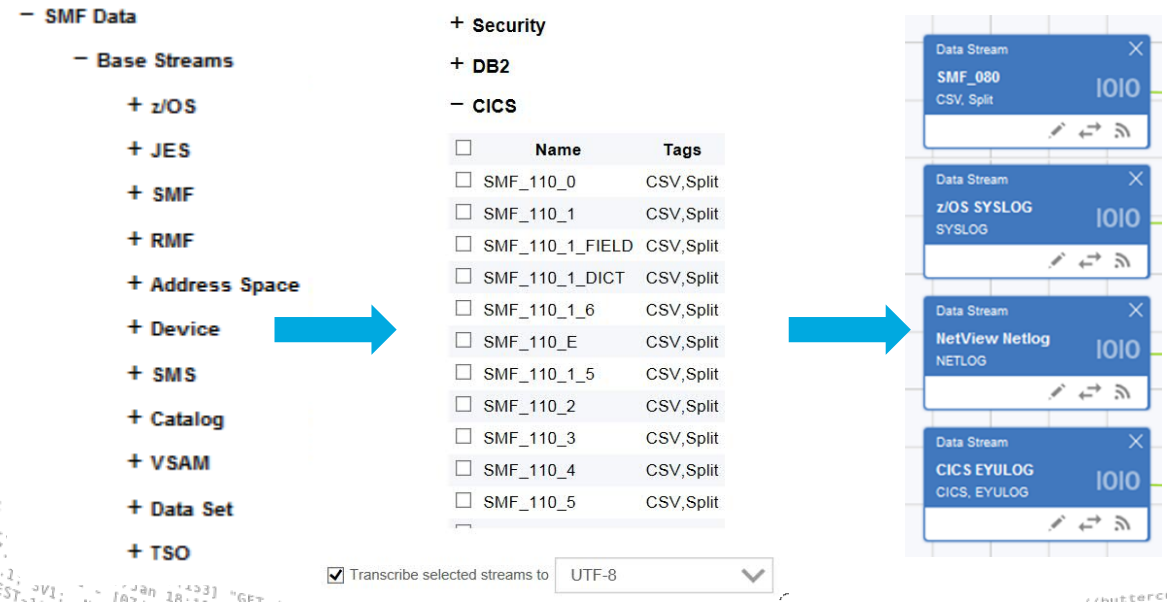
splunk> .conf2017

* Statements regarding IBM future direction and intent are subject to change or withdrawal, and represents goals and objectives only.

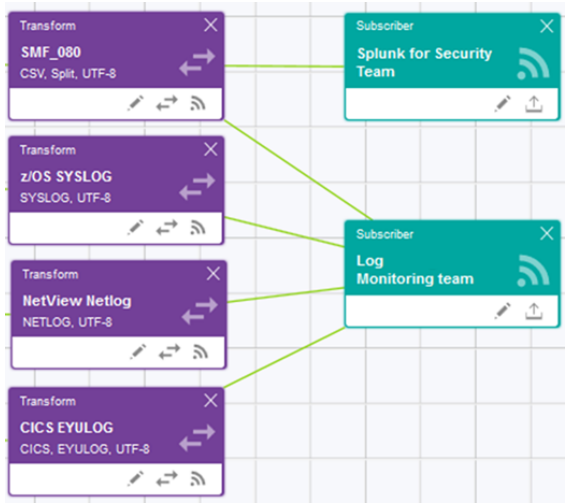
IBM Design Thinking For CDP z

Based on IBM Design Thinking, IBM CDPz leverages z/OSMF to provide users a simple to use graphical interface to select, filter, and send data to the required target(s)

Just select the z Systems SMF or Log data you need

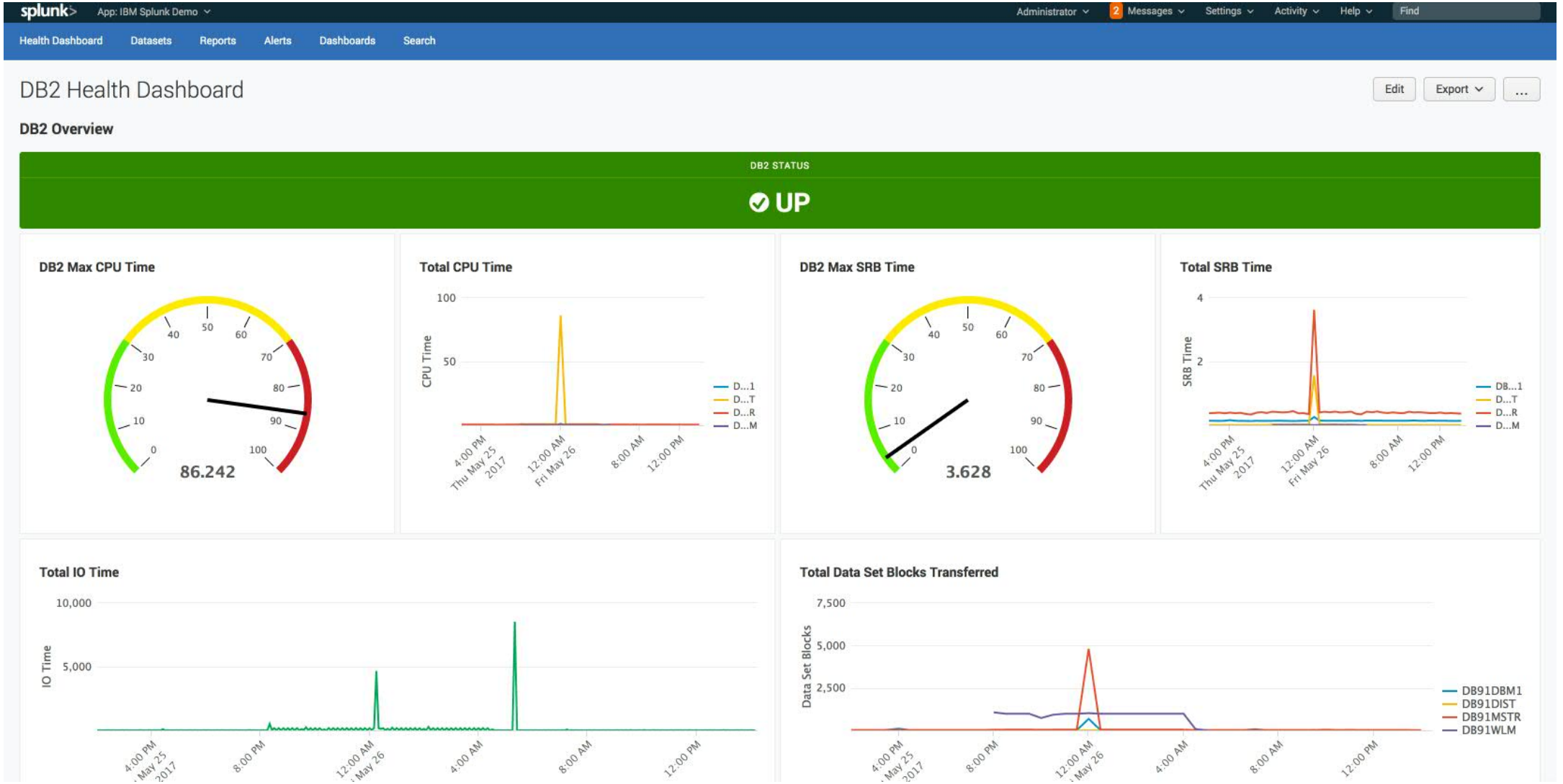


Add your data filters, add your target(s) and go…



splunk> .conf2017

Visualize Your Z Systems Data In Splunk



splunk> .conf2017

Using Operations Analytics Solutions From IBM

Client Challenge

Limited real time visibility of potential issues across the enterprise was causing extended problem determination times and not allowing business to be proactive in problem resolution. **Drops in service levels loses Banrisul customers, and incur fines from regulators.**

Client Solution

- IOAz showing dashboards with error messages in last 15 minutes, SMF 30 Dashboard (out-of-the-box) shows maxed capped resources
- Show graphed dashboard for SYSA, SYSB, and SYSD during the same time-period with SYSD Programs plotted
- Dashboards to demonstrate z/OS Abends, B37 errors, CICS & DB2 Resource Unavailable items of interest

Client Benefit:

- Near immediate identification of problems before they impact service delivery
- Increase in customer satisfaction levels and meeting regulatory requirements
- More “free time” to work on environment improvements that improve overall stability

Banrisul

“Useful for SYSLOG analysis to understand numerous system wide error messages!!"
"Out of the box analysis to quickly determine root cause of system lock up that required an IPL Outage!!"

Find out More:
http://ibm.biz/IOAzCaseStudy

splunk> .conf2017

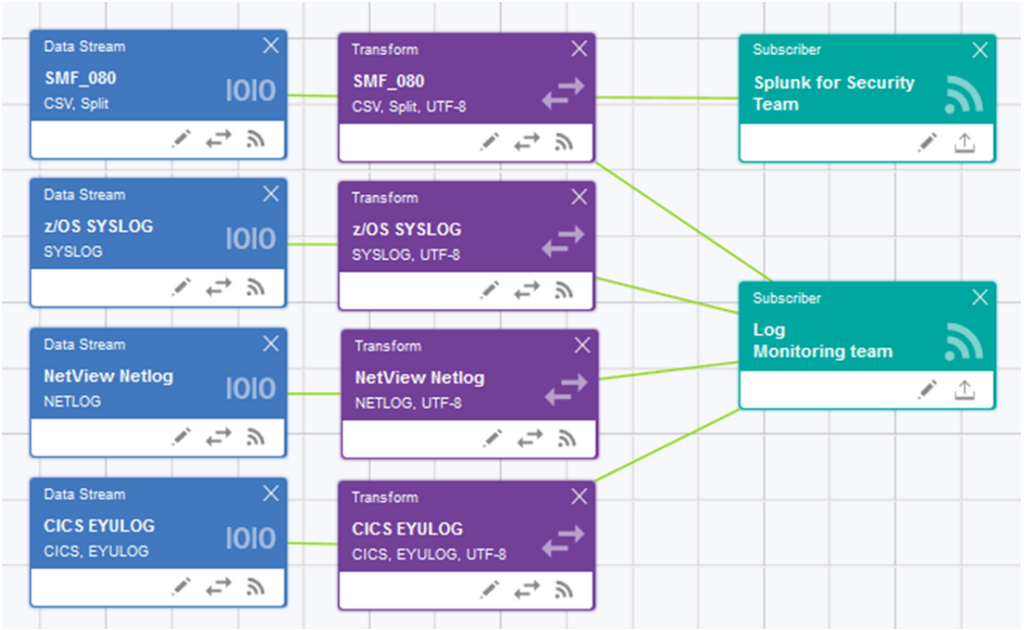
Data Your Way: A Large European Retail Company

Customer background and needs:

- **Splunk** is already used in the Enterprise for Network, Device and Open Systems Security
- Need to **integrate mainframe** security data into Splunk for Enterprise security team
- Mainframe monitoring team plan to use data for **IT Operational monotoring**

IBM Common Data Provider for z System is the solution being able to read the data once and send to different targets

Different filtering/trasformation options can be applied to the data before sending the same data to different targets.



splunk> .conf2017

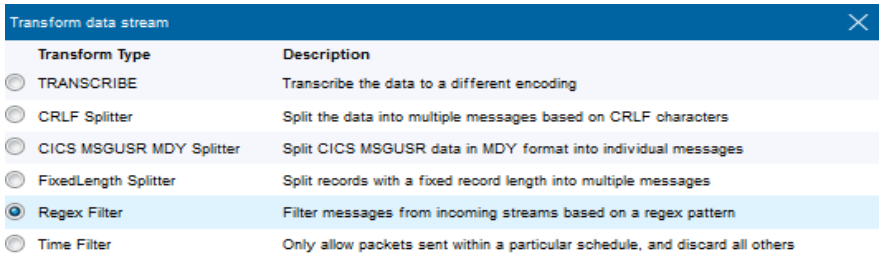
Enabling DevOps: A US Health Insurance Company

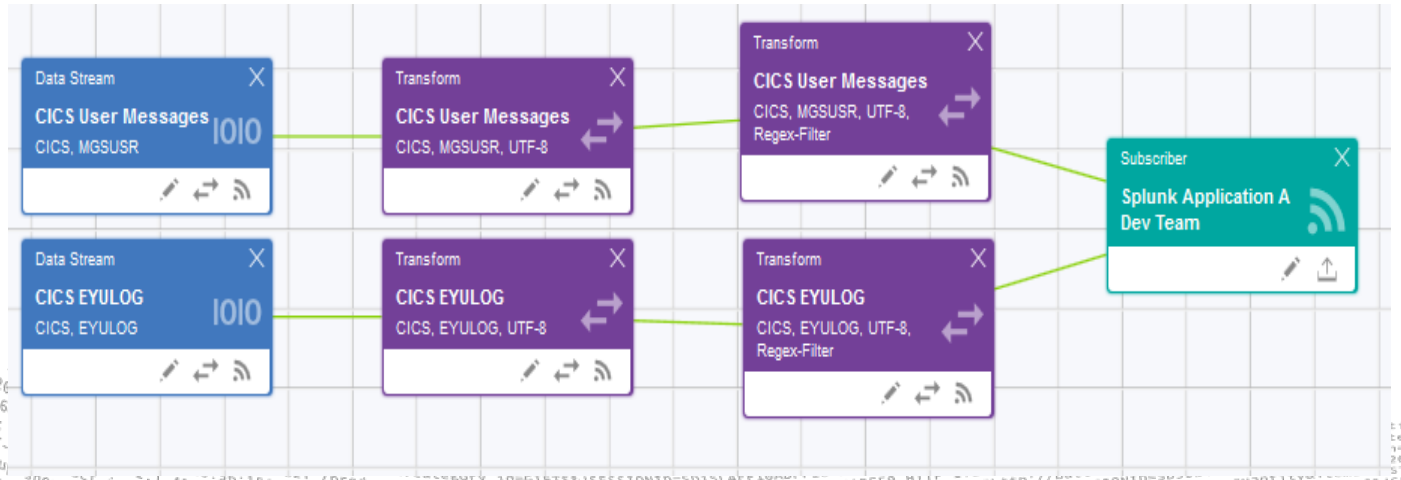
Customer background and needs:

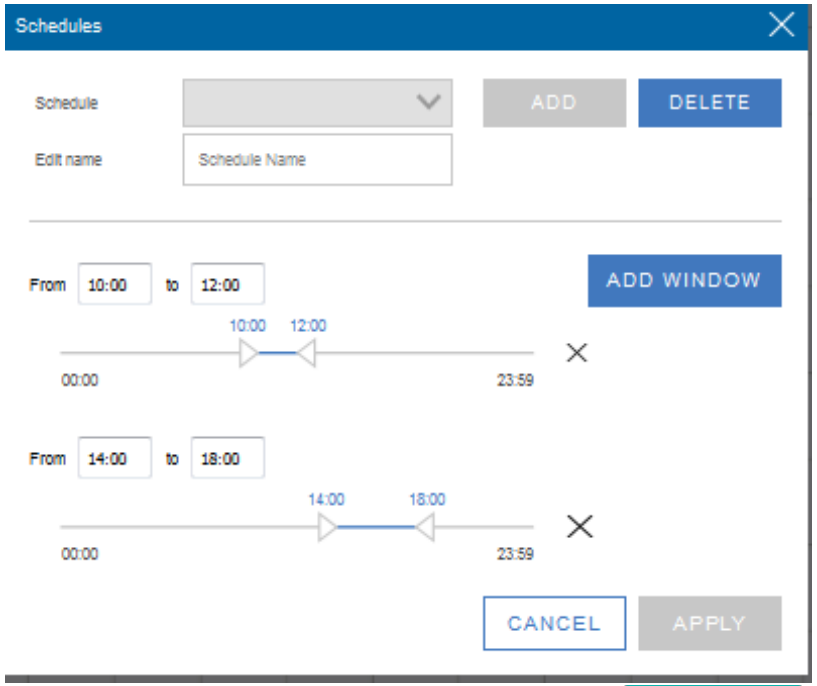
- **Splunk** is currently used by the development team to analyze an application's distributed logs
- The application leverages **z Systems CICS** and the development team needs to integrate the mainframe CICS application logs into Splunk
- New feature testing is performed during specific time windows

IBM Common Data Provider for z System is the solution to:

- Gather CICS log data during the requested testing windows
- Filter CICS log data based on the content specific to the application and send only the required data to Splunk enabling a single pane of glass view
- This configuration can later be used by **IT Operations**







splunk> .conf2017

Art Of The Possible: The Bread Box Company

- Family run retail business
- Started by 2 brothers in Ohio, United States
- Rapid Growth via commitment to clients and Innovation in IT

- Enterprise operations - 50 states
- 3 data centers in the US
- 500 distribution centers
- 45000 trailers & 4000 drivers
- 12000 stores
- Growth through acquisitions

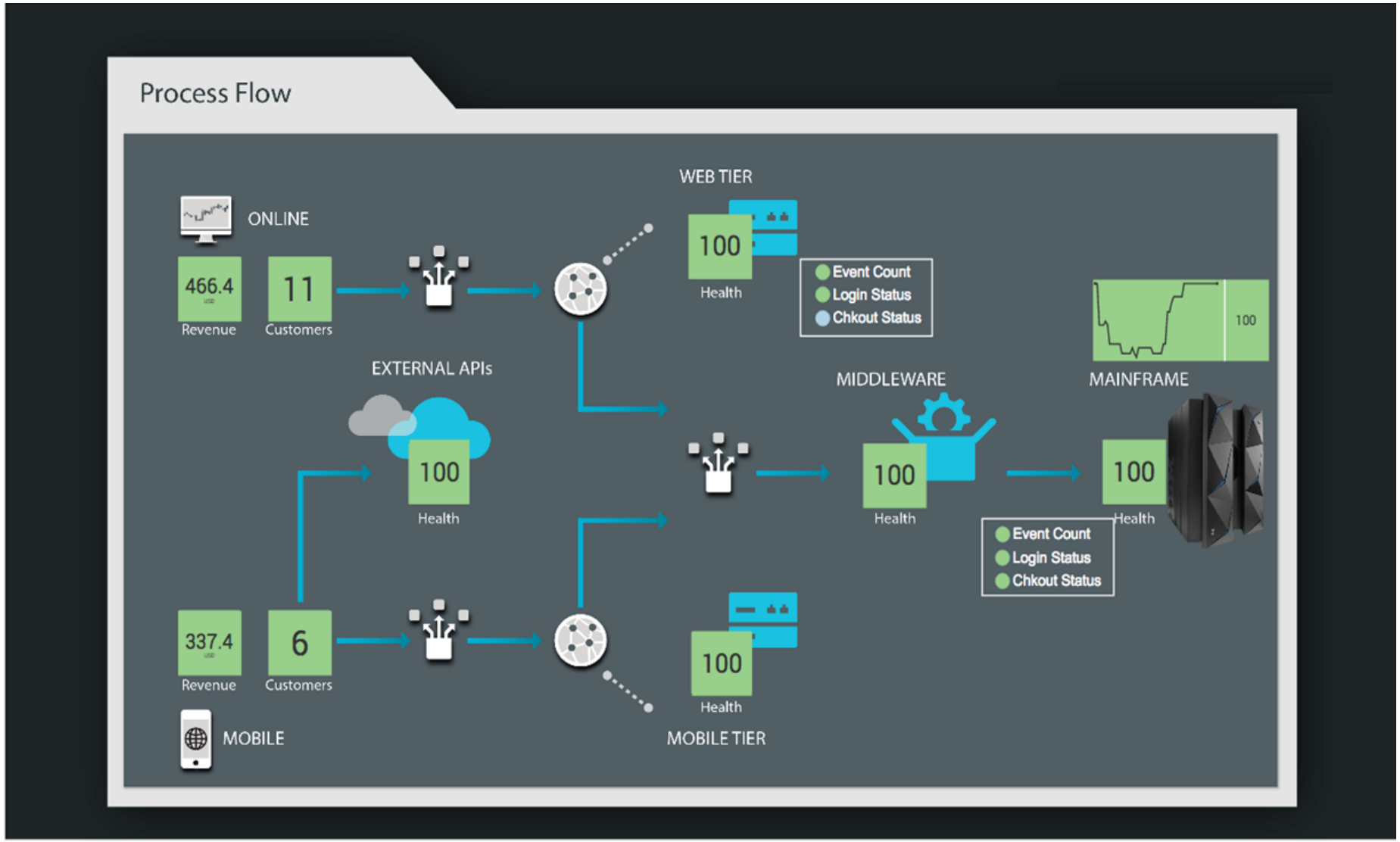
- Global footprint.
- Optimize and Innovate in IT
- New Services Online fast to reach new clients
- Leverage Social & mobile for better client engagement
- Maintain Industry Leadership

50 years ago → **Today** → **Where they want to be**

splunk> .conf2017

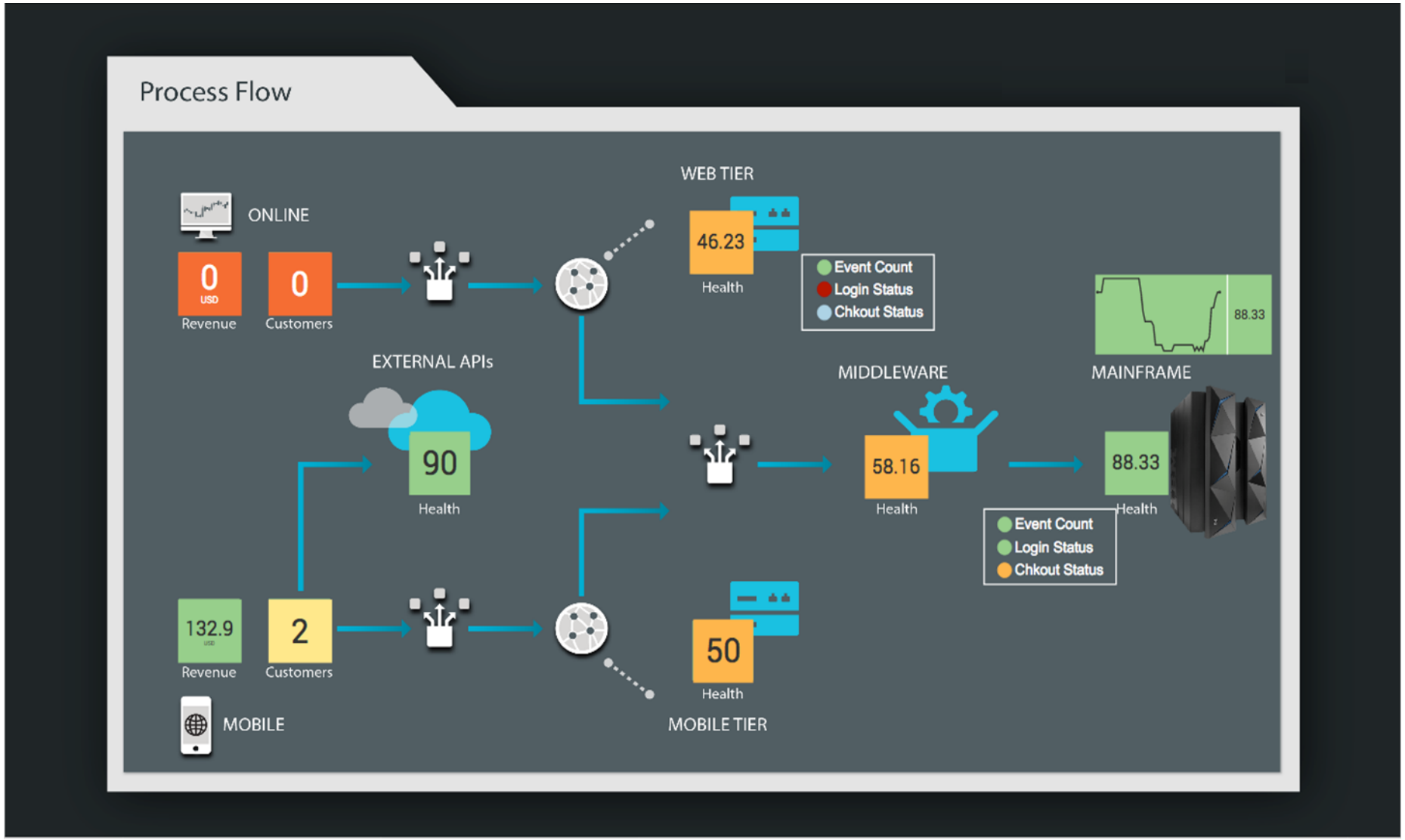
Art Of The Possible: Bread Box Virtual Shopping

Art Of The Possible: Bread Box Virtual Shopping



splunk> .conf2017

Art Of The Possible: Bread Box Virtual Shopping

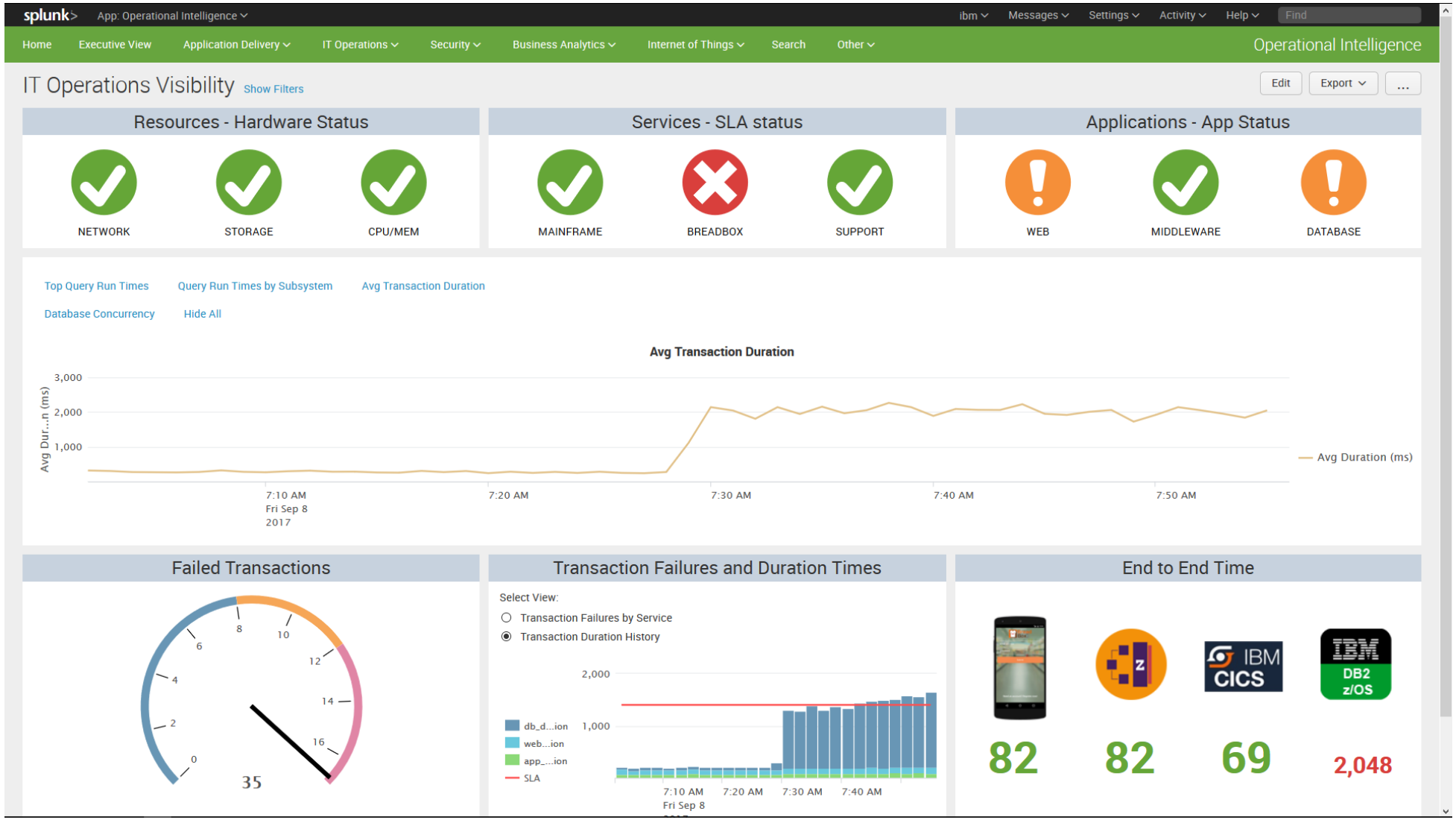


splunk> .conf2017

Art Of The Possible: Bread Box Virtual Shopping

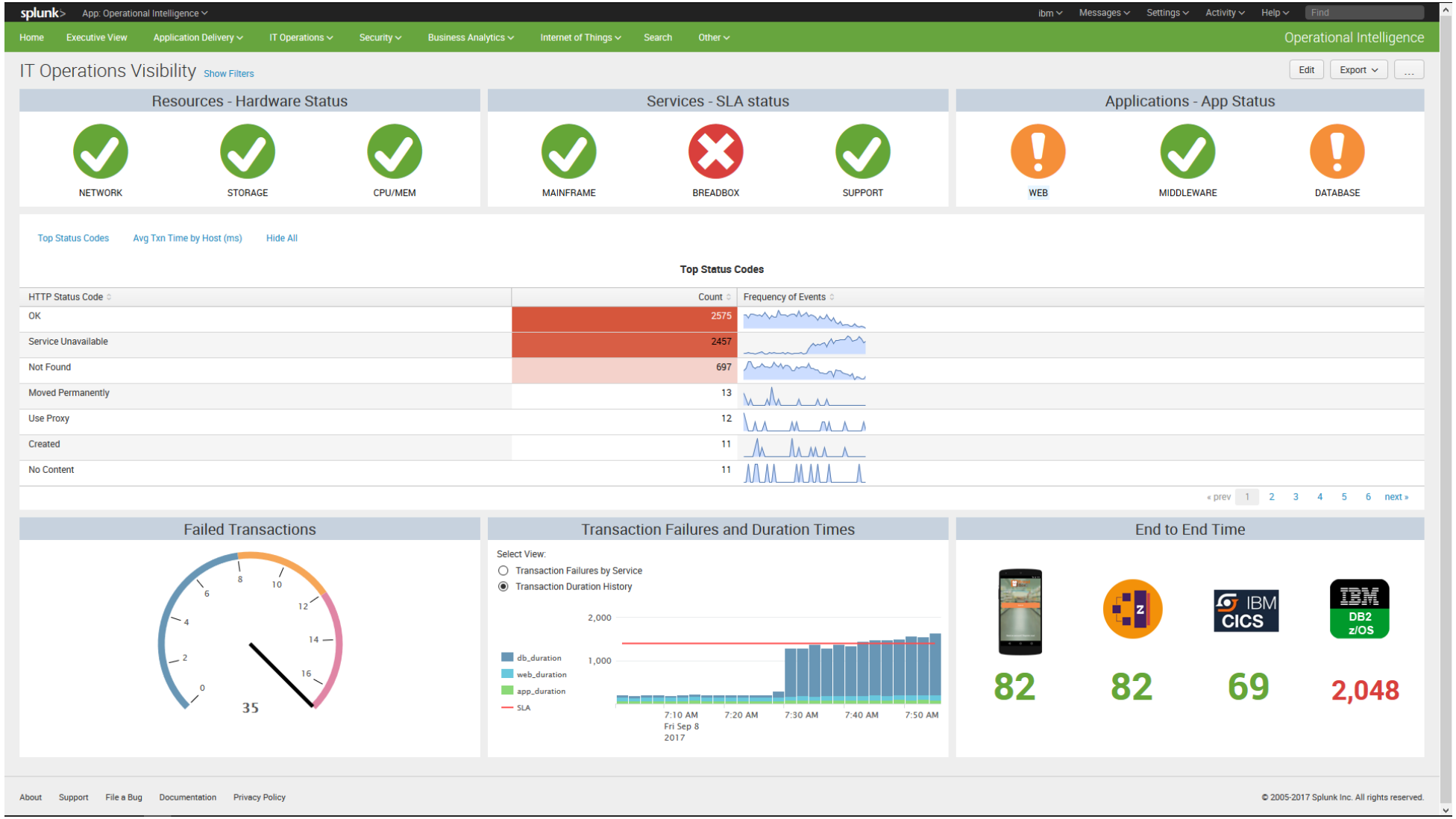
splunk> .conf2017

Art Of The Possible: Bread Box Virtual Shopping



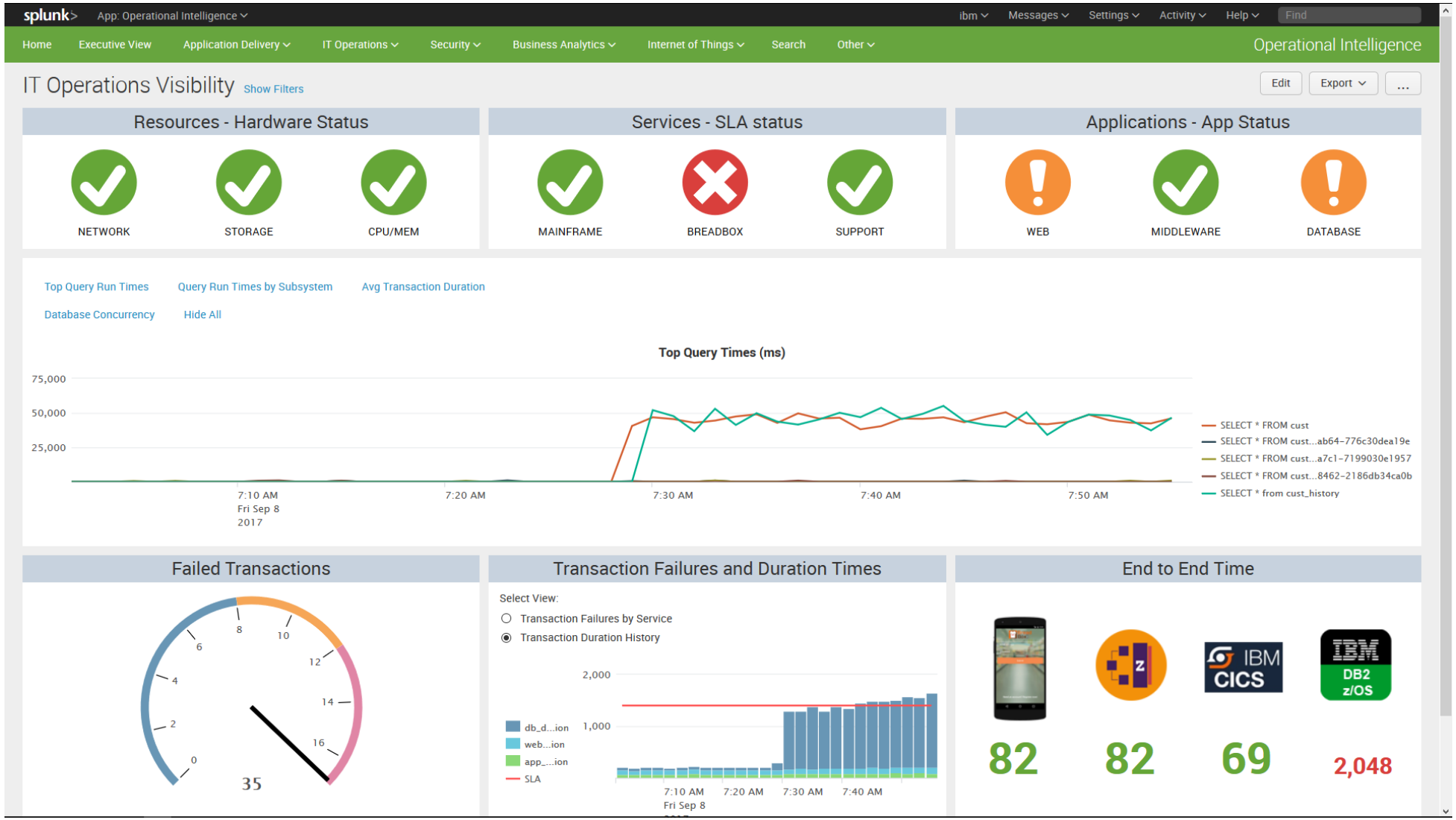
splunk> .conf2017

Art Of The Possible: Bread Box Virtual Shopping



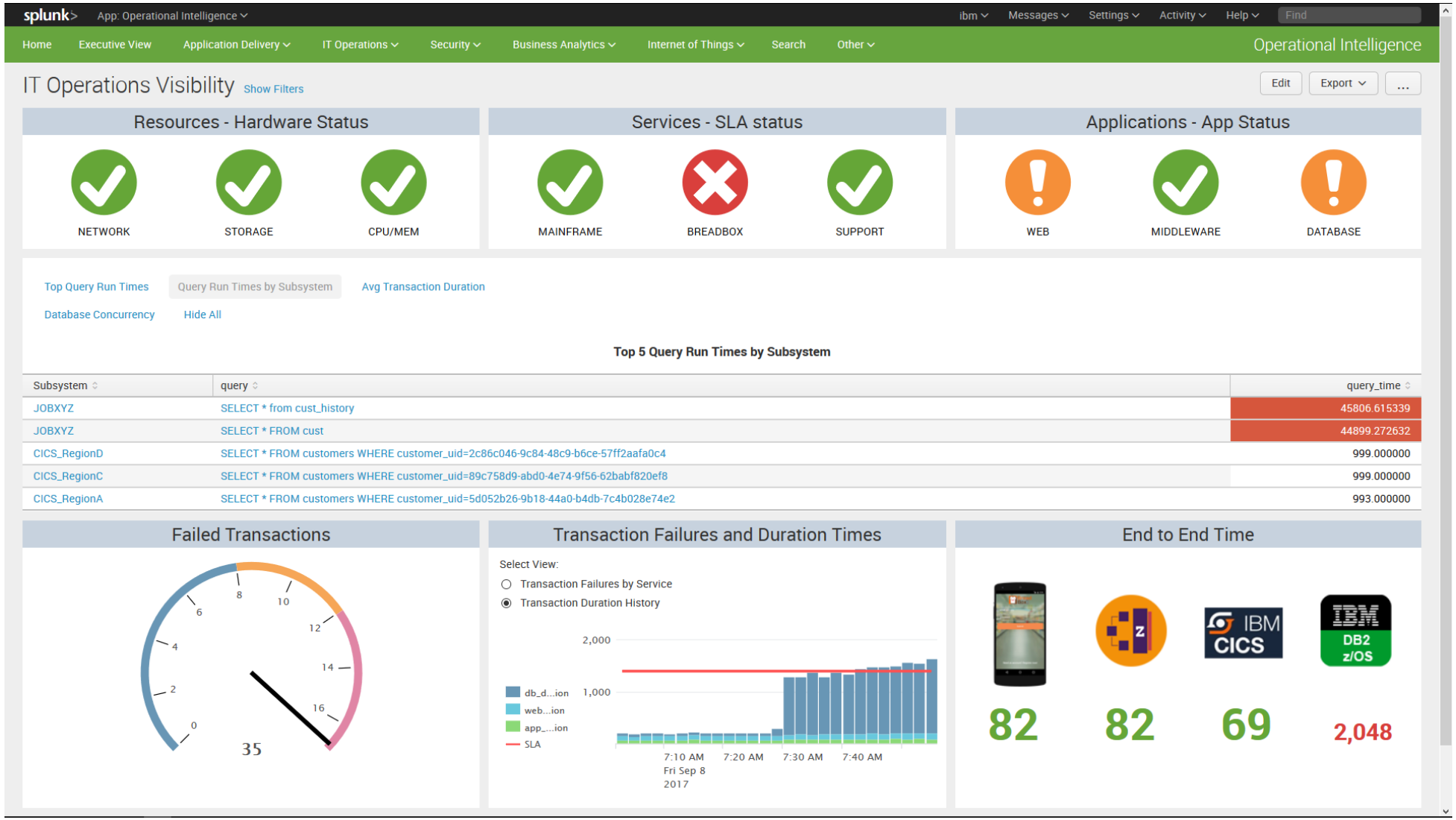
splunk> .conf2017

Art Of The Possible: Bread Box Virtual Shopping



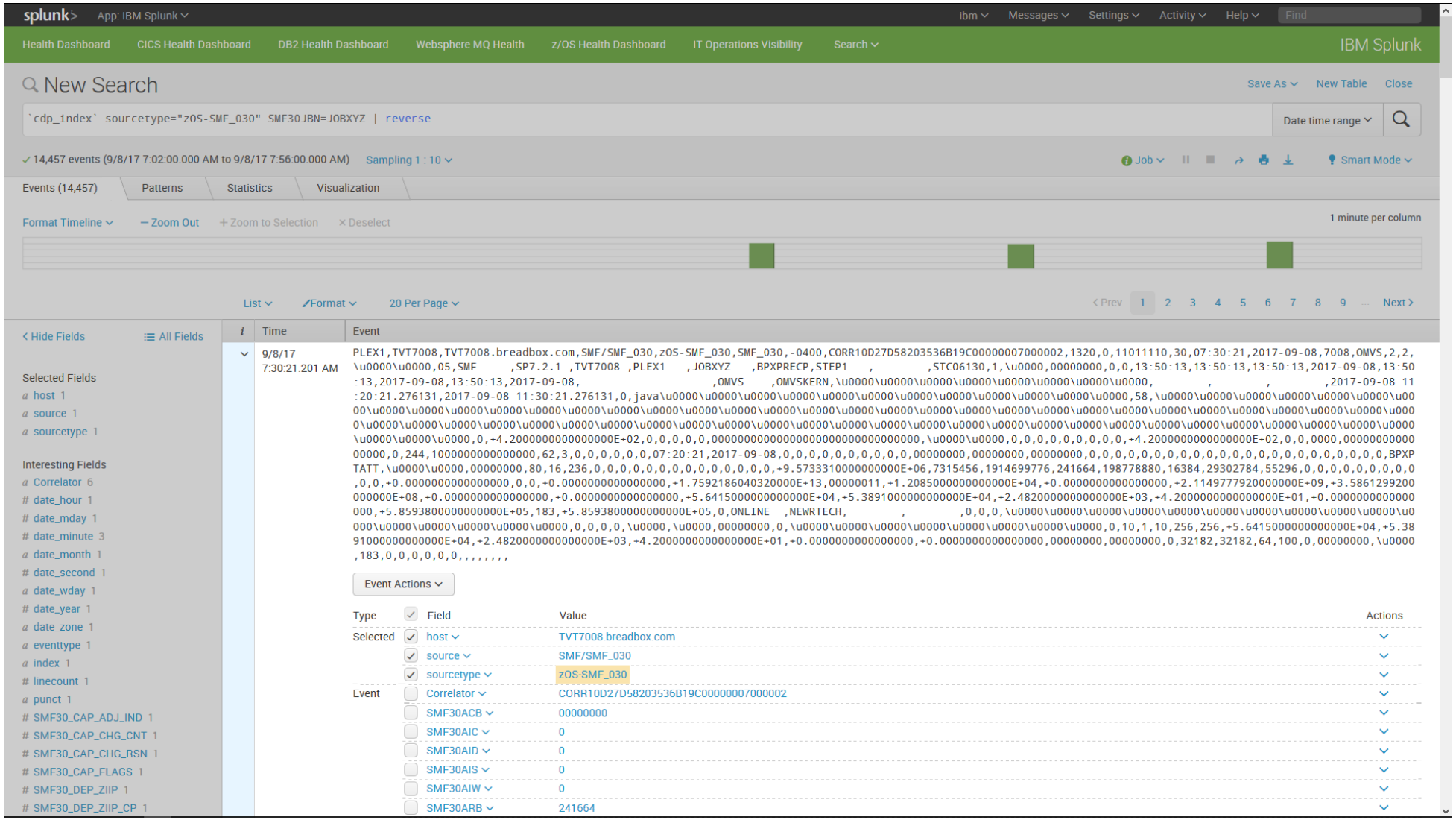
splunk> .conf2017

Art Of The Possible: Bread Box Virtual Shopping



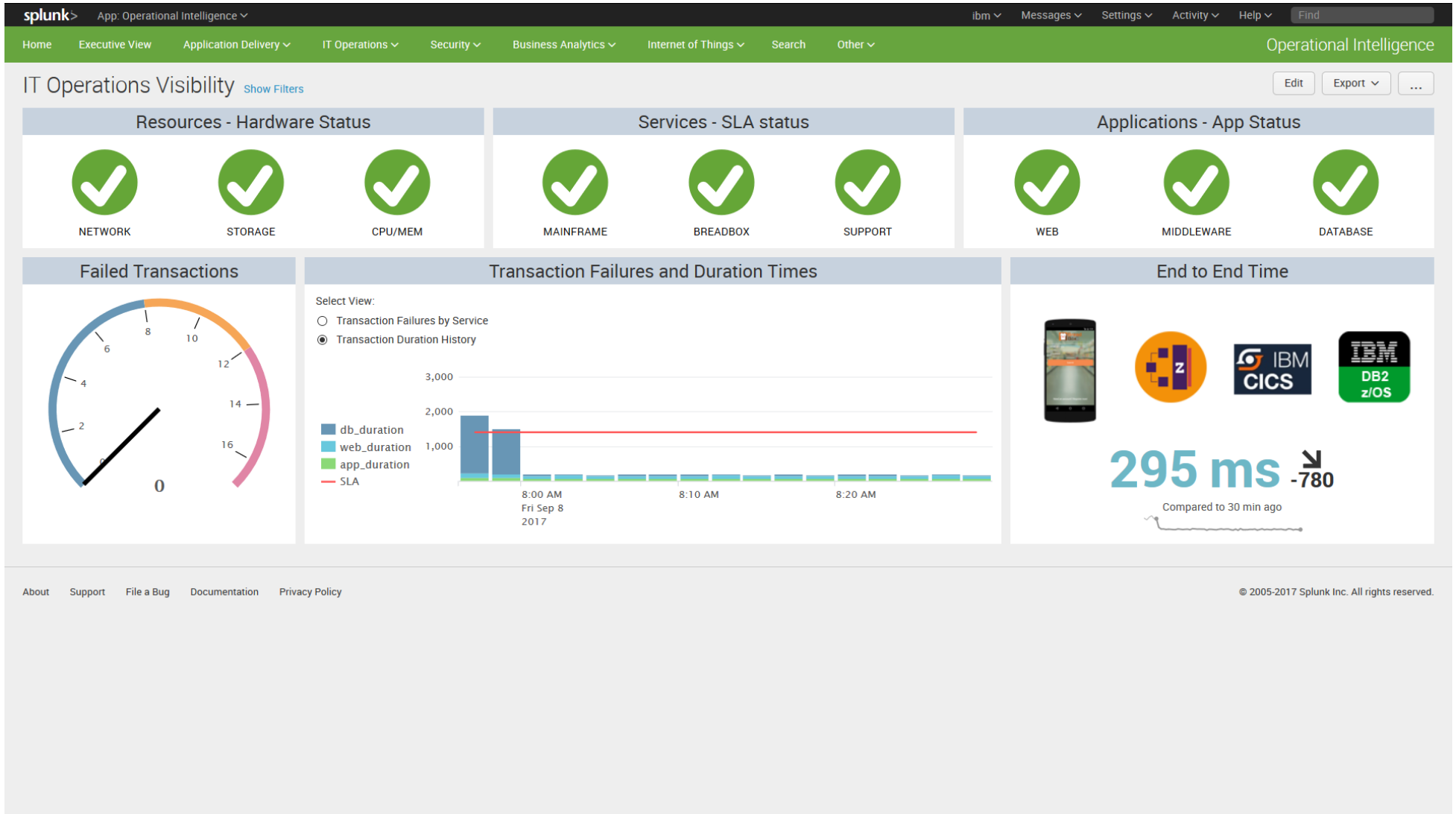
splunk> .conf2017

Art Of The Possible: Bread Box Virtual Shopping



splunk> .conf2017

Art Of The Possible: Bread Box Virtual Shopping



splunk> .conf2017

Find Out More

Common Data Provider official page:	ibm.biz/CDPzInfo	Product summary and contacts
Common Data Provider wiki:	ibm.biz/CDPzWiki	Product updates, best practice, media gallery
Common Data Provider on Splunkbase	ibm.biz/CDPzPartner	Product summary and information
Common Data Provider Executive Blog	ibm.biz/CDPzPartnerBlog	Solution and Market Overview
Common Data Provider and Splunk Solution Video	ibm.biz/CDPzSolutionVideo	Overview of how Splunk can leverage IBM Z
ITSM News Letter	ibm.biz/zITSMNewsletterSubscribe	Subscribe to the newsletter for information, announcements, events, etc

splunk> .conf2017

Questions….

Thank You

Don't forget to rate this session in the .conf2017 mobile app