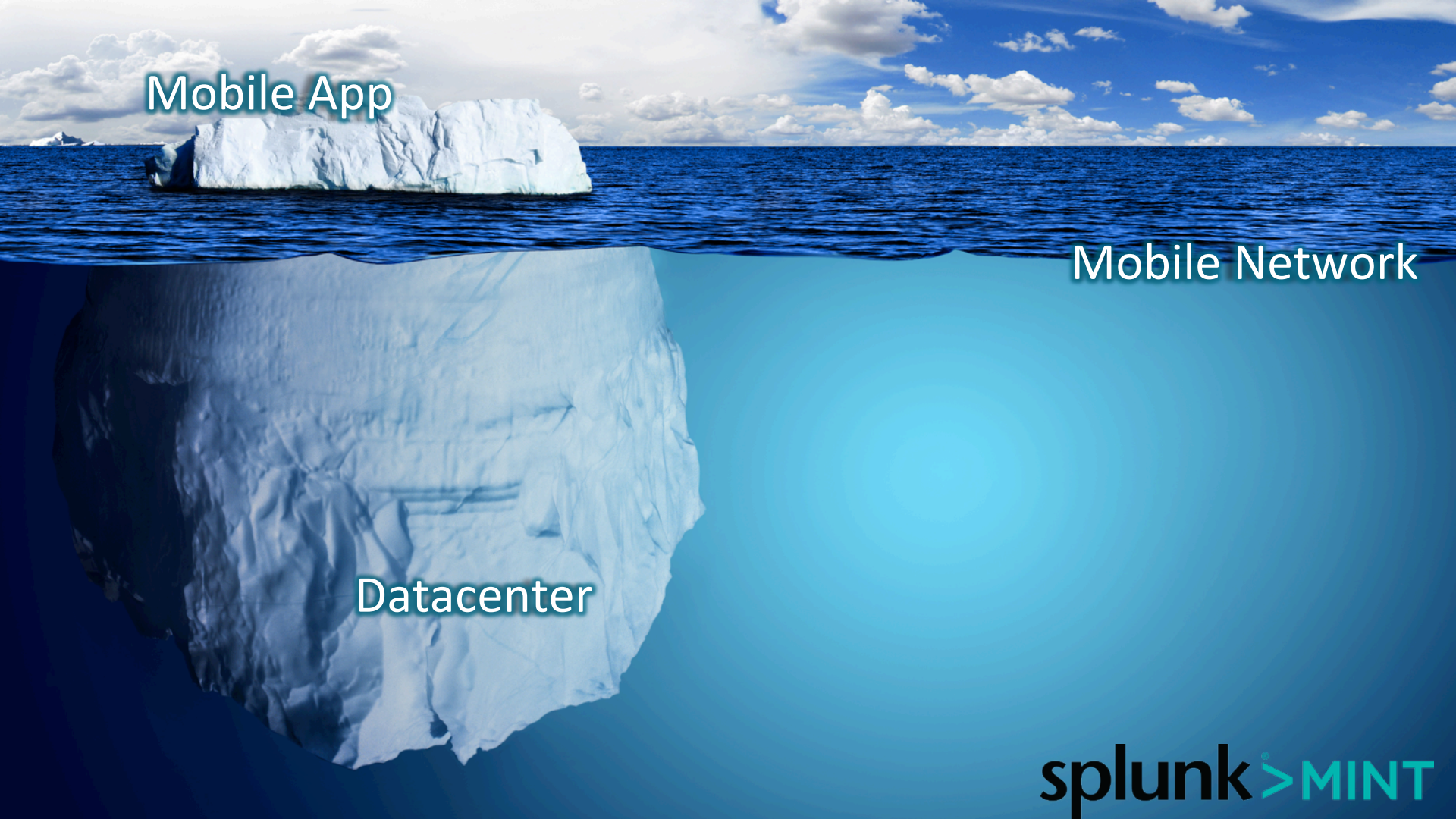
Getting Started with Splunk MINT

Panos Papadopoulos

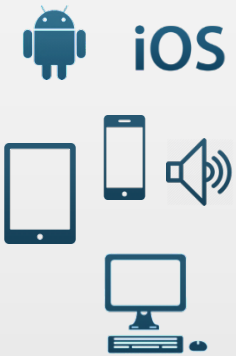
Director, Product Management, Splunk

splunk>


Mobile App
Mobile Network
Datacenter
splunk>MINT

The Challenges of Delivering Mobile Apps

Form Factor, Platform, Interaction Style Variety



Rapid App Dev Cycles, Break-Fix Needs

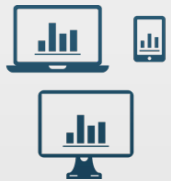
- New OS versions break apps
- Network issues are difficult to find and simulate
- Limited time to make changes and fixes

Infrastructure

- Plan for growth
- Solve infrastructure, API and app issues

Analytics

- Feature usage
- Monitor/analyze user behavior
- Deliver omni-channel analytics
- Mobile+Web+Desktop



Mobile App Delivery: Different Challenges for Different Roles

MOBILE APP DEVELOPERS

- How do I find the root cause of app crashes and/or poor performance?
- What were users doing when the issue happened?
- How do I get more insight into transaction paths?

APP MANAGERS / OPERATIONS

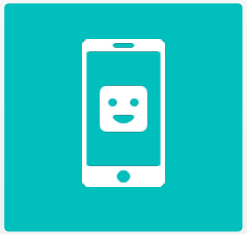
- Is the problem with the app, the network or the back end system?
- Do I have the right capacity in place to handle transaction volume?
- How does performance compare mobile vs. web vs. desktop?

PRODUCT MANAGERS / BUSINESS OWNERS

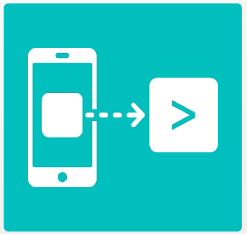
- How are customers using my app?
- Which features should I prioritize for future versions?
- How does customer behavior compare across channels?

Extending Operational Intelligence to Mobile Apps

splunk> MINT



Mobile **End User Monitoring**



End-to-End Performance

Deliver Real-Time Omni-Channel Analytics

Getting Started

splunk>

Getting Started with Splunk MINT

Mobile Developers

Sign up on
mint.splunk.com

Download SDKs
and create mobile projects

Re-deploy Splunk MINT
enabled apps

Check Splunk MINT
Management console

Splunk Admin

splunk>enterprise

Download Splunk
Enterprise

splunk>MINT

Download the Splunk
MINT App

Run Wizard to connect
to the Splunk MINT
Data Collector

Get dashboards and
search, correlate

Create a New Project at mint.splunk.com

Add new project

Project name

AndroidTest

Billing account

BugSense

Platform

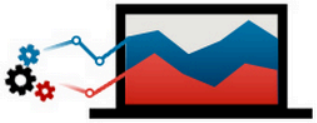
Android

Stage

Release

(Monitor an app in Release or Testing stage)

SUBMIT



Better apps happier users

You are a few minutes away from monitoring the quality of your apps.

Implementing Splunk MINT

Welcome to Splunk MINT! You are about to start tracking an **Android** app. Read the docs to find out how to integrate the SDK with your app.

```
Mint.initAndStartSession(MyActivity.this, "1378e5e5");
```

Press Cmd+C to copy

If you have more questions read the FAQ. If you have any problems installing or using the SDK please submit a ticket, we are more than happy to help you.

Once the SDK is installed, then crash your app and you will receive a crash report via email. You just made the first step to developing a better app!

SDK Configuration

splunk>

SKD Initialization

Android	Mint.initAndStartSession(Context, “APIKEY”);
iOS	[[Mint sharedInstance] initAndStartSession@"API_KEY"];

This single line of code will offer you the following:

- Usage analytics
- Crash reporting
- Network monitoring

Further SKD Instrumentation

Transactions

Android	Mint.transactionStart(“userLogin”); //start transaction
	Mint.transactionStop(“userLogin”); //successfully end transaction
	Mint.transactionCancel(“userLogin”, “user pressed back”); //cancel transaction with a reason

iOS	[[Mint sharedInstance] transactionStart:@”userLogin” andResultBlock:nil]; [[Mint sharedInstance] transactionStop:@”userLogin” andResultBlock:nil]; [[Mint sharedInstance] transactionCancel:@”userLogin” reason:@”user pressed back" andResultBlock:nil];

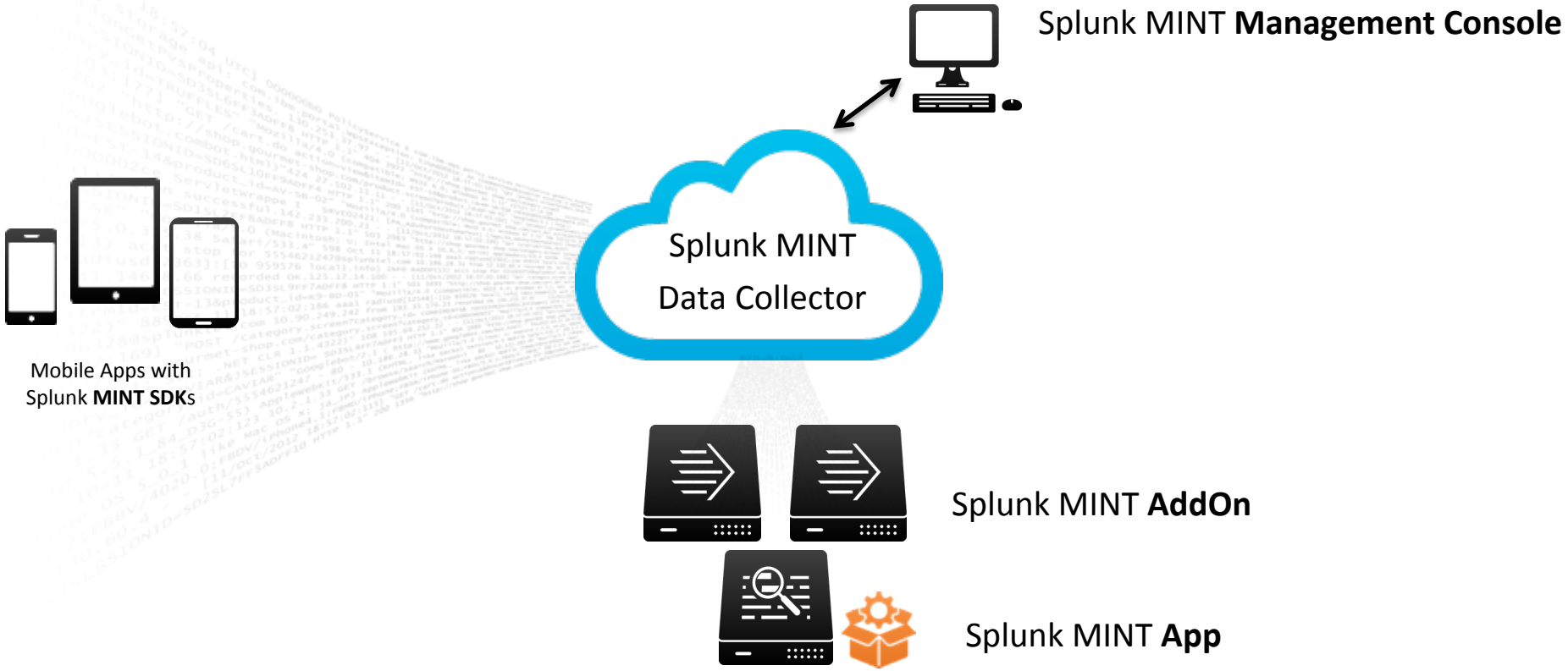
Events

Android	Mint.sendEvent(”button1pressed”);
iOS	[[Mint sharedInstance] logEventAsyncWithTag:@”button1pressed” completionBlock:nil];

Architecture & Installation

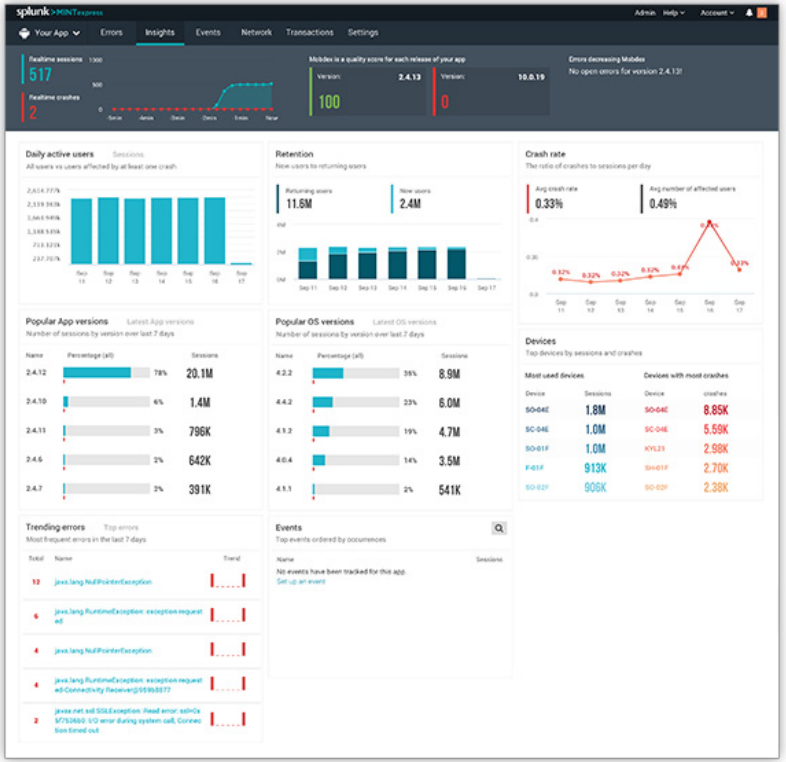
splunk>

Splunk MINT Architecture



Splunk MINT Management Console

- The go to for your Mobile Developers
- Fast on boarding
- “Light weight” dashboards to get you started.
- Good-enough for some teams & mobile devs



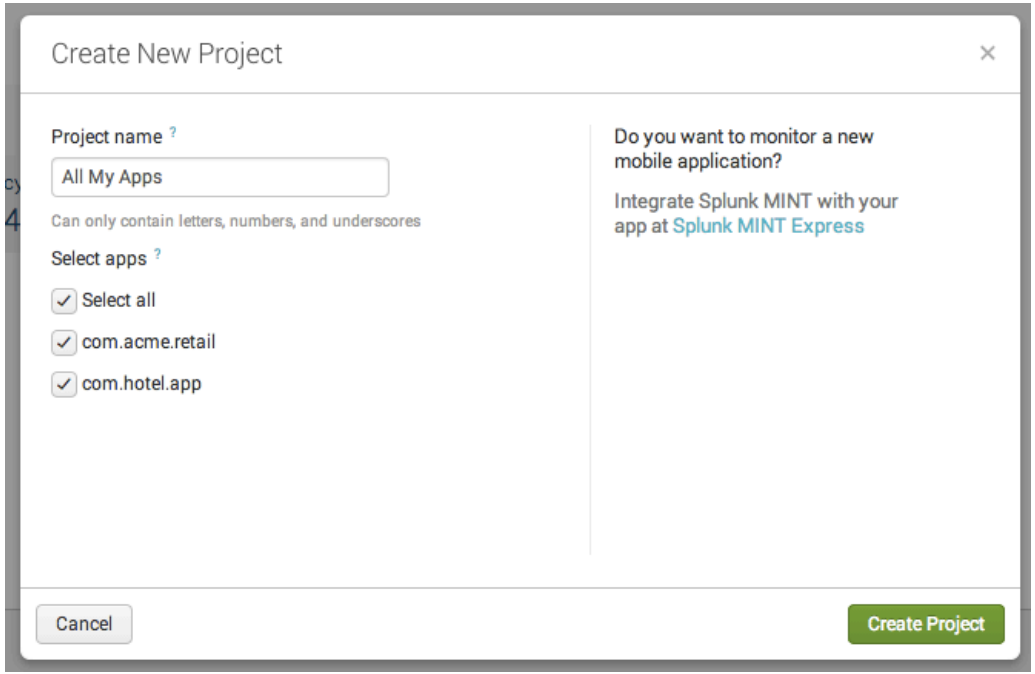
Install the MINT App

..in a distributed Splunk Environment

- You need to have a valid MINT license installed.
- After the license is installed the app will configure itself & fetch private SSL certificates for secure communication with the MINT Data Collector
- The First Time Run wizard will present two options:
  - Single instance, just click continue, wait for acceleration
  - Distributed environment:
    - Deploy the MINT TA in indexers
    - Copy local.conf & certs
    - Wait for the MINT data model to be accelerated everywhere

Create a MINT Project

Grouping or separating mobile apps



Customers may want to view data just for an app.
Example: How many users do our iOS banking app have?

Or they can group together all apps
Example: How many users do our mobile consumer banking apps have across iOS, Android and WP?

Project != App

Explain the MINT Data Model

i	13 Objects in MINT
>	All MINT
>	Usage
>	Sessions
>	Sessions Starts
>	Sessions Stops
>	Views
>	Events
>	Performance
>	Errors
>	Transactions
>	Transactions Stop
>	Transactions Start
>	Network Monitoring

- 13 data models
- 30 days acceleration
- Dashboards use data model (therefore acceleration needs to be completed!)

Beware

MINT Sourcetypes

- MINT source types:
  - mint:ping
  - mint:gnip
  - mint:trstart
  - mint:trstop
  - mint:event
  - mint:error
  - mint:network
  - mint:log
  - mint:view

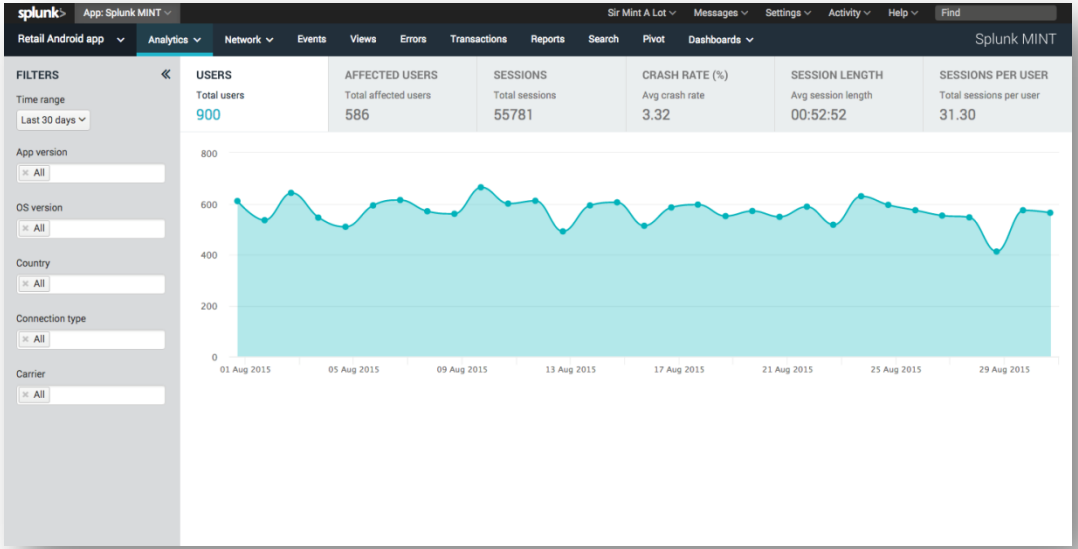
Dashboards

splunk>

User Analytics

Understand How Your Users Use Your Mobile App

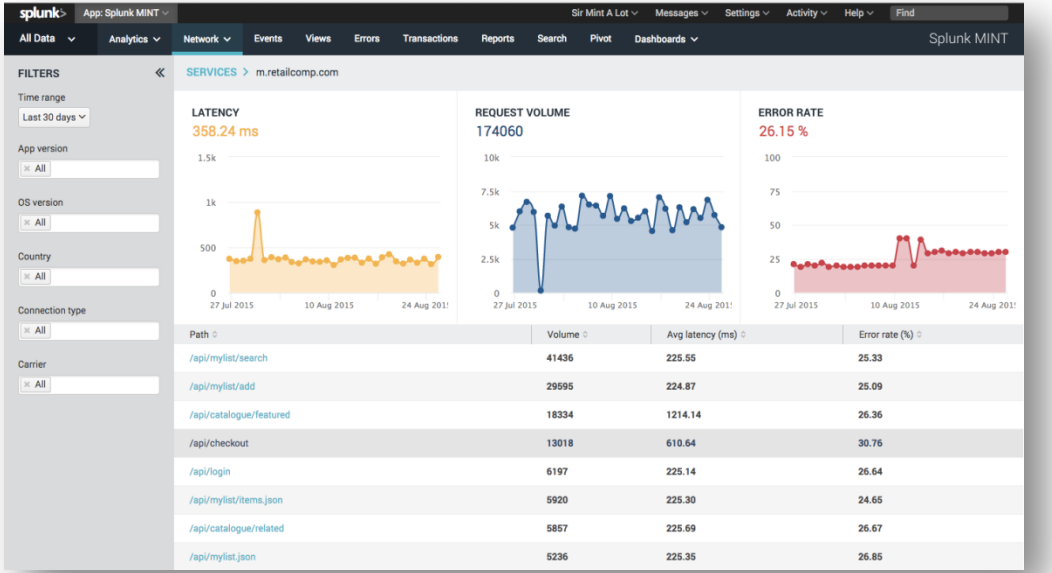
- How many users do I have?
- How many sessions do they do?
- How many have crashes?
- How often does my app crash?
- How much time is spent in my app?



Network Monitoring

Understand How Your Network Affects Your Mobile App

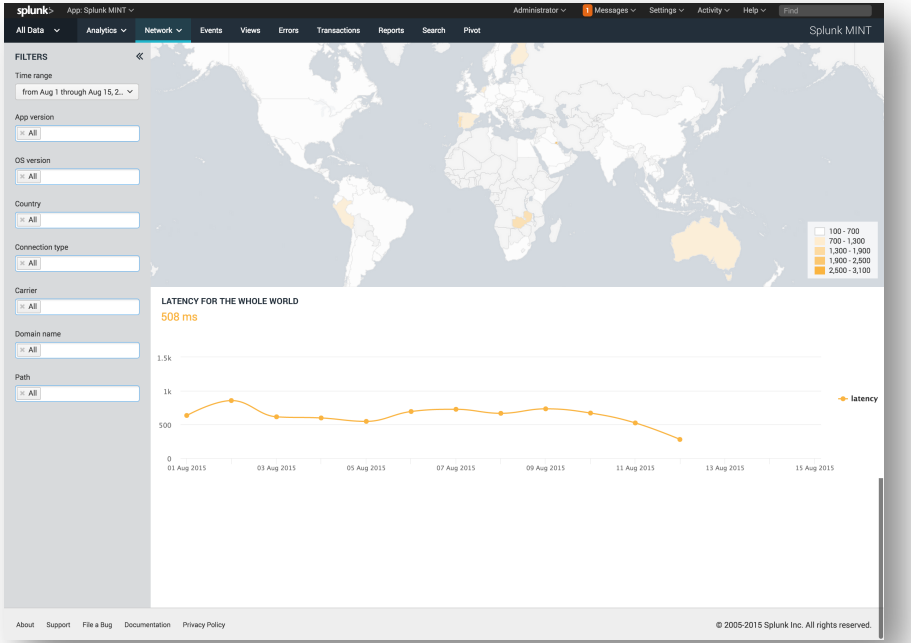
- What services does my app use?
- What is the availability of different APIs?
- What is the latency?
- What is the error rate?
- Analyze by location, connection, network



Location & Network performance

Understand the User Experience by Location

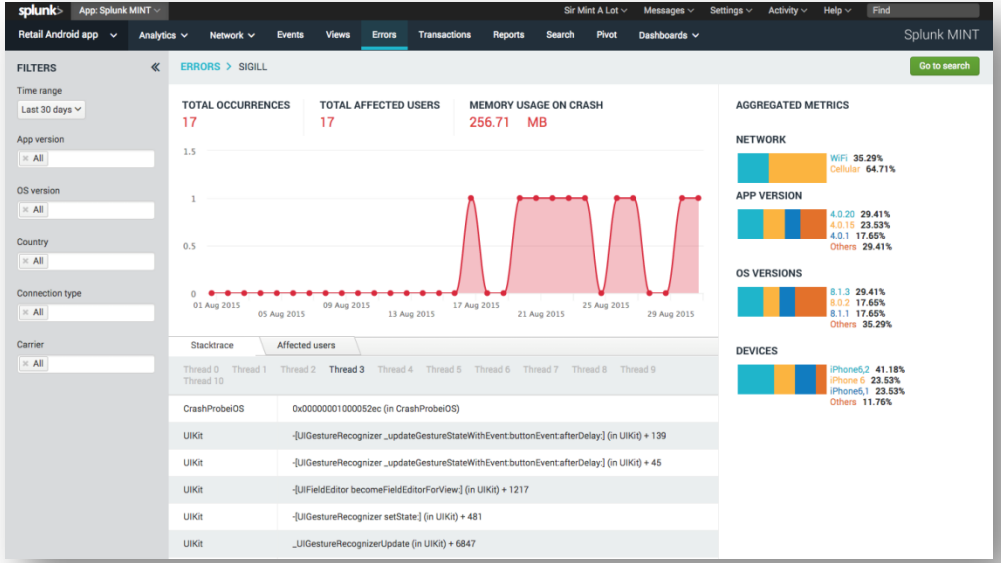
- What is the user latency by service & time of network in different countries?
- Should I invest in new datacenters?
- Should I invest in local CDN?



Crash Reporting

What Crashes are Effecting My User Base

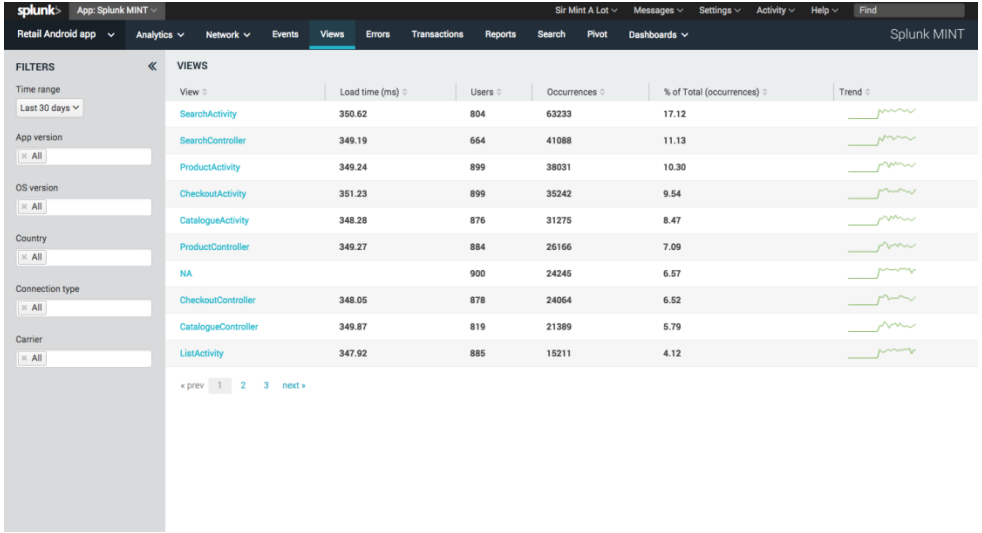
- See the complete stack trace of the errors that affect your app
- Get per error metrics on impact on user base & trends.
- Jump from aggregated to raw search
- Symbolication



View Tracking

What are My Most Used Features

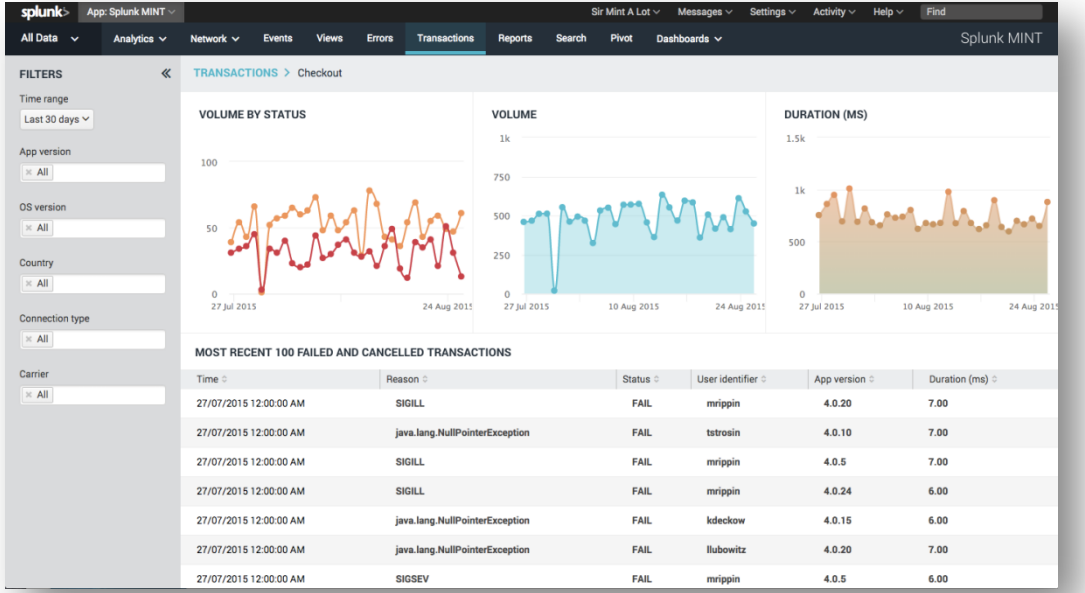
- What are the views (screens/pages) that are used the most?
- What is the rendering time?
- What other events happen within a view?



Transaction Monitoring

Monitor the Business Base Line of Your Apps

- Monitor and analyze critical business transactions
- Understand user activity by monitoring specific events and transactions
- Understand impact on business



Use Cases

splunk>

Achieve End-to-End Visibility

Use Correlations to Get Comprehensive Insights

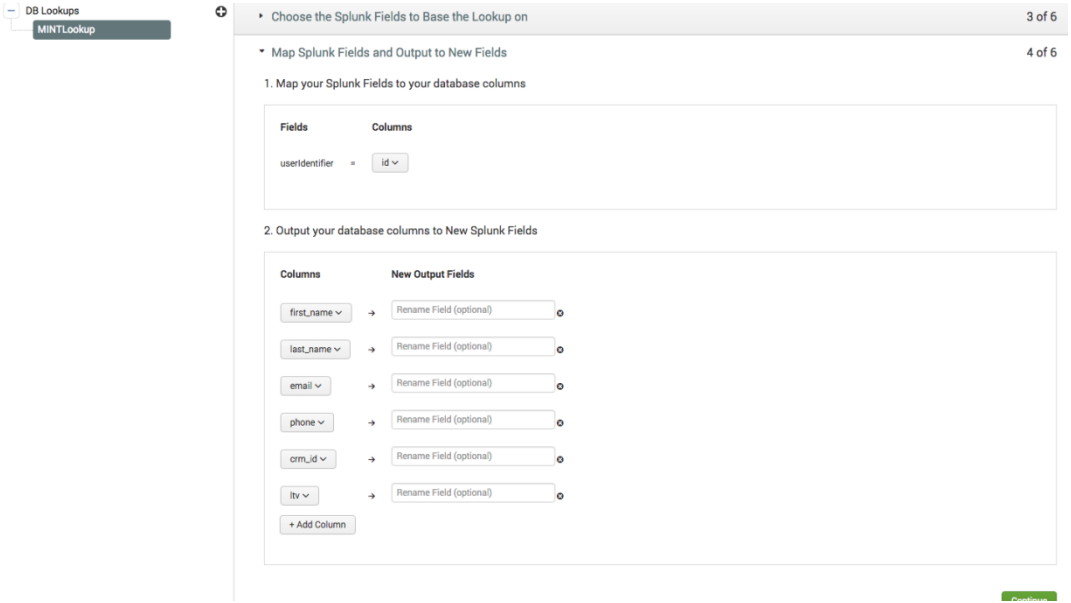
Correlate Splunk MINT data with other Operational Intelligence for end-to-end transaction analysis

Use Splunk Enterprise search capabilities to correlate and drill down into your mobile and non-mobile data

Personalized Analytics

Augment MINT Data with SQL Data Thanks to DBConnect

- Augment machine data with PII information
- Create personalized reports
- Rich analytics
- Monitor usage/issues per named user
- All in your datacenter



More than Application Metrics

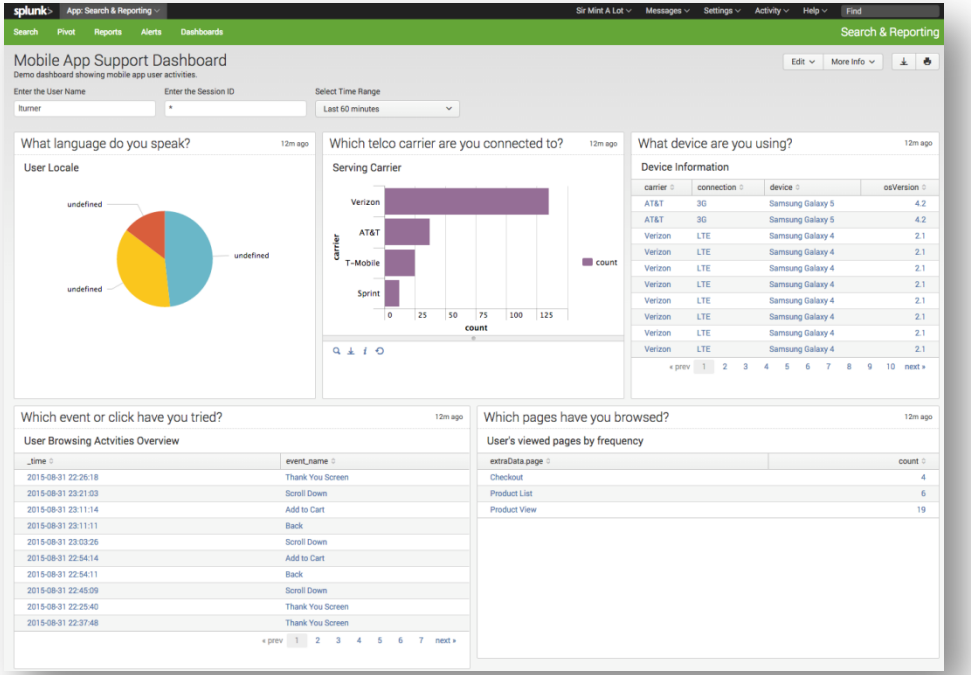
Use the Splunk MINT SDKs to Collect Metrics

- Use the MINT SDKs to capture data from phone sensors & connected devices eg iBeacon, ODB2, wearables.
- Create customized dashboards

Support

Provide Full End-User Visibility to Support Agents

- Create customized dashboards for Support agents
- Last user actions
- User attributes (device, OS, app version, network, language)
- Achieve 360 overview



Sum Up

splunk>

MINT Benefits Developers and the Business

MOBILE APP DEVELOPERS

- Immediate quality insights
- User, usage, transaction, network visibility
- Fast time-to-value with lightweight SDK

APP MANAGERS/ OPERATIONS

- Find bottlenecks across app, network, backend, APIs
- Right size capacity for transaction volumes
- Ensure performance across all channels

PRODUCT MANAGERS/ BUSINESS OWNERS

- User behavior, user experience insights
- Faster, more valuable improvements
- Omni-channel analytics

THANK YOU

splunk>