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YOUR DATA ADVENTURE

Splunk for Mobile Intelligence

Bill Emmett

Director, Solutions Marketing

Panos Papadopoulos

Director, Product Management

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Agenda

- A brief history
- Splunk MINT in a nutshell
- Introducing Splunk MINT Express
- Splunk MINT Enterprise (beta)
- Instrumenting your mobile apps
- Questions

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A Brief History

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Mobile App Delivery Challenges

FORM FACTOR, PLATFORM, INTERACTION STYLE VARIETY



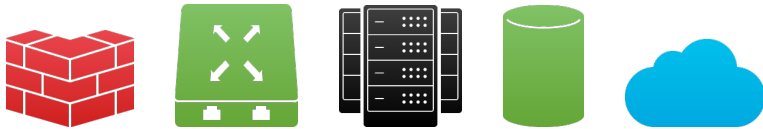
RAPID APP DEV CYCLES, BREAK-FIX NEEDS

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



INFRASTRUCTURE

- Right sizing and finding infrastructure, API and app issues



ANALYTICS

- Feature usage
- Monitoring/analyzing user behavior
- Delivering omni-channel analytics
- Mobile + Web + Desktop



Mobile App Delivery Roles Have Different Needs



MOBILE APP DEVELOPERS

How to find root cause of app crashes/poor performance?

What were users doing when issue happened?

How do I get more insight into transaction paths?



APPLICATION MANAGERS/
OPERATIONS

Is the problem with the app, the network or the backend 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?

Bugsense and Mobile Intelligence



- Founded July 2011
- Acquired September 2013
- Focuses on mobile application crash reporting, sessions, errors, and events



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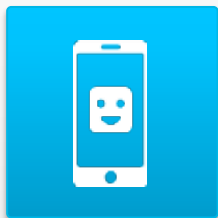
Splunk MINT
In a Nutshell

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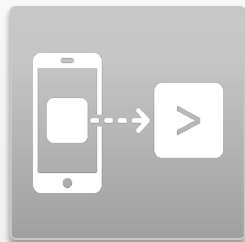
Introducing Splunk MINT

Extending Operational Intelligence to Mobile Apps

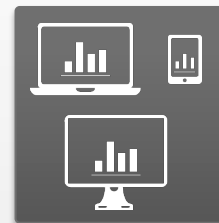
splunk > **MINT**



**Deliver Better
Performing, More
Reliable Apps**



**End-to-end
Performance and
Capacity Insights**



**Deliver Real Time
Omni-channel
Analytics**

Splunk MINT: Two Editions



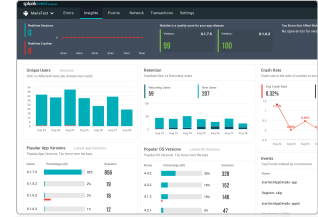
Mobile Apps with
Splunk MINT SDKs



Cloud Data
Collection

splunk > MINT **express**

- Cloud only
- Free Trial



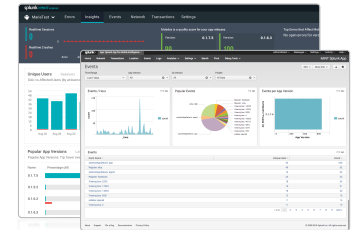
Cloud Data
Collection

splunk > MINT **enterprise**

- Splunk MINT Express
- Splunk App for MINT

+ CONNECTION TO

splunk > **enterprise**
splunk > **cloud**



Splunk Mobile Intelligence Offerings

Product Portfolio for Different Needs

Splunk MINT Express
App Availability, Performance, Usage

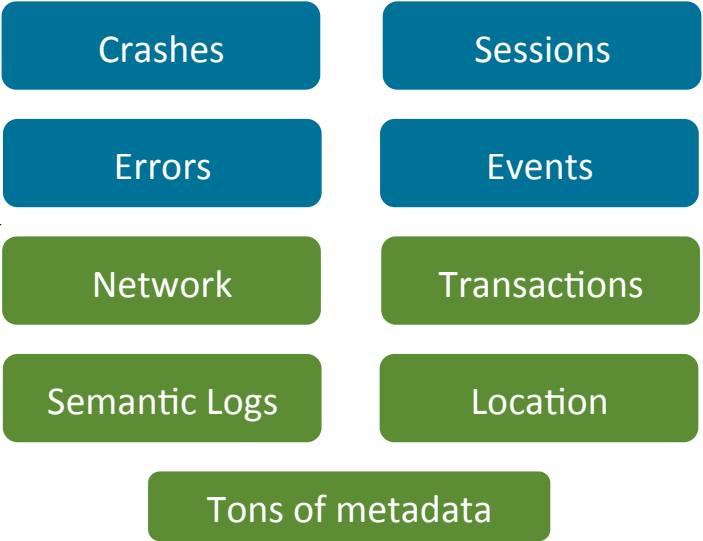
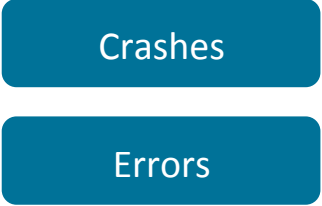
- **Rapid onboarding:** One line of SDK code
- **Cross-platform:** iOS, Android
- **Developer insights:** Detect crashes in real time
- **Network and transaction response:** Network and transaction latency and response times
- **Developer defined events:** Measure performance and user patterns based on specific user actions

Splunk MINT Enterprise
Enterprise Usage, Omni-channel Analytics

All the capabilities of MINT Express, plus:

- **Splunk Enterprise integration**
- **Splunk App for MINT with pre-built analytics like:**
 - **Advanced network monitoring:** Compare network latency by network providers/types
 - **User level analytics:** Understand what a specific user does and experiences
 - **Geo location:** Correlate app usage with location

Splunk MINT Data Types



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Introducing Splunk
MINT Express

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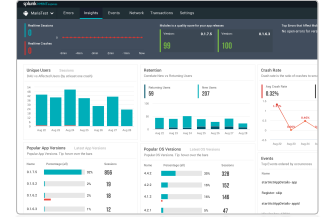
Splunk MINT Express



Mobile Apps with
Splunk MINT SDKs



- Cloud only
- Free Trial



Splunk MINT Express offers developers a fast path to mobile application intelligence. Mobile app developers can quickly instrument mobile apps and view app performance and usage information in an easy to use cloud-based service.

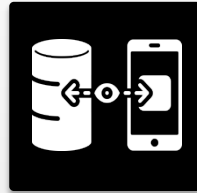
Splunk MINT Express

Deliver better performing and more reliable apps

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**Monitor Mobile App
Usage and
Performance**



**Deep Visibility into
Mobile App
Transactions**

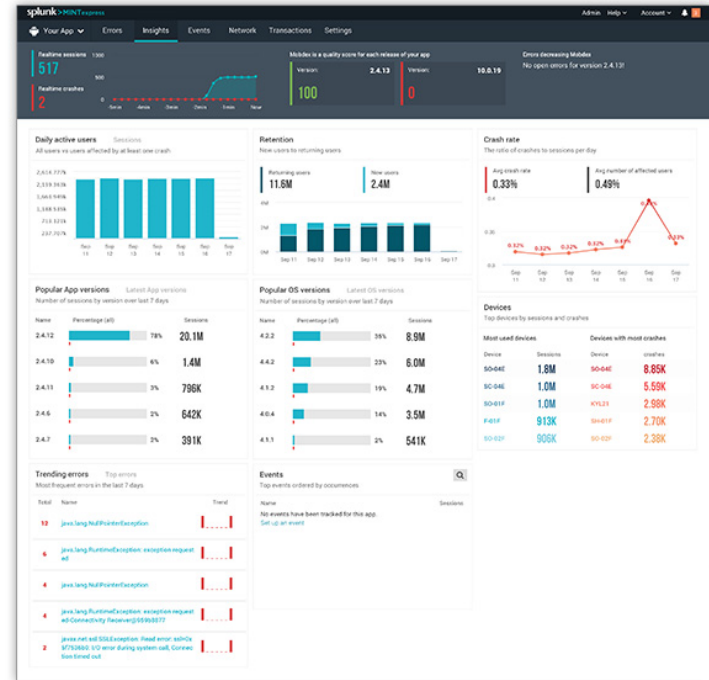


**Accelerate
Development of
Mobile Apps**

Monitor App Usage and Performance

At a glance views of mobile app usage and performance

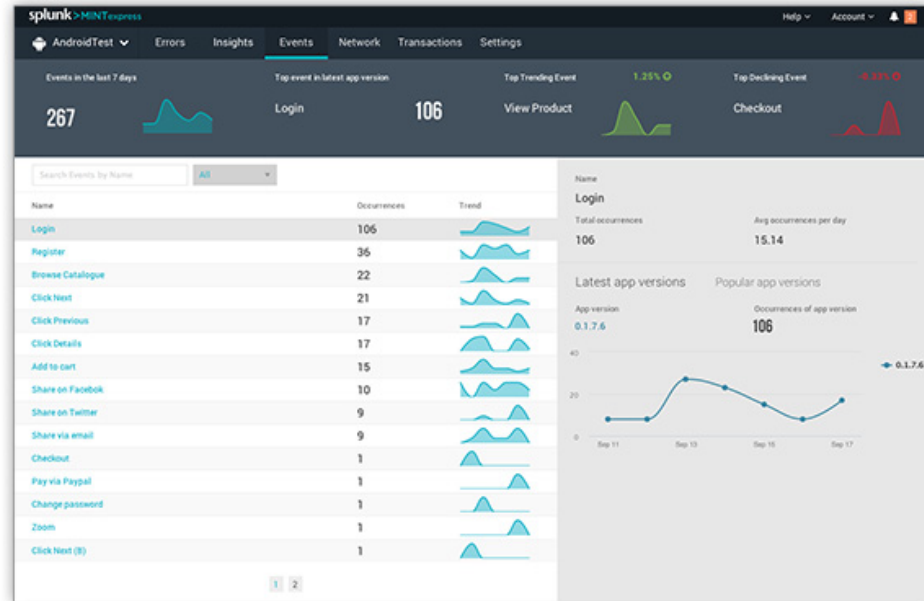
- Improve user retention by quickly identifying crashes and performance issues
- Establish whether issues are caused by an app or the network(s) apps run on
- Correlate app, OS, and device type to diagnose crash and network performance issues



Deep Visibility into Mobile App Transactions

Define what you want to measure

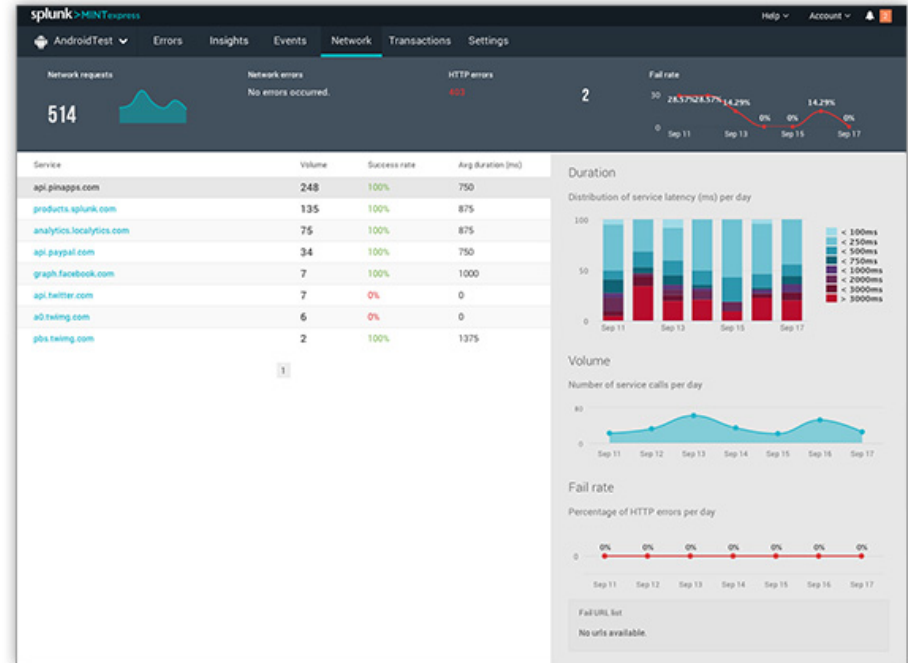
- Monitor and analyze critical business transactions
- Understand user activity by monitoring specific events and transactions
- Measure latency, volume and status codes for all HTTP calls



Deep Visibility into Mobile App Transactions

Understand how your network affects mobile apps

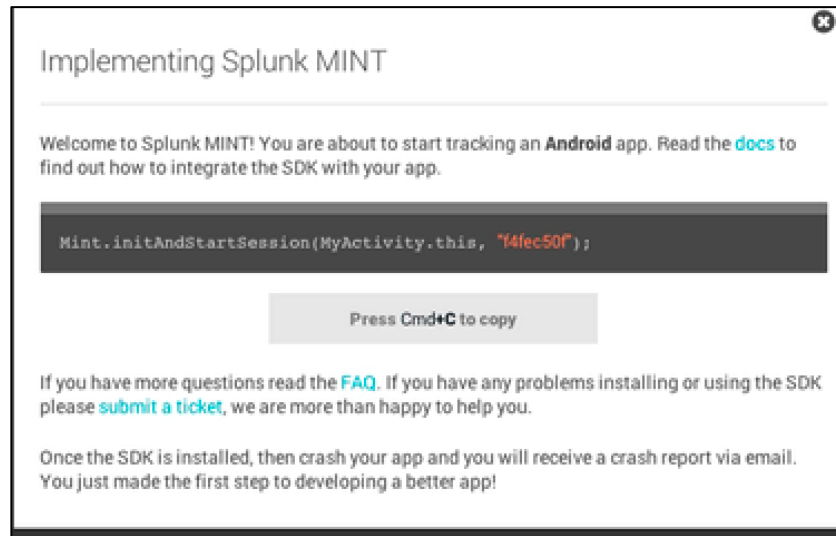
- Visualize trends in network performance
- Determine whether networks are preventing transactions for occurring
- Measure latency of network and understand its role in mobile app performance



Accelerate Development of Mobile Apps

Real-time information and integration to quickly deliver new app versions

- SDK only requires one line of code and uses minimal overhead
- Centrally monitor crashes, handled exceptions and user flow to debug faster
- Integration with popular developer tools: JIRA, Github, Hipchat, Pivotal Tracker

A screenshot of a web page titled "Implementing Splunk MINT". The page has a white background and a dark border. At the top right, there is a small "x" icon. The main heading is "Implementing Splunk MINT". Below the heading, there is a paragraph: "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." Below this paragraph is a dark grey rectangular box containing a line of code: `Mint.initAndStartSession(MyActivity.this, "f4fec50f");`. Underneath the code box is a light grey button with the text "Press Cmd+C to copy". Below the button, there is another paragraph: "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." At the bottom of the page, there is a final paragraph: "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!"

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, "f4fec50f");
```

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!

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Splunk MINT
Enterprise Beta

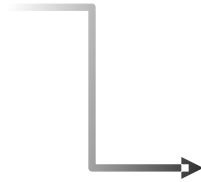
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Splunk MINT Enterprise

Splunk MINT Enterprise (Beta) builds on Splunk MINT Express by providing the ability to collect, index, search, and present mobile intelligence information in Splunk Enterprise or Splunk Cloud.



Mobile Apps with
Splunk MINT SDKs



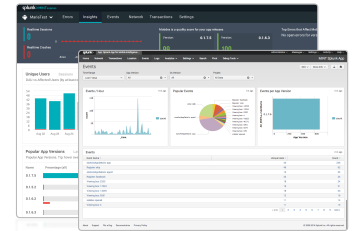
Cloud Data
Collection

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- Splunk MINT Express
- Splunk App for MINT

+ CONNECTION TO

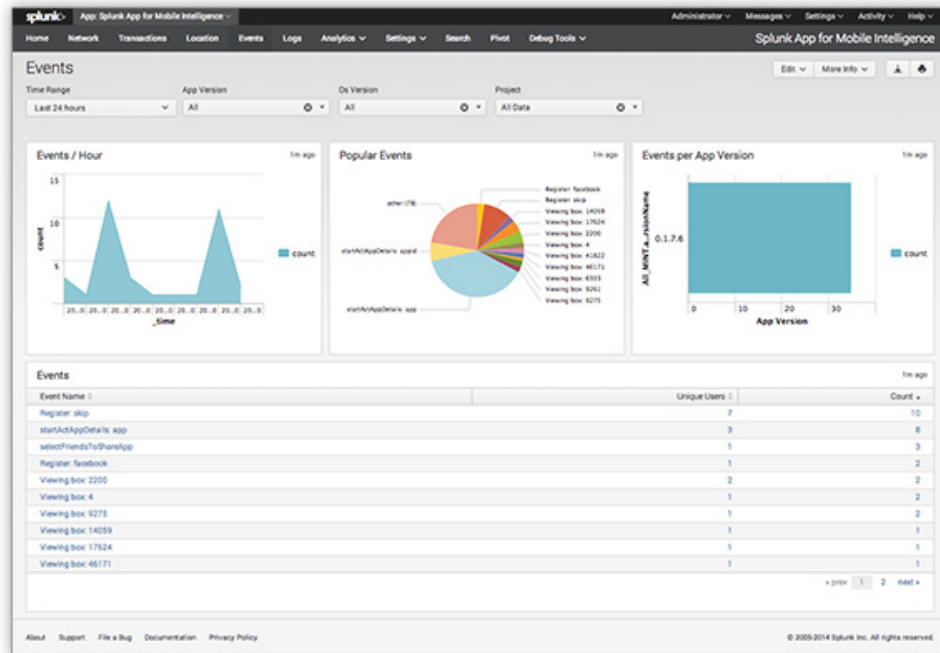
splunk > enterprise
splunk > cloud



Splunk MINT Enterprise

Mobile Operational Intelligence delivered to Splunk Enterprise

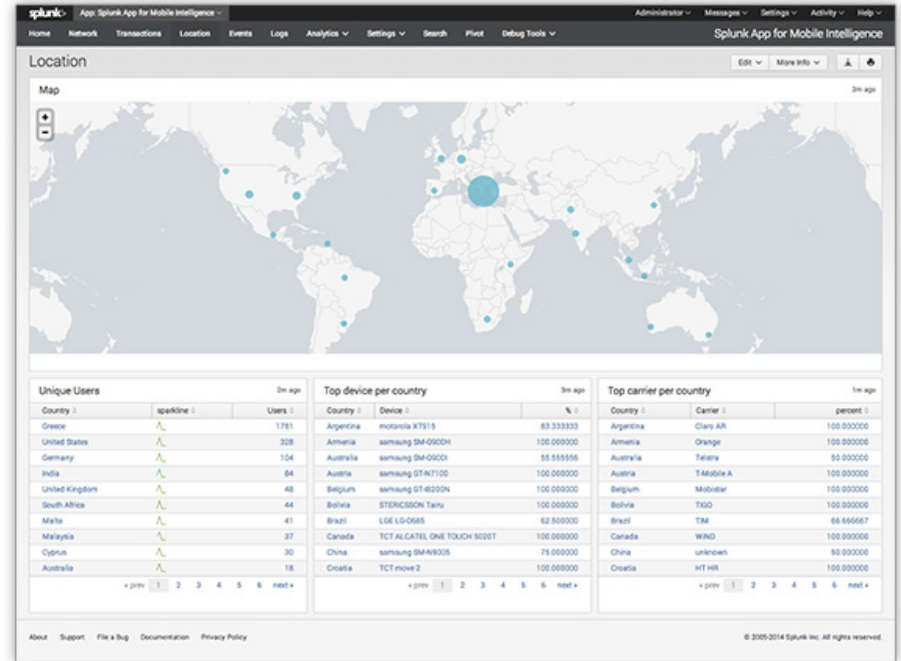
- Operational Intelligence delivered to Splunk Enterprise
- Splunk App for MINT provides out-of-the-box dashboards, data model, and connection to your mobile data
- Customize existing dashboards or correlate with other types of machine data



Splunk MINT Enterprise

Granular and expanded data collection supports additional insight

- Network Performance: Create dashboards that compare network performance by carrier (wi-fi, LTE networks, etc)
- Geolocation: Use geolocation to gain insight on usage and performance by where users are located
- User sessions: Understand how users are engaging mobile apps



Splunk MINT Enterprise

Correlate data with other sources for end-to-end transactions and omni-channel analytics

- Use data models to search, create pivot tables and dashboards to visualize mobile intelligence information
- Correlation Splunk MINT data with other operational intelligence for end-to-end transaction analysis
- Create omni-channel analytics by adding business context and correlating with other application channels

The screenshot displays the Splunk MINT Enterprise interface. At the top, the navigation bar includes 'Home', 'Network', 'Transactions', 'Events', 'Logs', 'Analytics', 'Settings', 'Search', and 'Pivot'. The main search area shows a search for 'index=mint' with 5,039 events. A pivot table for 'sourcetype' is open, showing 8 values. The table includes columns for 'Values', 'Count', and '%'. Below the table, a sample event is shown with fields like 'appVersionCode', 'appVersionName', 'carrier', 'connection', 'device', 'locale', 'osVersion', 'packageName', 'platform', 'protocol', 'punct', 'remoteIP', 'requestLength', 'responseLength', 'state', and 'uid'.

Values	Count	%
mint:network	3455	68.565%
mint:event	318	6.311%
mint:ping	314	6.231%
mint:log	287	5.696%
mint:gnip	267	5.299%
mint:trstop	180	3.572%
mint:trstart	172	3.413%
mint:error	46	0.913%

```
> 8/19/14 5:02:14.000 PM
  appVersionCode: 46
  appVersionName: 0.1.7.5
  carrier: unknown
  connection: WIFI
  device: samsung GT-P5210
  locale: GR
  osVersion: 4.2.2
  packageName: com.pinapps.android
  platform: Android
  remoteIP: 79.130.9.87
  sdkVersion: 0.1
  state: CONNECTED
  uid: f8cc365586d44382680898859e568
```

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Instrumenting your
mobile apps

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SDK instrumentation

- Download the Splunk MINT SDKs
- Documentation for Splunk MINT SDKs:
<http://docs.splunk.com/Documentation/MintSDKs>
- Recompile/deliver apps
- That's it!

Example of SDK code

Android

```
Mint.initAndStartSession(Context, "APIKEY");
```

iOS

```
[[Mint sharedInstance] initAndStartSession@"API_KEY");
```

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Questions

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Getting Started with Splunk MINT

2 minutes to register + 1 line of SDK code = better performing apps!

- Sign up for 6 months of of Splunk MINT Express – FREE!
 - <http://mint.splunk.com/conf2014offer>
- Download the Splunk MINT SDKs
- Deliver new Splunk MINT Enabled apps
- Request Splunk MINT Enterprise Beta Access
<http://www.splunk.com/goto/mintbeta>

The screenshot shows the 'Get started with MINT!' registration page. The header includes the Splunk logo and 'MINT Express'. The main heading is 'Get started with MINT!' with a sub-heading 'It only takes 2 minutes to get insights for your mobile apps'. The form contains several input fields: 'First name*' (filled with 'Panos'), 'Last Name*' (filled with 'Papadopoulos'), 'Email*' (filled with 'panos@splunk'), 'Company*' (empty), 'Password*' (empty), 'Re-type password*' (empty), 'Address' (empty), 'ZIP / Postal code*' (empty), 'Country*' (dropdown menu showing 'Choose a Country'), and 'Phone' (empty). A checkbox is present with the text 'Clicking "Sign up for free", you are agreeing to our Terms of Use and Privacy Terms'. Below the form is a green button labeled 'SIGN UP FOR FREE!' and a link for 'or sign up in 5 seconds with your Google account'. At the bottom right, there is a link for 'Already have an account? Log in'. The footer contains the copyright notice: 'Copyright © 2005-2014 Splunk Inc. All rights reserved.'

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THANK YOU

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