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Working with Splunk Cloud

Best Practices and Things Best Known

Eric Six | Staff Architect

Shaun Bland | Cloud Advisory Engineer

2017/09/27 | 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.

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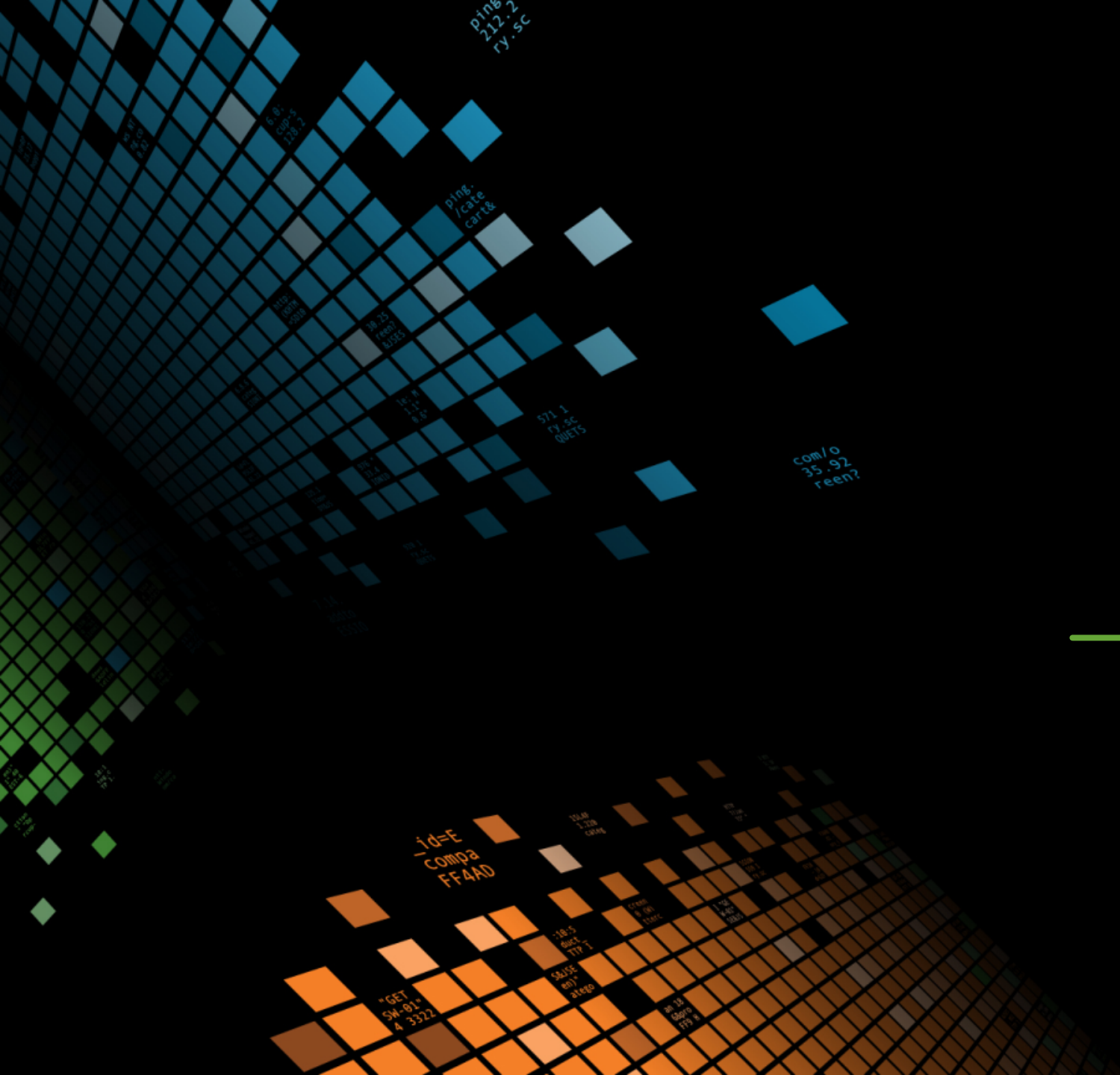

Just imagine..

The Adventure starts now…

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splunk> cloud™

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Who We Are..
Eric Six

Splunk-ing over 6 years, 4+ years as a Splunker. Before that.. A very happy customer.

Based in Japan, covering Architecture all over Asia, Australia, and New Zealand

Architecting and Deploying solutions of all sorts and sizes

- Favorite Command : ***tstats***
- Favorite App : **ITSI!**
- Hobbies : **Anything Alpine, Everything Bourbon…**
- Active Splunk Answers : ***esix_splunk***

Who We Are..
Shaun Bland

Splunk for 1.5 years. Asia (Japan and Hong Kong) for 15 years.

Back in Texas for the last 1.5 years. Two little splunkers at home

Background in Cloud, Servers, Data Centers

- Favorite thing to do: fix things
- Hobbies: Hike, bike, play poker with 7yr old
- Act as customer advocate for Splunk Cloud customers

Purpose and Agenda

- **Splunk Cloud Architecture**
  - Splunk Cloud Architecture **vs** On Premise Deployments
- **Best Practices**
  - Authentication Schemes / User Management
  - Forwarders / Aggregation Tier
  - Knowledge Object and App Management
- **New Features**
- **Working with Support**

splunk>cloud

splunk>enterprise

Hybrid Search

Search Head(s)

Indexer(s)

On Premises

Private Cloud

Public Cloud

Search Head(s)

Indexer(s)

On Premises

Private Cloud

Public Cloud

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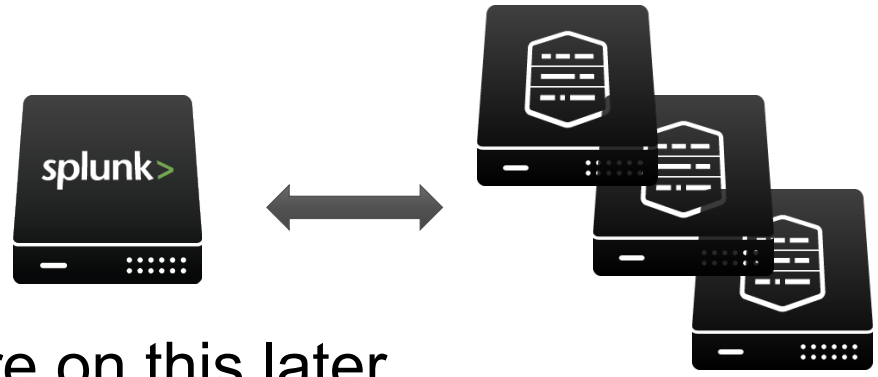
Splunk Cloud Deployments

Self-Service

- Click through to purchase!
- Up to 25gb a Day
- Single Instance!
- ***https://prd-*.cloud.splunk.com***

Managed*

- Have to contact sales..
- Full Index Cluster
- Up to **N** tb+ a Day
- Encryption at Rest (As an option!)
- **https://*.splunkcloud.com**



*More on this later….

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Managed Splunk

- Splunk's Responsibility
  - Splunk is UP and Running
  - Response Times
  - App and KO Management
  - Conf file changes

Patching and Upgrading!

- Your Responsibility
  - Search and Dashboard Management
  - Forwarder and Input Management
  - App Creation and Validation
  - Conf file creation and changes for data sources

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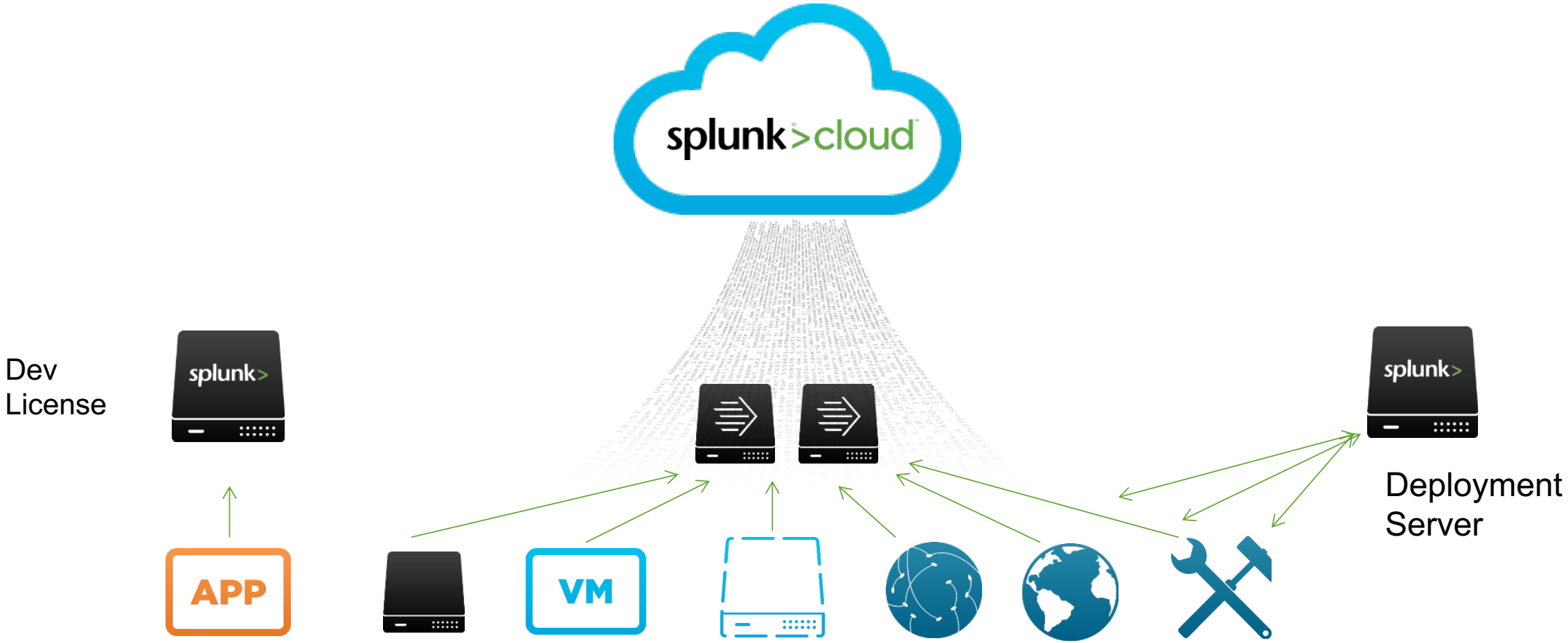
“The only true wisdom is in knowing you know nothing.”

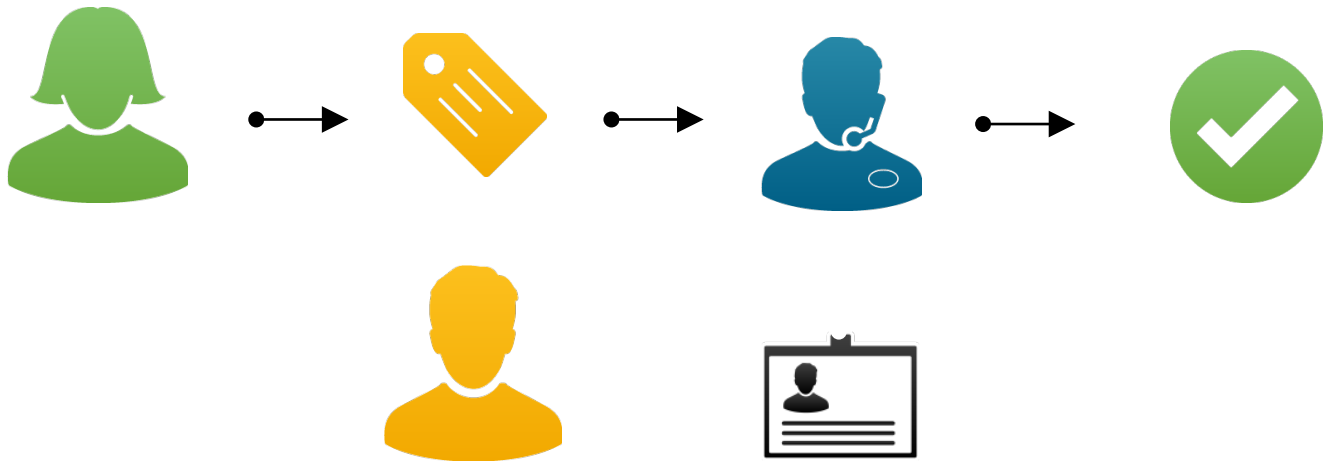
-- Socrates

Ideal Deployment..



Authentication Methods

- Supported IDP: Ping, Okta, Azure AD, ADFS, Onelogin, Optimal, CA Siteminder
- SAML 2.0 Compliant – it should work! Confirm on Splunk Docs!



Choosing your Forwarders..

Questions....

- Do I need a modular input? { DBX, AWS, EPO, OpsecLEA etc }
- Do I need to be able to Filter / Mask Data before it goes to the Cloud?
- Do I need a Deployment Server (DS) or a local License Master (LM)?

* General rule of thumb.. There are always exceptions... Ask the Experts.

Yes?

Heavy Forwarder!

No?

Universal Forwarder!

Building (better) Apps.. for the Cloud

Make Apps better… faster … stronger

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Splunk Cloud and Custom Apps

- All apps have to be vetted, and approved, before they can be Deployed!
- Vetting *DOES* takes time..

Make Apps according to Best Practices…

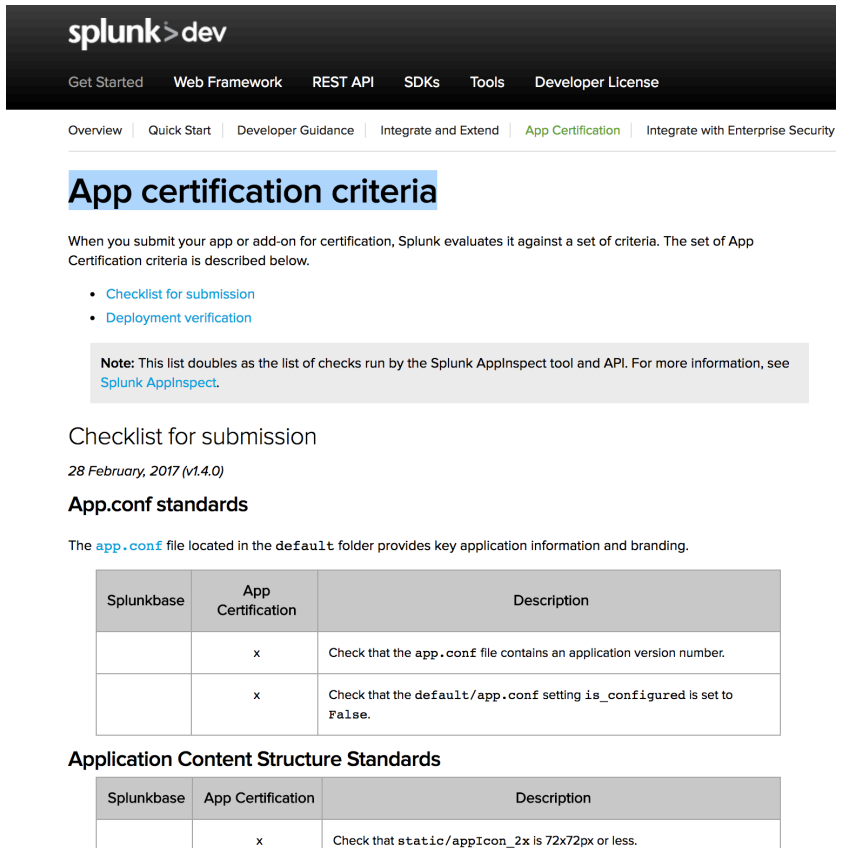
- Requirements and Best Practices --(http://dev.splunk.com/view/app-cert/SP-CAAAE85)

App Vetting Process

*Certified Apps are pre-approved

App Certification Criteria

- For 3rd party developers
- Revised set of guidelines
  - 100+ specific best-practice guidelines
- Guidelines focus on:
  - Security
  - Quality
  - Good Form
- Certified App displayed with a certification mark on Splunkbase



splunk>dev

Get Started | Web Framework | REST API | SDKs | Tools | Developer License

Overview | Quick Start | Developer Guidance | Integrate and Extend | App Certification | Integrate with Enterprise Security

App certification criteria

When you submit your app or add-on for certification, Splunk evaluates it against a set of criteria. The set of App Certification criteria is described below.

- Checklist for submission
- Deployment verification

Note: This list doubles as the list of checks run by the Splunk AppInspect tool and API. For more information, see Splunk AppInspect.

Checklist for submission

28 February, 2017 (v1.4.0)

App.conf standards

The `app.conf` file located in the `default` folder provides key application information and branding.

Splunkbase	App Certification	Description
	x	Check that the `app.conf` file contains an application version number.
	x	Check that the `default/app.conf` setting `is_configured` is set to `False`.

Application Content Structure Standards

Splunkbase	App Certification	Description
	x	Check that `static/appIcon_2x` is 72x72px or less.

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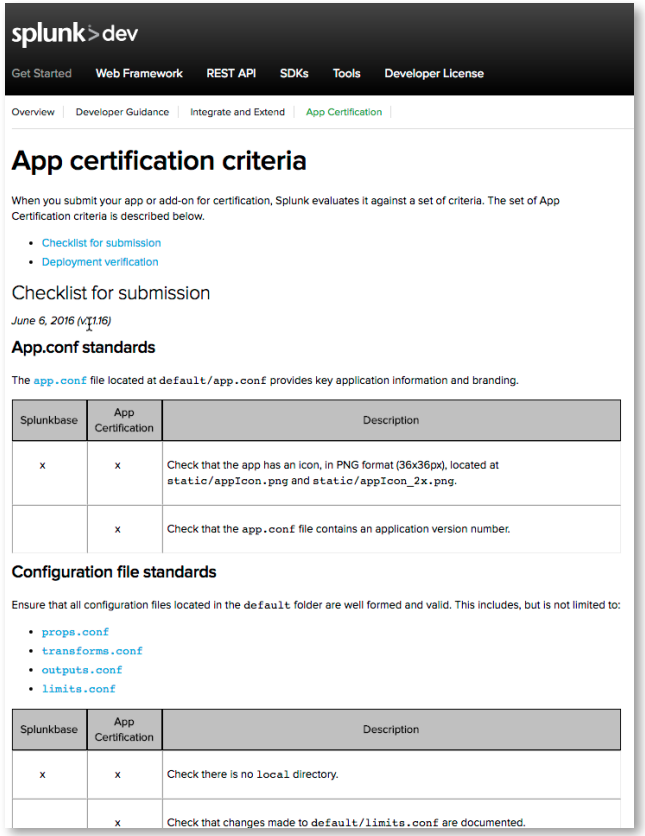
Splunk App Vetting

App Vetting is process for ensuring Apps submitted by customers meet guidelines for Splunk Cloud

App Vetting and App Certification have unified criteria on:

- ☑ Security
- ☑ Quality
- ☐ Good Form

New



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Checklist for submission

June 6, 2016 (V1.1.16)

App.conf standards

The `app.conf` file located at `default/app.conf` provides key application information and branding.

Splunkbase	App Certification	Description
x	x	Check that the app has an icon, in PNG format (36x36px), located at `static/appIcon.png` and `static/appIcon_2x.png`.
	x	Check that the `app.conf` file contains an application version number.

Configuration file standards

Ensure that all configuration files located in the `default` folder are well formed and valid. This includes, but is not limited to:

- `props.conf`
- `transforms.conf`
- `outputs.conf`
- `limits.conf`

Splunkbase	App Certification	Description
x	x	Check there is no `local` directory.
	x	Check that changes made to `default/limits.conf` are documented.

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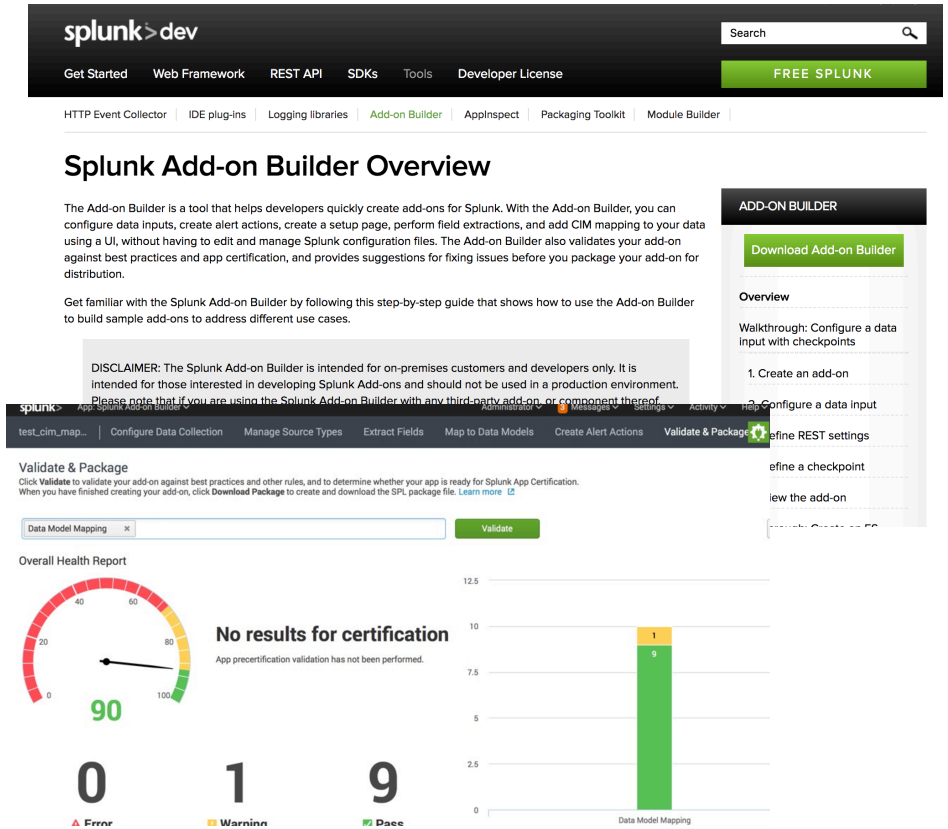
Make those Apps!

Add-on Builder is Totally Awesome!

GUI Creation of—

- Basic Data Inputs!
- FEX ! CIM Mapping
- Advanced Inputs { REST / HEC / Python etc}
- Adaptive Response Actions!



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(Some) Reasons Apps Fail..

- No Compiled Executables!
- No indexes.conf!
- All outbound communication needs to be *encrypted*!
- All objects must be within the App Context!
- Custom scripts must be limited to Splunk's internal python!
- Credentials **MUST** be *encrypted*!
- No file system / process manipulation is allows (Only lookups / KV Store)

*Full list is available at : **http://dev.splunk.com/view/app-cert/SP-CAAAE2S**

App Management..

Production
- Use a DS
- Inspect the app yourself!
- *make them your own*

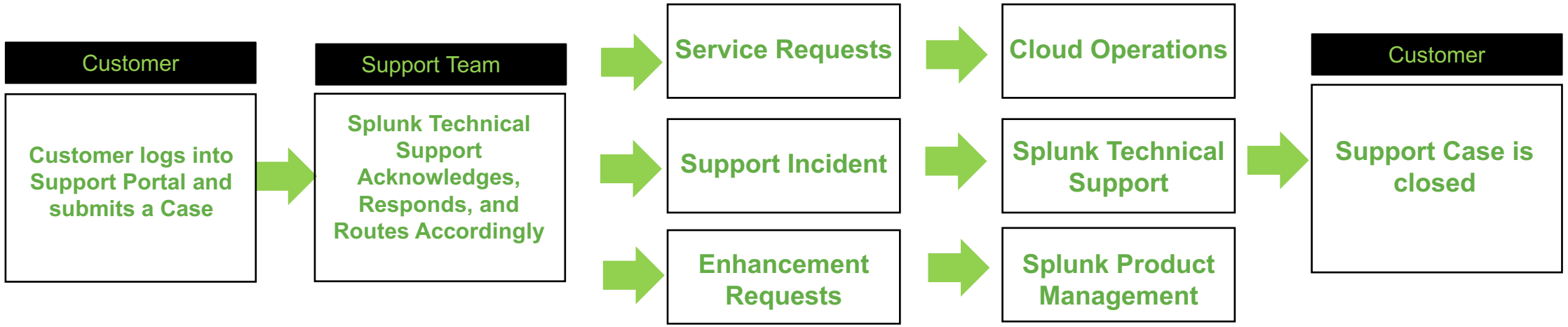
Development
- Dev environment for apps!
- TA Builder!
- Use a non-production index
- Version control
- Best Practices

Splunk Cloud Features

Splunk Cloud gets the cool stuff first!

- Metrics Store
- Search Optimization
- Dashboard Editing enhancements and Trellis Layouts
- Self-service App Installation
- And much much moooooore!

Working with Support



Its like Chemistry..

- Totally awesome!

- OR… not so much

Wrapping it up…

1. Splunk Cloud is Splunk!
2. Best Practices are the Best!
3. Splunk Cloud is Excellent!

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Important Links

Informative and Useful Links for Splunk Cloud

- Splunk Cloud Latest FAQ : https://docs.splunk.com/Documentation/SplunkCloud/latest/FAQs/FAQs
- Splunk Cloud Docs : https://docs.splunk.com/Documentation/SplunkCloud/latest/User/WelcometoSplunkCloud
- Splunk Answers : https://answers.splunk.com/topics/splunk-cloud.html
- Splunk Cloud TOS : http://www.splunk.com/en_us/legal/terms/splunk-cloud-terms-of-service.html
- Splunk Cloud Service Schedule : http://www.splunk.com/en_us/legal/splunk-cloud-service-level-schedule.html
- Splunk Cloud Maintenance Policies : http://www.splunk.com/view/SP-CAAAMTU
- https://splunk.box.com/v/cloudappsbestpractices

What Now?

Related breakout sessions and activities…

- **Introducing Splunk Validated Architectures** (Wednesday | 3:30 PM-4:15 PM)
- **Digital Transformation is Here - Progress Report and Lessons Learned from Cloud-First Initiatives in the Public Sector** (Wednesday | 4:35 PM-5:20 PM)
- **Security Ninjutsu Part Four: Attackers Be Gone in 45 Minutes of Epic SPL (** Wednesday | 2:15 PM-3:00 PM **)**
- **Customer Success Boot at Source=*pavillion**

Thank You

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