How We Deliver First Class Digital and Services to Our Customers Thanks to Splunk

...from our own true story on software journey

Philippe Ensarguet | CTO Orange Applications for Business
philippe.ensarguet@orange.com | @P_Ensarguet

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, Splunk>, Listen to Your Data, The Engine for Machine Data, Splunk Cloud, Splunk Light and SPL are trademarks and registered trademarks of Splunk Inc. in the United States and other countries. All other brand names, product names, or trademarks belong to their respective owners. © 2017 Splunk Inc. All rights reserved.
Orange Applications for Business, a Business Unit of Orange Business Services

Orange Business Services

- 3,000+ multinational customers
- 21,000+ employees dedicated to serving enterprises
- 2,000,000+ professional, small and medium-sized enterprises and business customers in France
- 6.4 billion euros in revenue 2015

Orange Applications for Business

- Software & Services company
- 3 core pillars: customer Experience data, IoT, System Integration
- 2,500+ employees
- 1,000+ managed applications in production
- 2,000 software people
- 400+ simultaneous projects

A global presence

Our Group provides services for residential customers in 28 countries and for business customers in 220 countries and territories.
Speaker Biopic

- CTO of Orange Applications for Business
- Tech and digital evangelist with 20+ years in software, services and innovation
- Core missions:
  - Corporate technical strategy (Cloud, mobile, data, bots, software production pipeline)
  - Software delivery and production (Tools, services and infrastructures)
  - Strategic partnerships management and start-up scouting
  - Product delivery industrialization
- I have a strategic observation post on the evolutions, changes, practices and tools of the Digital, Cloud and Software cultures
- I love to share my expertise and experiences with customers, partners, analysts and journalist in keynotes, sessions or seminars
Moving in a Software World

How we deliver first class digital and services to our customers thanks to Splunk
Everything Is or Becomes Software
Moving in a Software World

- Cloud, Social Networks, Mobile, Analytics, ... the common denominator is the software
- The level of demand and expectation of users is increasing constantly, in all industries
- Software provides a continuous relationship with the user or extend the life of products and goods

Software has become a critical asset to master and produce
The Daft Punk Syndrome

“Better, Cheaper, Stronger, Faster”

The true rhythm of software development in a digitalized world
Act As a Software Manufacturer

How we deliver first class digital and services to our customers thanks to Splunk
Application Lifecycle Management…

A Continuum from Ideas to Operations
Two Tracks of Software Pipeline Tooling
Corporate Stakes
Tools Deployment in every Delivery Team

▶ Secure tools set up at corporate scale and move to a self service infrastructure delivery for software production
▶ Ensure that projects do not put in place specific tools and bear the associated costs (i.e. reduce legacy and manage corporate assets)
▶ Speed-up project bootstrap and delivery
▶ Develop and harmonize practices between projects
▶ Motivate cross geographic software delivery thanks to common tools and practices

Be more efficient and productive for the best software quality
A Broad And Wide Ecosystem To Address >10 Technical Streams

Data oriented

C#

PHP

Java

Web Mobile

Cross platform Mobile

Native Mobile

C/C++

Python

node.js
How We Move Forward …

How we deliver first class digital and services to our customers thanks to Splunk
Quality, Efficiency and Productivity at Scale

1 project
10 people team doing software

Impossible to navigate by sight to target a software delivery at corporate scale

400+ simultaneous projects
2,000 people doing software
Be Natively Customer Oriented
~ 50 Dashboards to Monitor Tools and Practices

WHAT

- Identify which tools are used by projects
  - Lack of information
  - Lack of training
  - Lack of support
- Identify core practices on Project Follow-up, Automation and Tests
- Identify referents to set up tools + practices networks
- Identify projects in difficulty or danger

HOW

- Visibility at scale allow to:
  - Better anticipate project overruns
  - Take into account software quality in the full life cycle
  - Give support to operational project teams
  - Produce in a better and at a more sustainable pace
  - Provide live insights and feedbacks to tools owners

WHY
What We Have Done (At Scale) To Move Forward

The Time Line

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Ecosystems (C#, Java, PHP, ...)</th>
<th>Number of Software developers</th>
<th>Number of corp. tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3</td>
<td>500</td>
<td>2</td>
</tr>
<tr>
<td>2012</td>
<td>4</td>
<td>1000</td>
<td>6</td>
</tr>
<tr>
<td>2014</td>
<td>8</td>
<td>1250</td>
<td>10</td>
</tr>
<tr>
<td>2016</td>
<td>8</td>
<td>2000</td>
<td>12</td>
</tr>
<tr>
<td>2017</td>
<td>12</td>
<td>2000+ x ?</td>
<td>14 + x ?</td>
</tr>
</tbody>
</table>

- First approach for corporate software tooling
- End-to-End corporate software tooling
- Extension of corporate software tooling
- First move to measure culture with ELK: failure
- Real time software tools monitoring with Splunk
- Practices monitoring + First ML try outs
- Selfcare + Automation = As a services
- Tools
- Expert pairing
- Global support
- Selfcare
- Project-based empowerment

Age of Software tooling

Age of Tools monitoring

Age of Practice monitoring

Mainly manual provisioning

Splunk Conference 2017
What We Have Done (At Scale) To Move Forward

The Big Idea

Tools
- Store
- Financial ERP
- Atlassian JIRA
- SVN
- Git
- Jenkins
- Squash
- TFS
- SonarQube
- JFrog Artifactory
- ...

Connections
- REST API
- Forwarder

Business
- Process
- Scripts

Platforms
- Splunk Single Pre-Prod platform
- Splunk Cluster Production platform

KPI
- Project at lowest level
# Tools Portfolio Follow-Up

Track Audience to Align your Training, Support and Information at Scale

<table>
<thead>
<tr>
<th>Tool Name</th>
<th># of distincts users / month</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS</td>
<td>534 +19</td>
</tr>
<tr>
<td>Confluence</td>
<td>166 -45</td>
</tr>
<tr>
<td>Jira</td>
<td>1005 -101</td>
</tr>
<tr>
<td>SVN</td>
<td>337 -222</td>
</tr>
<tr>
<td>Jenkins</td>
<td>51 -11</td>
</tr>
<tr>
<td>Sonar</td>
<td>23 -4</td>
</tr>
<tr>
<td>Artifactory</td>
<td>177 -25</td>
</tr>
<tr>
<td>Squash-TM</td>
<td>66 -12</td>
</tr>
</tbody>
</table>

Global trends

Trends vs month n-1

# of distincts users / month

Tool name
Capacity Planning (ex: Artifactory)

Understand the Real Use of Tools to Take Decision and Plan for Future
Practices Follow-Up
Follow Which Tools are Really Used on Projects and their Trends in Practices
Depreciated Assets and Legacy Management
Monitor Old Tools to Promote New Ones
What’s Next on the List?
Toward a Continuous Improvement Process

▶ Open KPIs and dashboards to projects

▶ Extend Build perimeter monitoring to Run ecosystem

▶ Tools practices natively monitored to identify impacts and benefits on projects

▶ Moving to machine learning to detect abnormal software patterns and weak signals
Conclusion

How we deliver first class digital and services to our customers thanks to Splunk
Feedback from the Trenches
Before, we had feelings, today we have facts

- Move to measurement culture to continuously improve your software journey
- KPI and dashboards on real projects data are enhanced communication and dialogue tools to make the right decision
- Tools (1st step) are much simpler to monitor and manage but value is on practices (2nd step)
- A sustainable step-by-step approach that enriches the global data value
- Introduction of ML must help monitoring trends for better decision making

Valuable ROI with Splunk (time invested + price / results)
If I Have Some Advice To Share…
To Produce Software at Scale

► Start **SMALL** and Think **BIG**
  - Add one tool after another… the more you have, the best value you will benefit

► Focus on **Tools** then on **Practices**
  - Target first KPI and dashboards on **tools portfolio usage** to ensure that tools are used at scale
    - Drive transformation with the good level of training, support and information to the dev team
  - To embrace **practices** once tools are used at state of the art practices

► **A progressive** dashboards and KPI **production**
  - Tools Inventory >> Capacity Planning >> Audience >> Software Activities >> 360° project overview >> Practices

► **Break silos and correlate information** between tools to have the global picture on your software delivery
Thank You

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