CLOUD FOUNDRY SUMMIT 2017

OCTOBER 11-12
SWITZERLAND

FREEDOM TO CREATE
Cloud Foundry Monitoring:
How to Never Leave Your Deployment Unattended
Let me introduce myself

Anton Soroko
Cloud Foundry/DevOps Engineer
Altoros
Agenda

- IaaS
- BOSH
- Cloud Foundry
- Services
- Applications
- Updates
- Security
- Drills
- Tips
- Q&A
IaaS

- Monitor availability of your IaaS
  - Availability of your DCs/AZs
  - Metrics and alerts for internal metrics
- Monitor health of your VMs
  - CPU/mem/I/O/network/etc.
  - Availability
BOSH

- Configure email notifications
- Configure log forwarding
- Collect metrics (BOSH Health Monitor)

https://bosh.io/docs/monitoring.html
https://bosh.io/docs/hm-config.html
https://github.com/cloudfoundry/bosh-hm-forwarder
Cloud Foundry

- Collect logs (platform and apps)
- Collect metrics (Firehose, metrics collectors)
- Set up alerts based on logs and metrics
- Set up URL checks (CC API, UAA, etc.)

https://docs.cloudfoundry.org/loggregator/architecture.html
https://docs.cloudfoundry.org/running/all_metrics.html
https://docs.pivotal.io/pivotalcf/1-12/monitoring/metrics.html
https://www.altoros.com/blog/cloud-foundry-deployment-metrics-that-matter-most
Services

- Collect metrics
- Set up alerts based on vendor’s recommendations
Apps

- Set up URL checks
- Collect Metrics
  - Instrument your code and send metrics to a TSDB
  - Or use an APM
- Collect logs

https://docs.cloudfoundry.org/loggregator/architecture.html
https://docs.cloudfoundry.org/devguide/services/log-management.html
Updates

- New services
- New stemcells
- Consider using CI for updates
  - Concourse
  - CI tool of your choice
Security

- CVE

https://www.cloudfoundry.org/category/security/
Drills

It is reasonable to simulate:

- Crash of specific VMs
- DC outages
- Network issues
Tips

- Ensure a sufficient coverage, but refrain from overdoing it (too many alerts/metrics will create information noise)
- Don’t forget to add new specific cases when you run into them
  - Also consider: KB, postmortems
- Create alerts for at least basic use cases and metrics
Altoros Heartbeat for PCF

https://www.altoros.com/heartbeat/
https://network.pivotal.io/products/altoros-heartbeat
Altoros Log Search for PCF

https://network.pivotal.io/products/altoros-log-search
Q&A

Thank you!

Anton Soroko
anton.soroko@altoros.com
https://www.altoros.com/heartbeat/