

AWS in and out

A quick Journey through Amazon Web Services
(Part 1)

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Dev*Ops At Tpaga



Elastic Beanstalk

- Artifact management (rollback and versioning)
- It creates useful AWS resources like LB/ ASG so you can "scale" your Application without knowing about infra and deal with the details later
- Poor monitoring (Cloudwatch integration across services still evolving)
- Rolling and immutable releases
- Try new stuff like ec2 spot very limited
- CLI friendly :3 (eb clone , eb upgrade)



Elastic Beanstalk for a



HEROKU user

- `eb logs MyFarm`
- `eb create MyFarm`
- `eb deploy MyFarm*`
- `heroku logs --app MyFarm --tail`
- `heroku create MyFarm`
- * not on heroku but still cool

AWS System Manager

- Agent (no SSH, but ssm sessions)
- Automations (run scripts from ssm API/CLI, TAG friendly)
- Parameters (parameter store saves strings and secrets**)
- Packages* (distribute your software)

AWS VPN for users?

- IPSEC and related.. ok for corporate stuff.. but not for everyday user...
- There is VPN Service (OpenVPN) BUT still new and only integrates with AD (do not want!) also bit \$\$\$ per user

Wireguard

- Wireguard tunnels are quick to setup.
- Server key
- Client key
- Store parameters and secrets on AWS System Manager (SSM) Parameter Store
- CLI Friendly so you can integrate on bash scripts
- `aws ssm put-parameter ...`
- `aws ssm get-parameter ...`

Step 1 from cli

```
aws ssm put-parameter --region us-east-1 --name "service_stored_value" --  
type "SecureString" --value "XXXXXXXXXXXXXXXXXXXXxxxxxxxxxx="
```


Run this from ec2 userdata

```
#!/bin/sh
```

```
yum install awesomeservice
```

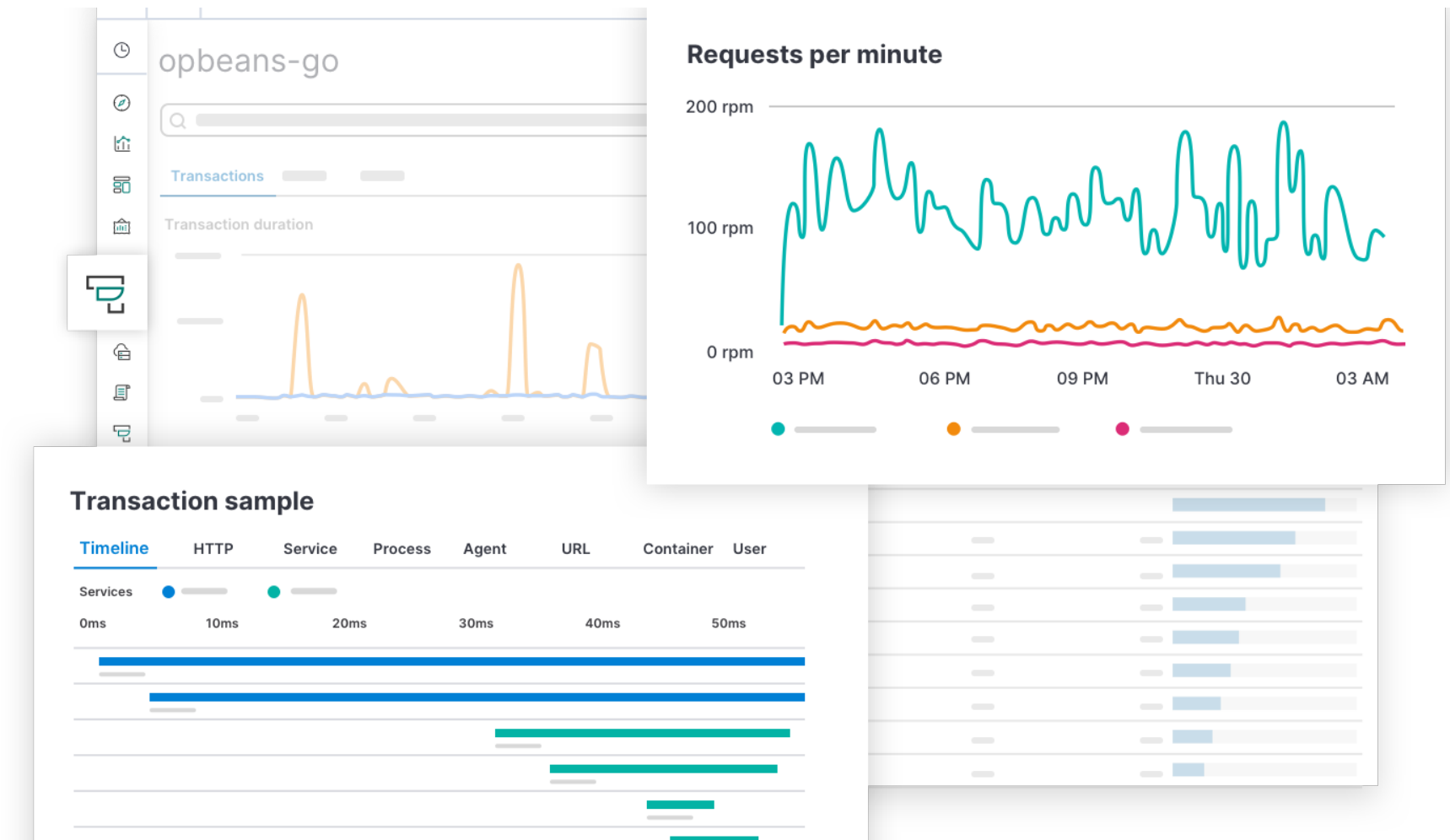
```
export service_config_value=$(aws ssm get-parameters --names  
"service_stored_value" --query "Parameters[*].{Value:Value}" --output  
text --with-decryption --region us-east-1)
```

```
sed -i 's|placeholder_value|$service_config_value|g' /etc/some/  
file.conf
```

```
service awesome service restart
```

Elastic APM

- Elasticsearch
- Kibana
- Agents
 - Metricbeats
 - APM
 - Filebeat



Java .NET Go Django Rails Node.js

- Good to get started on getting insight from application
 - Diagnostics
 - Measure response times
 - Error
 - Track sessions
- \$\$\$ Features
 - Machine Learning for anomaly detection
 - Alerting
 - Various management options

<https://github.com/kristianpaul/elk-django-apm>

AWS Elasticsearch?

- Works for a document DB
- OpenDistro on the works... APM still missing*
- Integration with Cloudwatch? (not just streaming data)

Thats it for now