

Contribfest:
Zero to Published Gadget
eBPF for Everyone with Inspektor Gadget



Speakers



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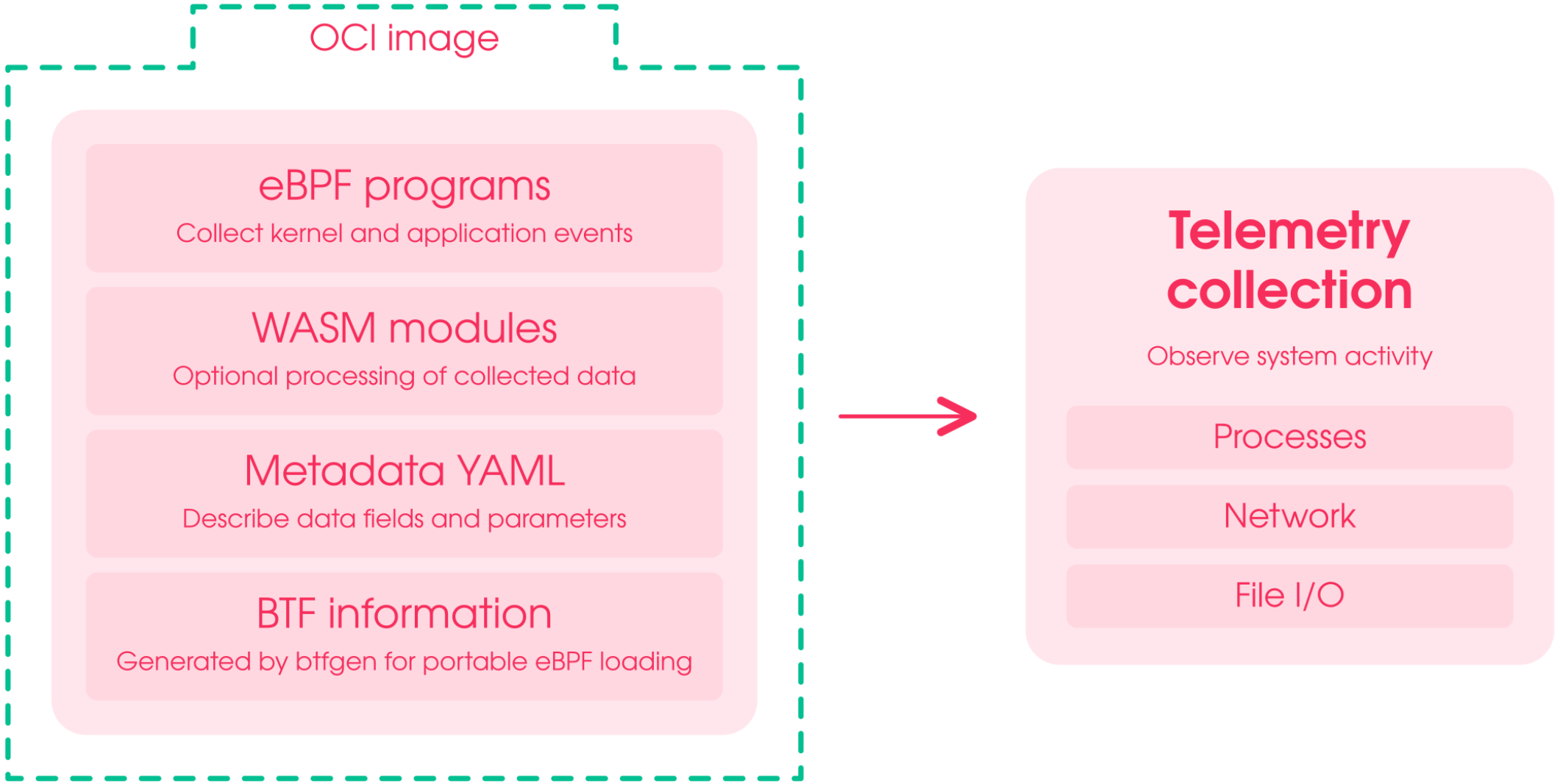
Senior Software Engineer @ Microsoft

Agenda

1. Introducing Gadgets
2. Inspektor Gadget Framework
3. Writing and Publishing Your First Gadget
4. Conclusion

Gadget

Inspektor Gadget



Running a Gadget (Kubernetes)

Inspektor Gadget

```
$ kubectl gadget run trace_dns -A
```

K8S.NAMESPACE	K8S.PODNAME	COMM	QR	QTYPE	NAME	RCODE	LATENCY_NS	ADDRESSES
default	dns-traffic-generator	nslookup	R	A	kubernetes.default.svc.cluster.local.	Success	410.72us	10.0.0.1

Workload context

Namespace and pod added by the framework's Kubernetes enrichment.

DNS details

nslookup / R = response / A = IPv4
NAME identifies the domain queried.

Result and latency

Success / 410.72 us / answer 10.0.0.1
Latency is measured at the client.

Selected columns from one real response; latency in microseconds (us)

Running a Gadget (Linux)

Inspektor Gadget

```
$ sudo ig run trace_dns
```

RUNTIME.CONTAINERNAME
dns-client

COMM	QR	QTYPE	NAME
nslookup	R	A	example.org.

RCODE	LATENCY_NS	ADDRESSES
Success	410.72us	192.0.2.1







Container context

Container name added by the runtime enricher; no Kubernetes required.

DNS details

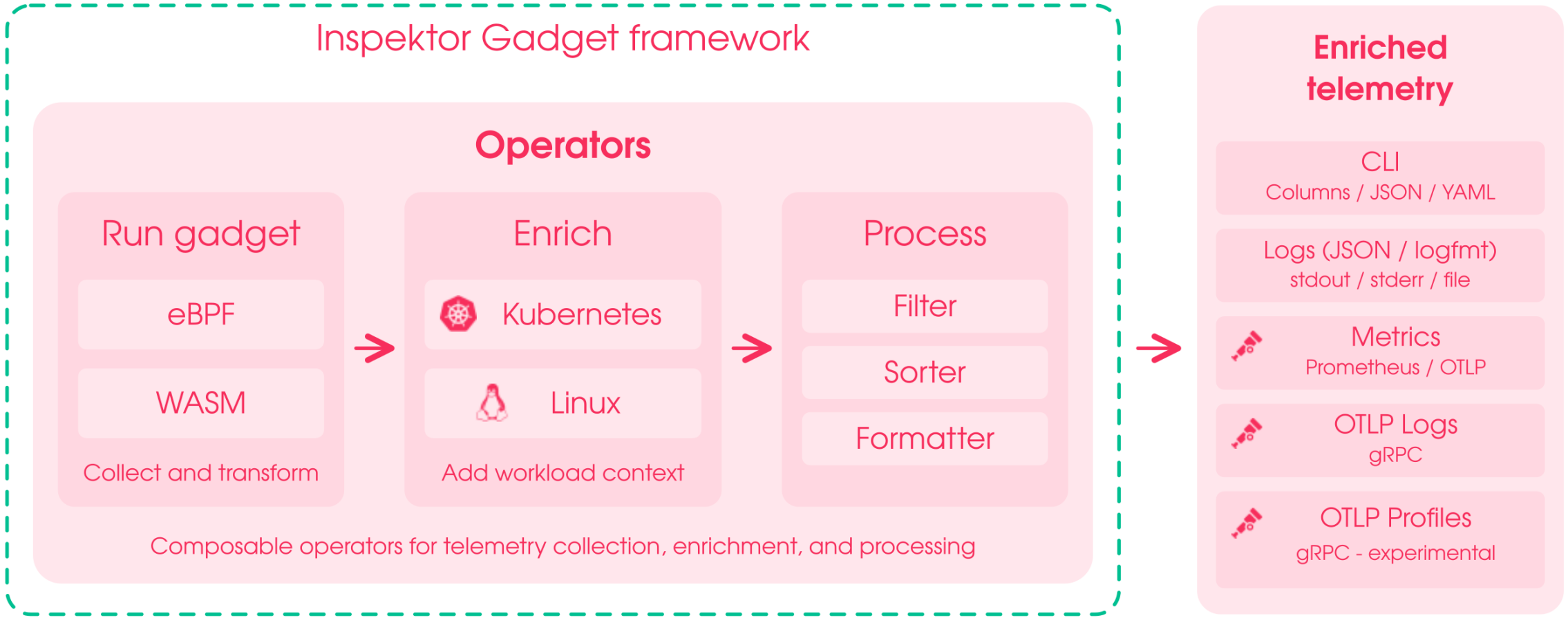
nslookup / R = response / A = IPv4
NAME identifies the domain queried.

Result and latency

Success / 410.72 us / 192.0.2.1
Latency is measured at the client.

Illustrative event; column names verified locally; latency in microseconds (us)

Inspektor Gadget Framework



The goal of this presentation is to help you publish/run your first Gadget

Publish Your First Gadget

Inspektor Gadget

- Open the GitHub template: https://aka.ms/ig-gadget-template
- Use the template to create your repository
- Name your gadget: top_syscall
- In new repository: Actions > Initialize gadget > Run workflow (data source type=**map-iterator**)
- Open issue and follow steps there: https://github.com/inspektor-gadget/gadget-template/issues/10



Thank you