IN SOFTWARE WE TRUST

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IN SOFTWARE
(& AUTOMATED PROCESSES & SEPARATION OF DUTIES & APIS)
WE TRUST

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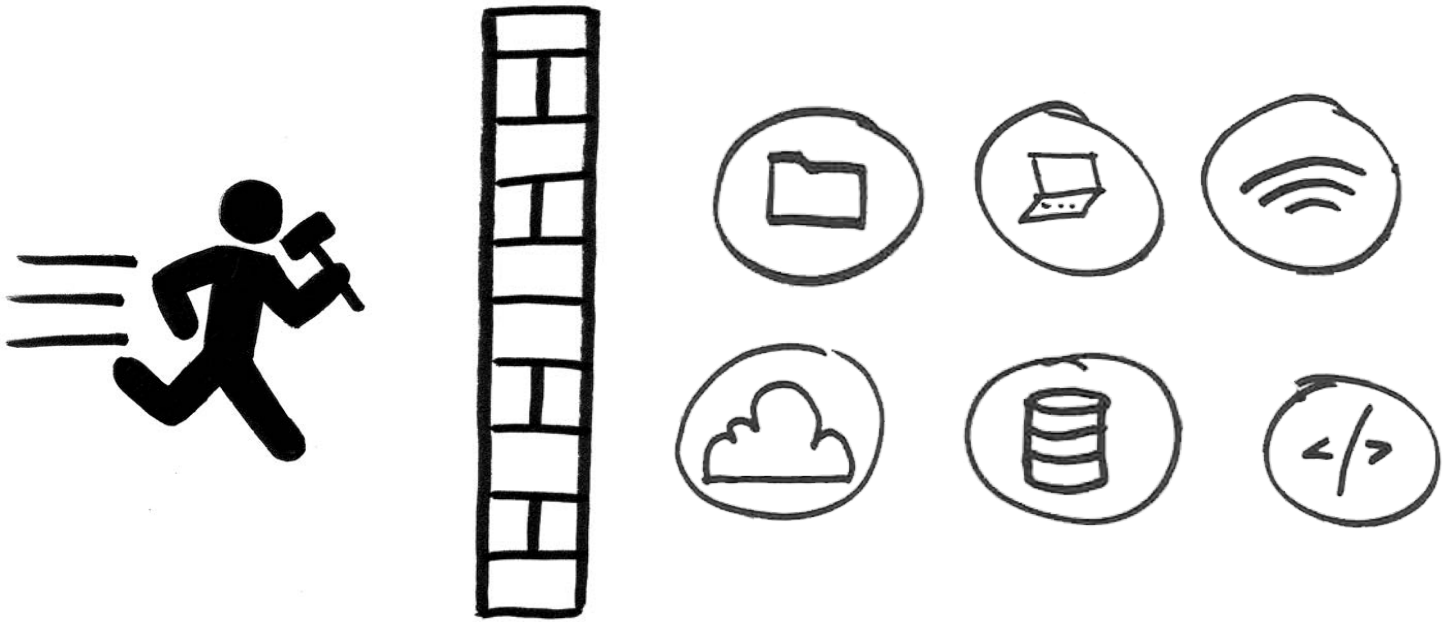
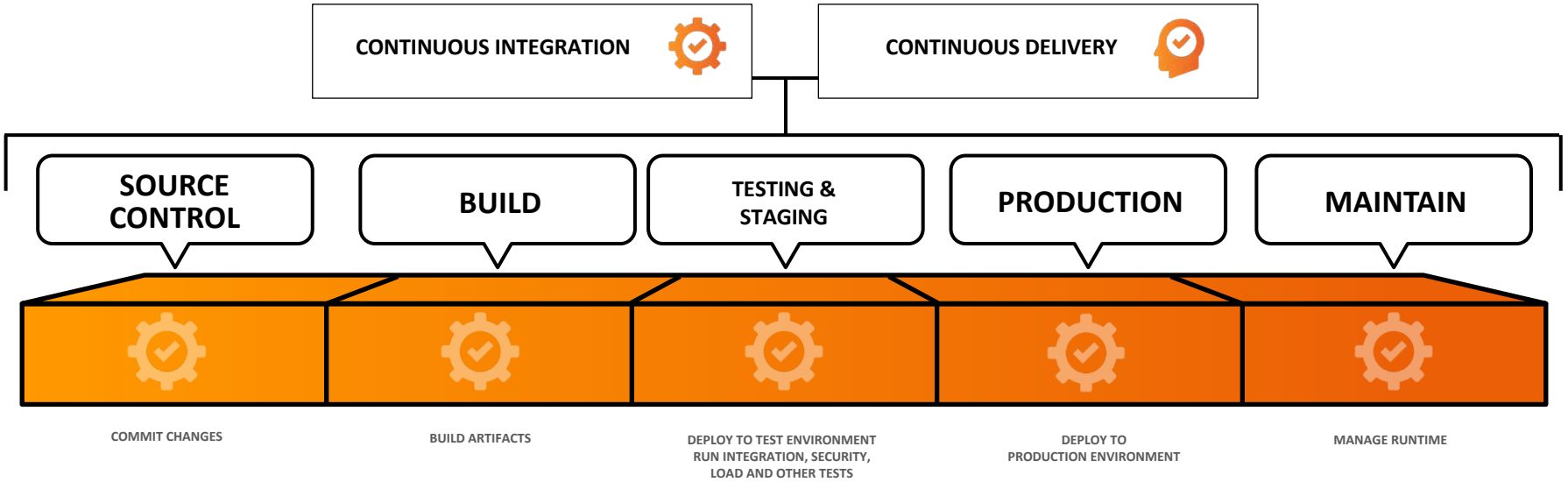
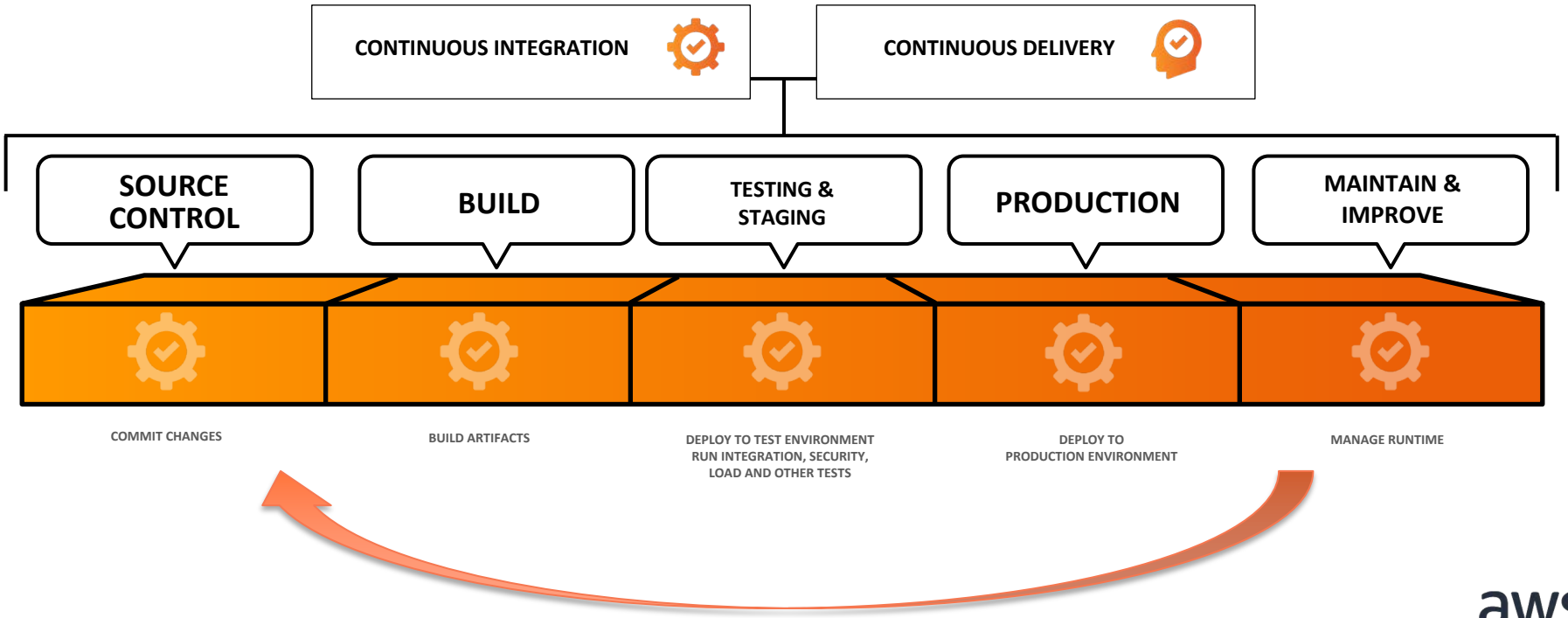
Get Humans (Farther) Away from Data



Security in the CI/CD Pipeline



Security in the CI/CD Pipeline

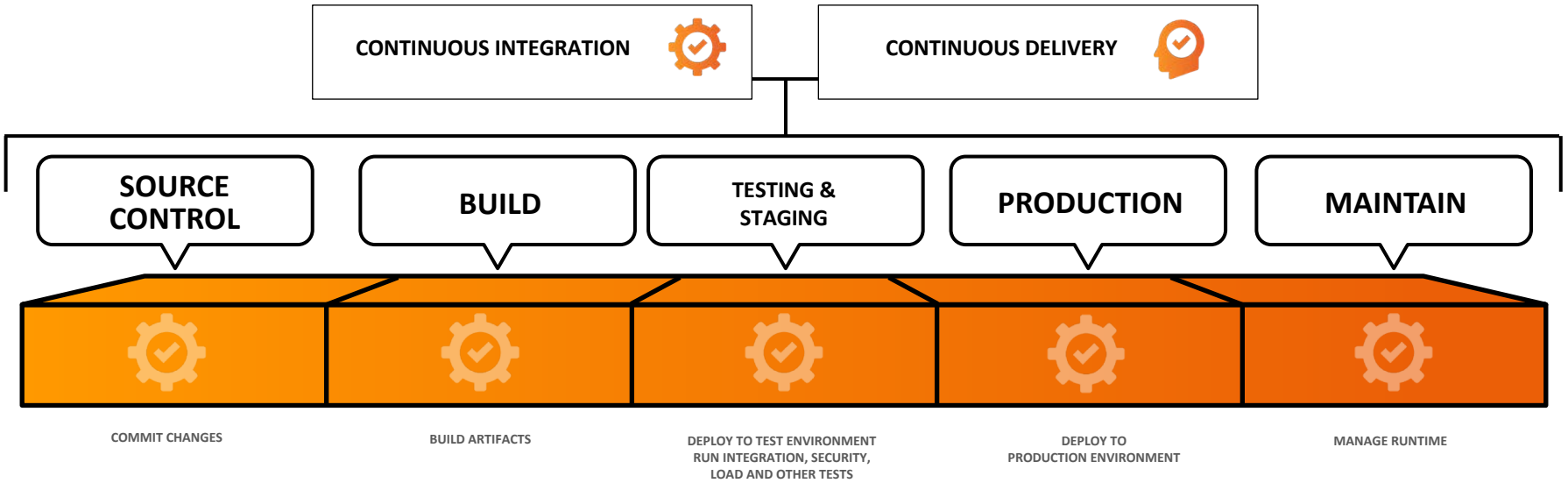


Infrastructure as Code

vs.

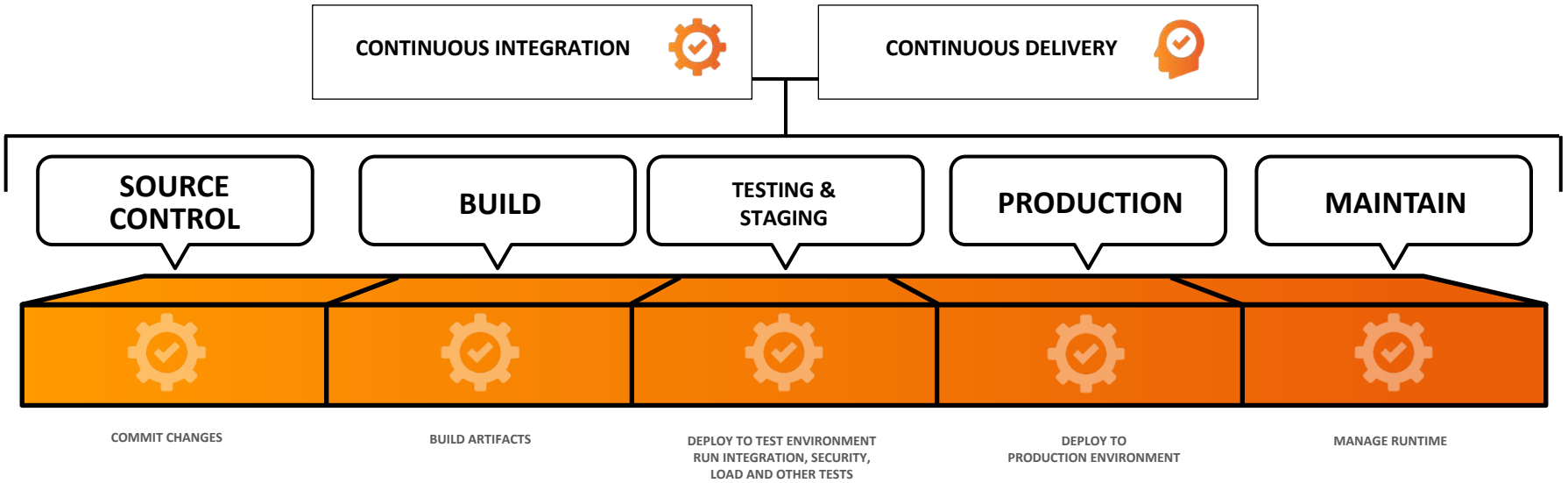
```
    }
},
"ElasticLoadBalancer":{
    "Type":"AWS::ElasticLoadBalancing::LoadBalancer",
    "Properties":{
        "Subnets": { "Ref": "ELBSubnets" },
        "SecurityGroups": [ { "Ref": "ELBSecurityGroups" } ],
        "HealthCheck":{
            "Target":{
                "Fn::Join":[
                    "",
                    [
                        "HTTP:",
                        {
                            "Ref":"AppPort"
                        },
                        "/healthCheck"
                    ]
                ]
            },
```

Security in the CI/CD Pipeline



APPLICATIONS AND INFRASTRUCTURE

Security is ~~in~~ the CI/CD Pipeline



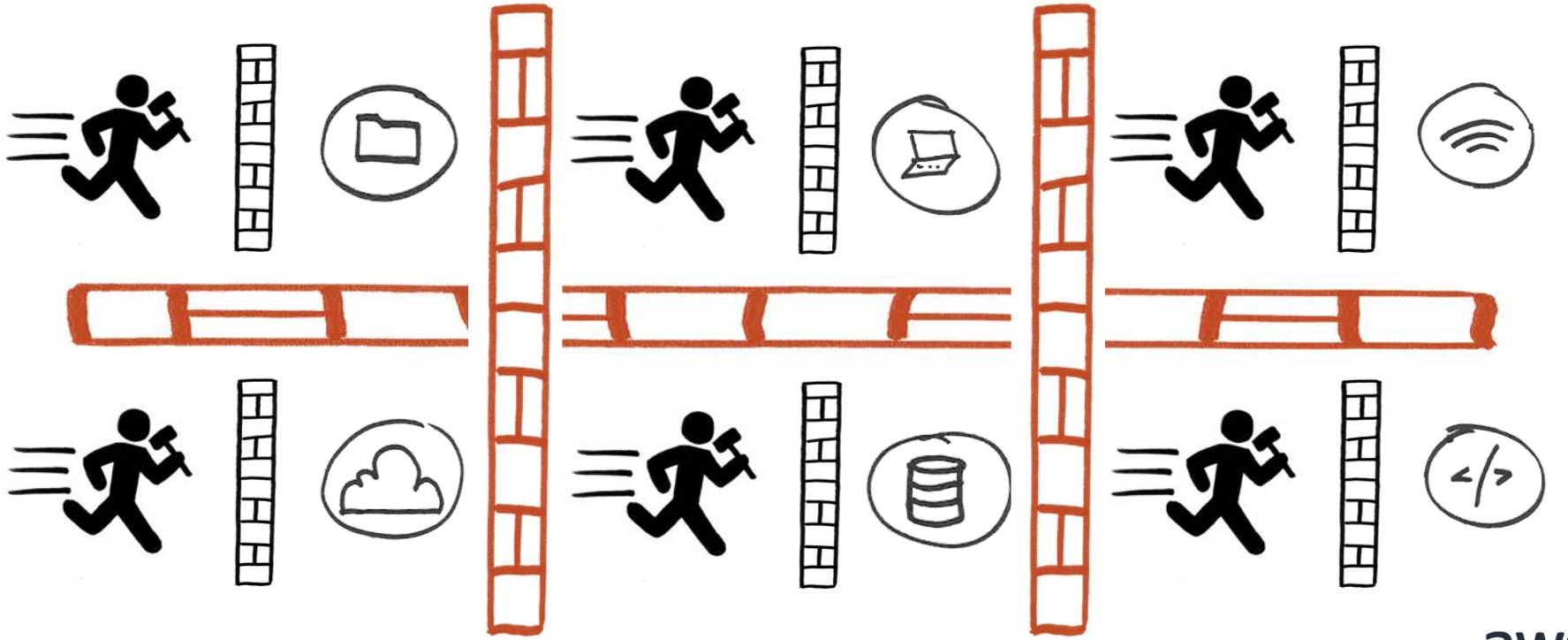
APPLICATIONS AND INFRASTRUCTURE

aws

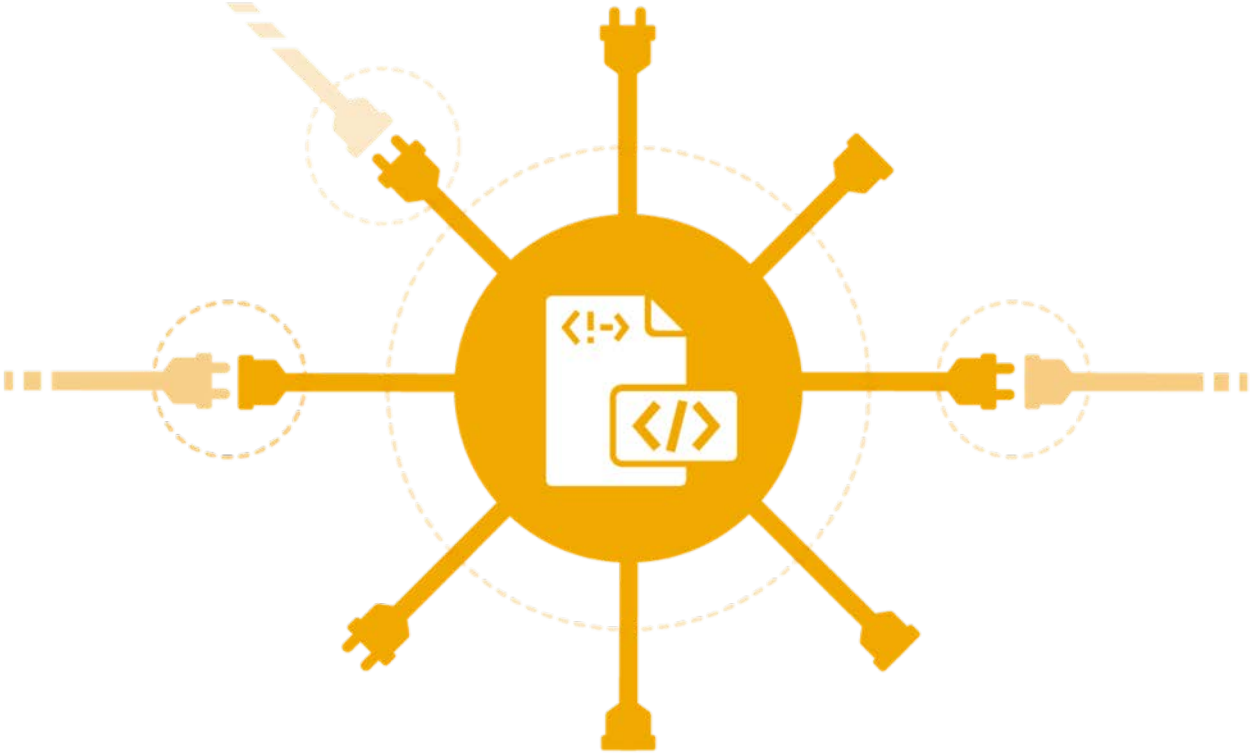
Protecting Source Code: Trust But Verify

User	Pulled	Committed	% Inactive	Avg Dist	History	TT	[redacted]
[redacted]	1397	9	58.1	11.75	view	TT:E027599[redacted]	1-Click
[redacted]	1361	4	79.2	9.08	view	TT:E027569[redacted]	1-Click
[redacted]	535		2.8	9.33	view	TT:E027655[redacted]	1-Click
[redacted]	457	11	33.0	11.34	view	TT:E027656[redacted]	1-Click

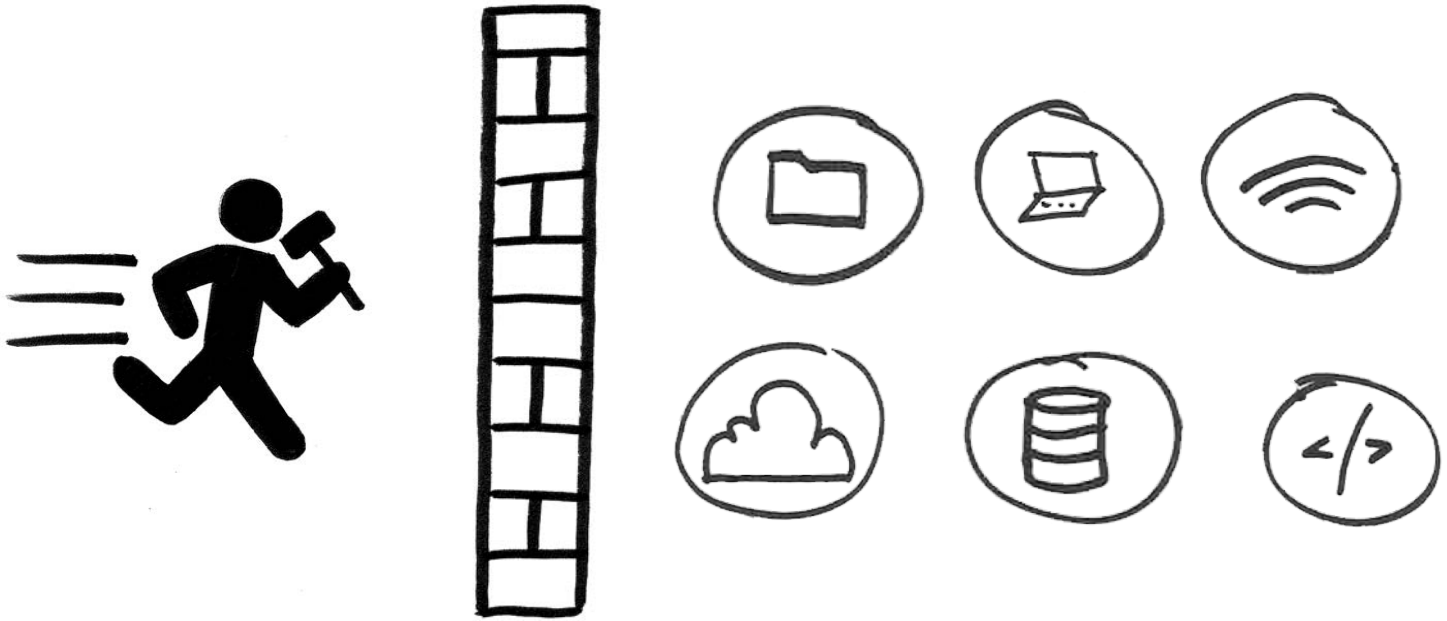
Separation of Duties: Physical/Logical/Service



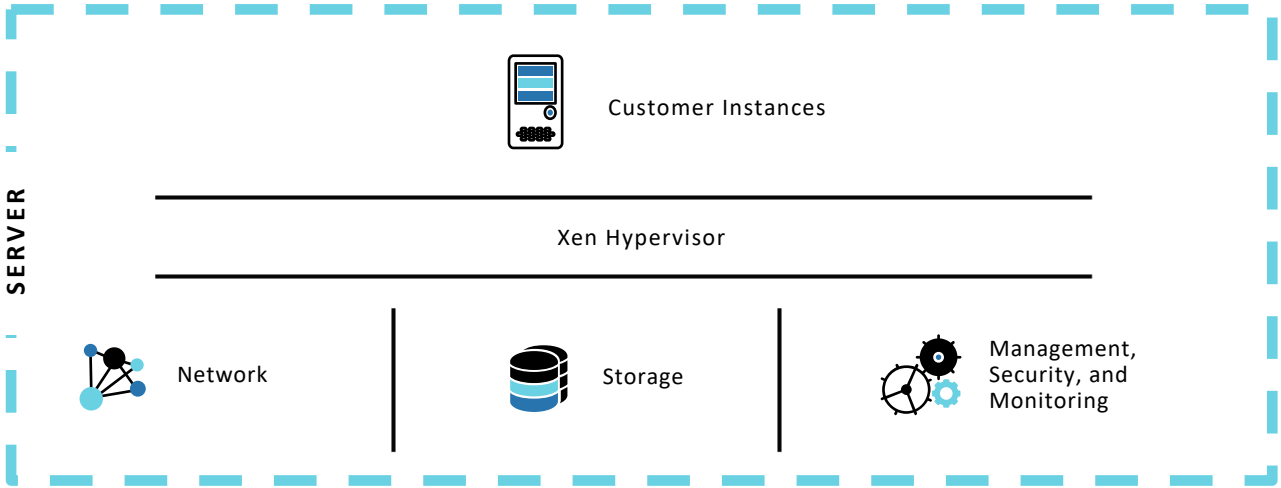
Reduce Blast Radius: APIs, Microservices, Serverless



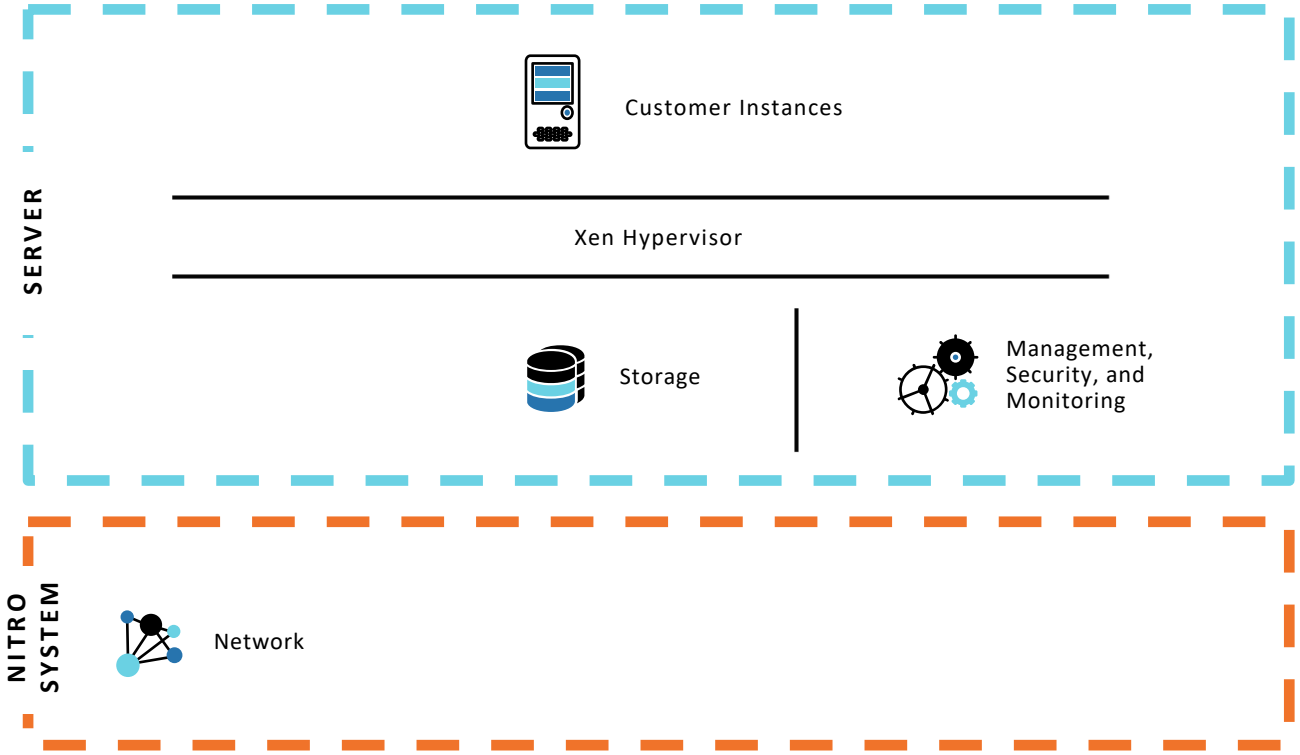
Get Humans (Farther) Away from Data: an EC2 Example



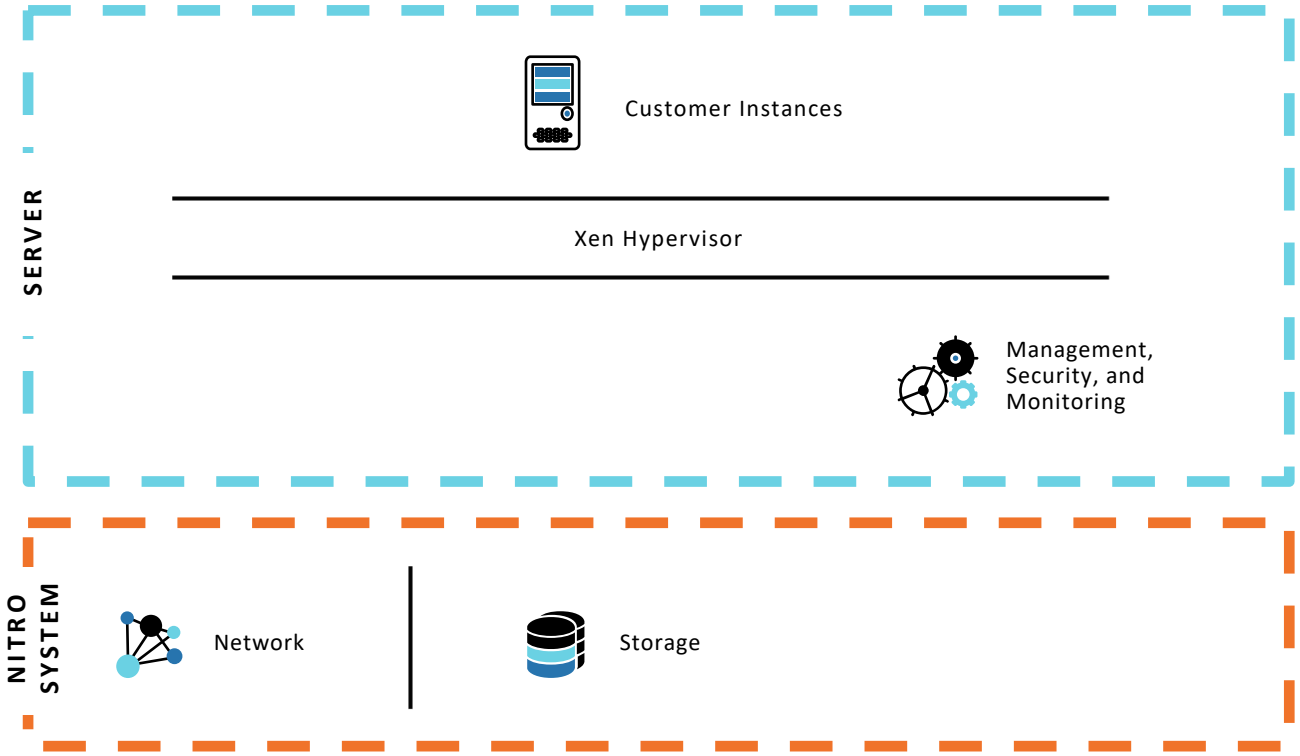
Original Amazon EC2 Host Architecture



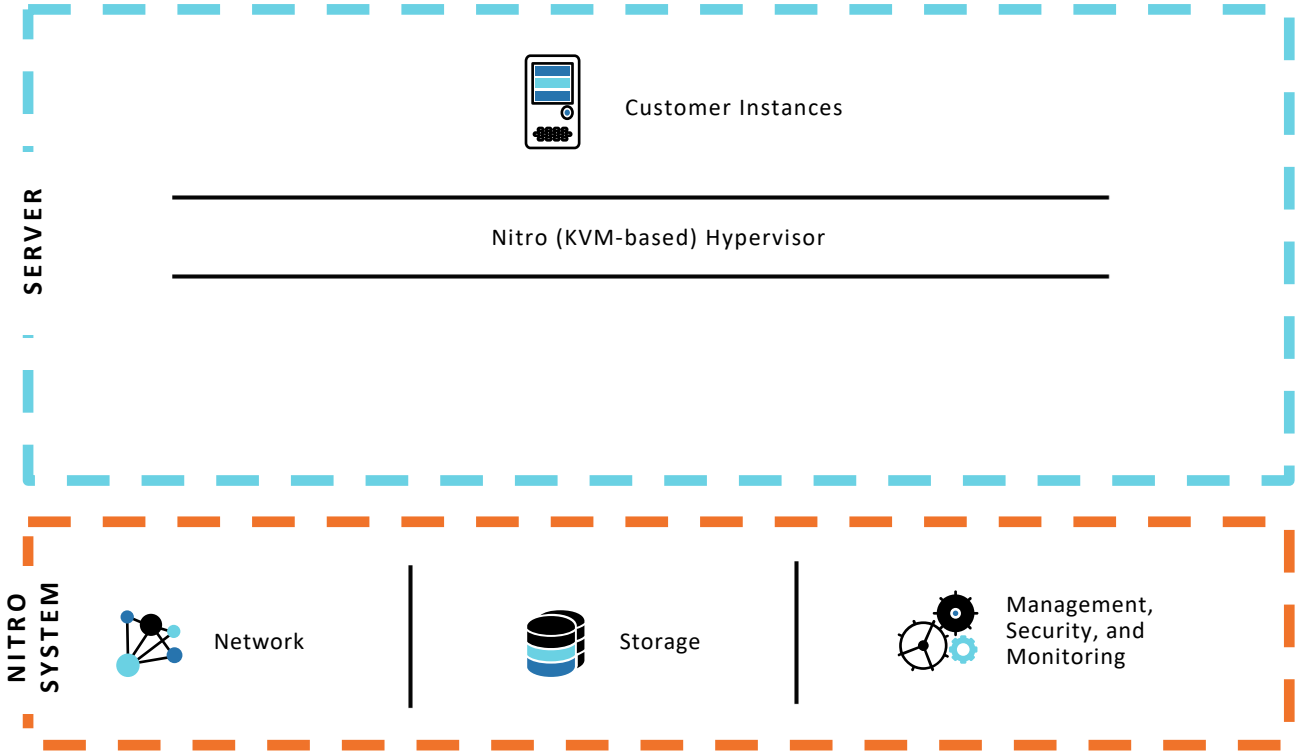
Amazon EC2 C3 Instances



Amazon EC2 C4 Instances



Amazon EC2 C5 [M5, R5, etc] Instances



SHELL
(SSH)

THANK YOU!

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AWS Security Blog: aws.amazon.com/blogs/security/

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