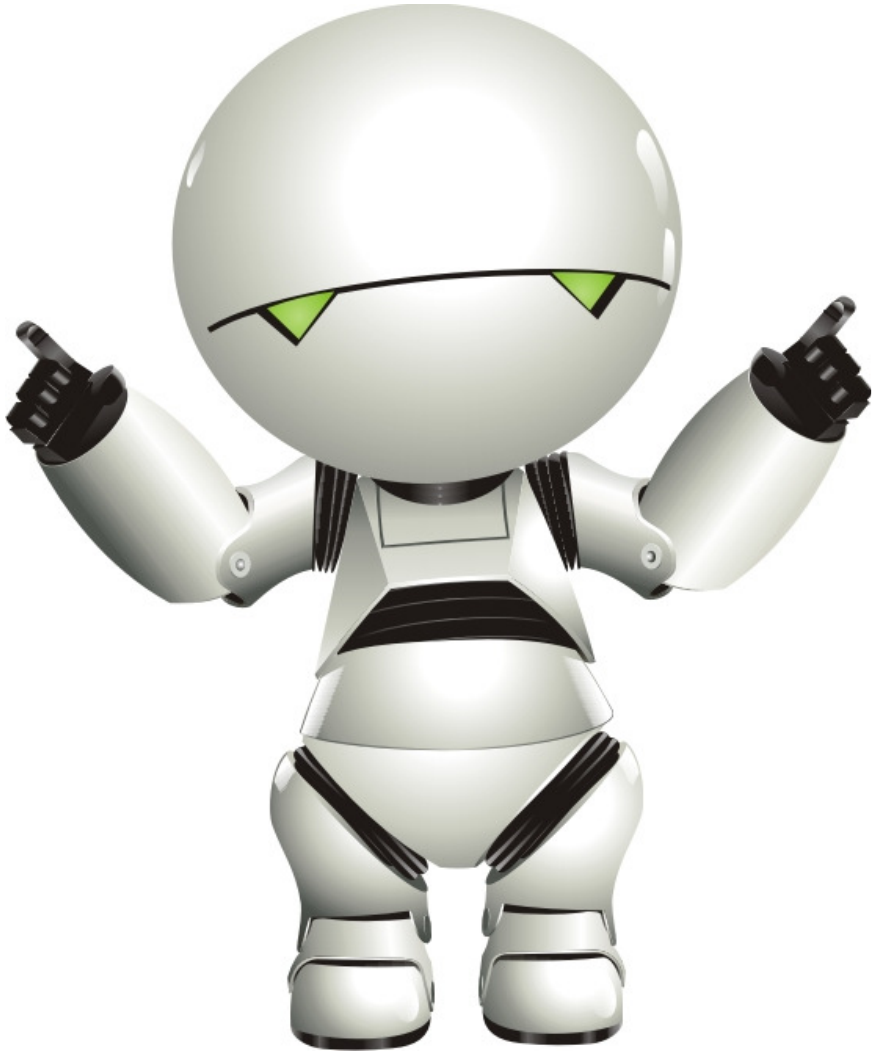
Barracuda | doIT 2014

Zero Trust Environments

Dream and Reality

Do not be depressed

THERE IS GOOD NEWS!



But not too much ;-)

Crime and the Attack Surface

Crime and the Attack Surface

1990s

- The Internet is bad - If we do not connect to the Internet, life is good

2000s

- The Internet is bad, but necessary - If we implement enough checks and controls, life is still good

2010s

- Life is bad - we f..ked it up

Crime and the Attack Surface

FIRST: The bad guys are really after YOU

- SPAM dropped by more than 50%
- Successful targeted attacks from all over the place increased massively

SECOND: Transformation of users

- 2000s users were stupid, aware of that, i.e. “losers”
- 2010s users are stupid, not aware of that and perceive themselves as system admins, managing their i-pods, i-phones, i-pads and connecting to your data, network, …
- The losers evolved into i-diots

Cloud and Internet of Things

Early 2000s

- Worms are spreading – we are about to lose control

Late 2000s

- NAC, NAP, Self-defending networks, IDS/IPS … - we regain control

2010s

- Oooops

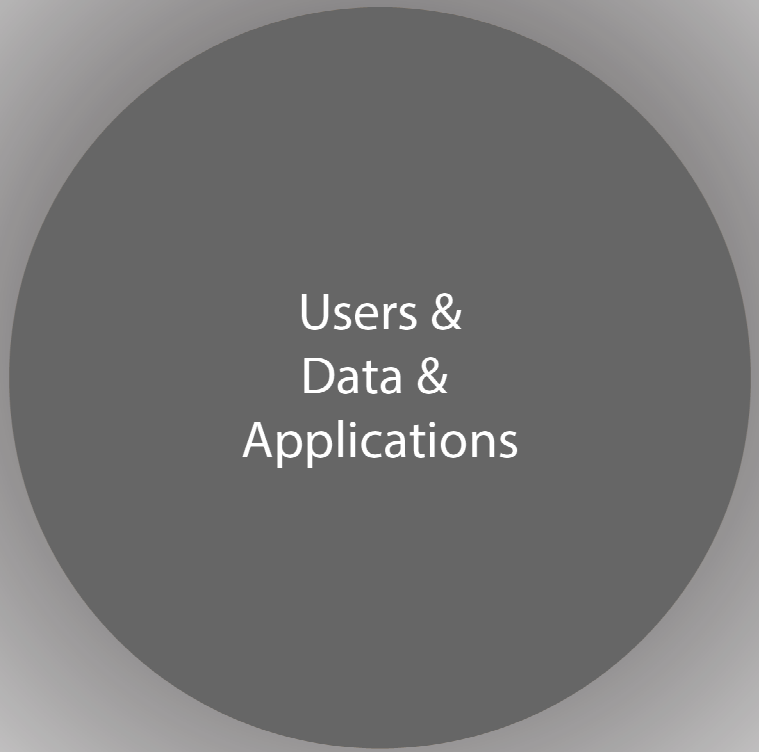
Cloud and Internet of Things

2010s

- We admit the loss of user operated domain
- We move our servers, applications and data to the cloud
- We increasingly buy smart lightbulbs, fridges with direct connections to their suppliers

- Our “internal” network is about to become the “Internet of Foreign Things”

Crime and the Attack Surface



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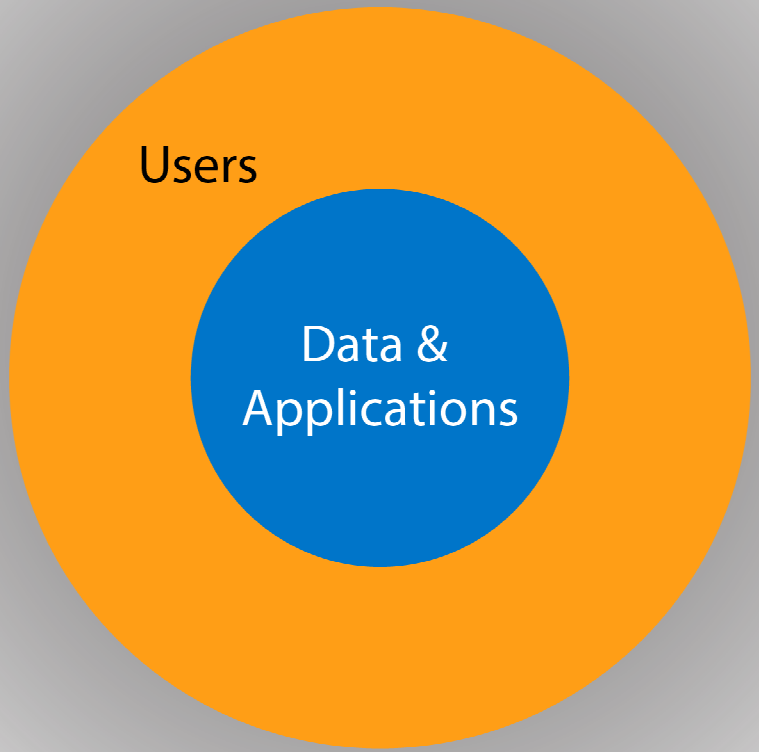

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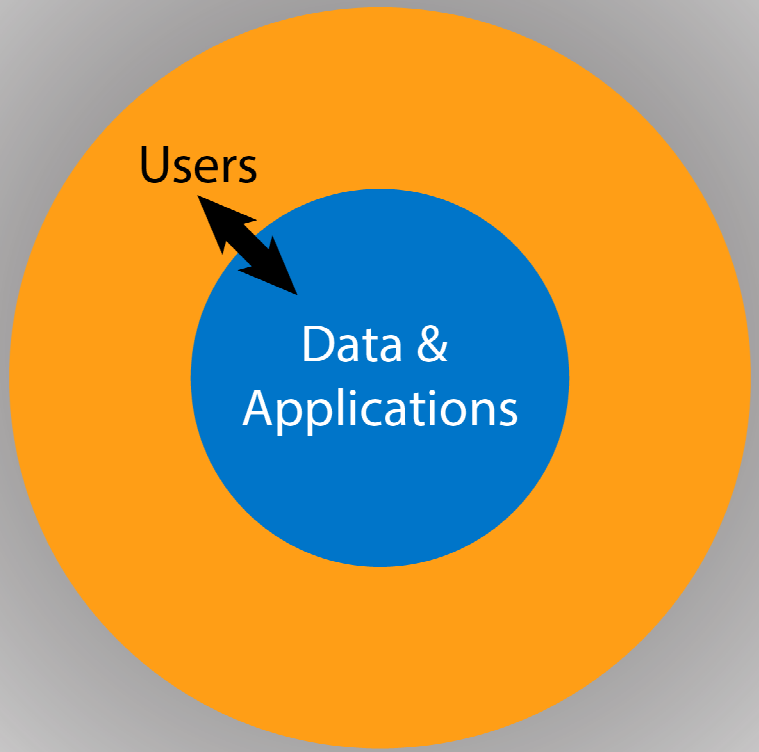

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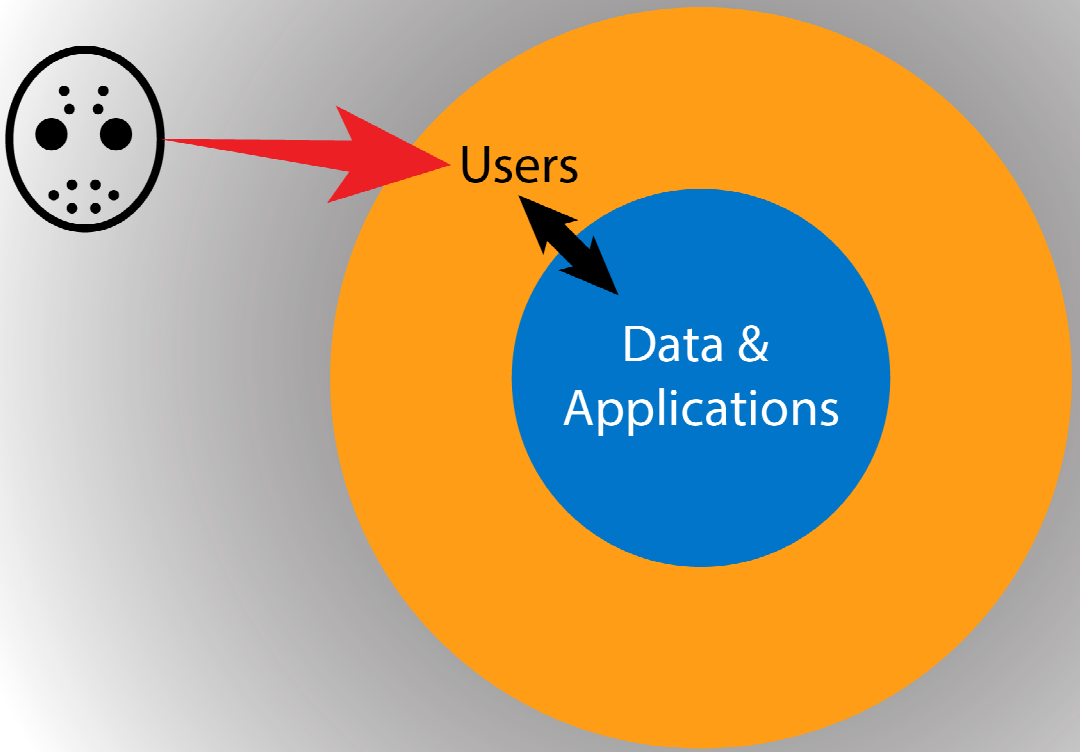

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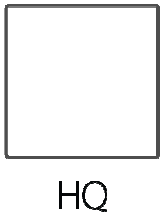

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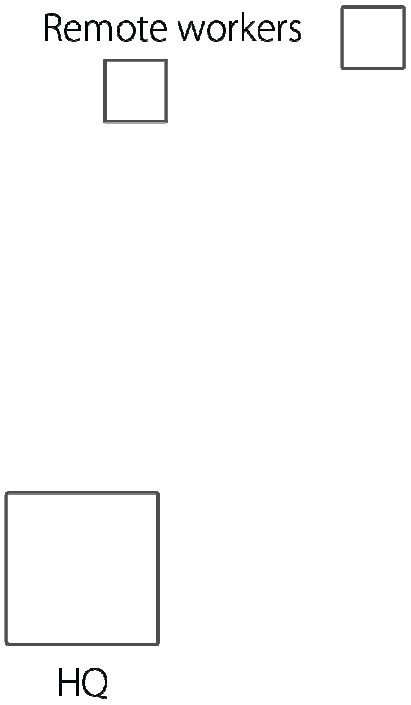

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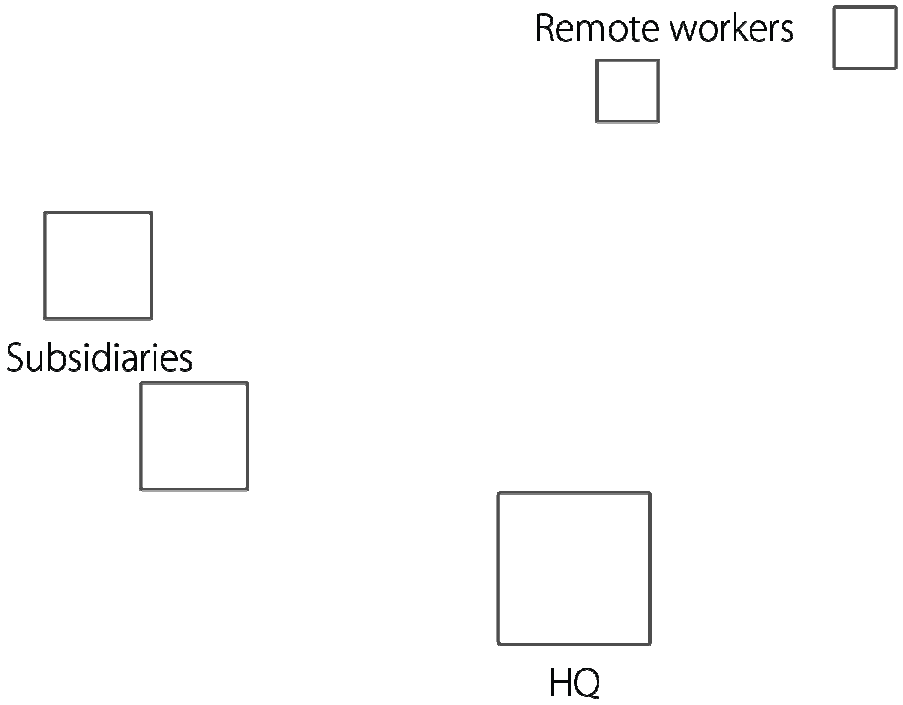

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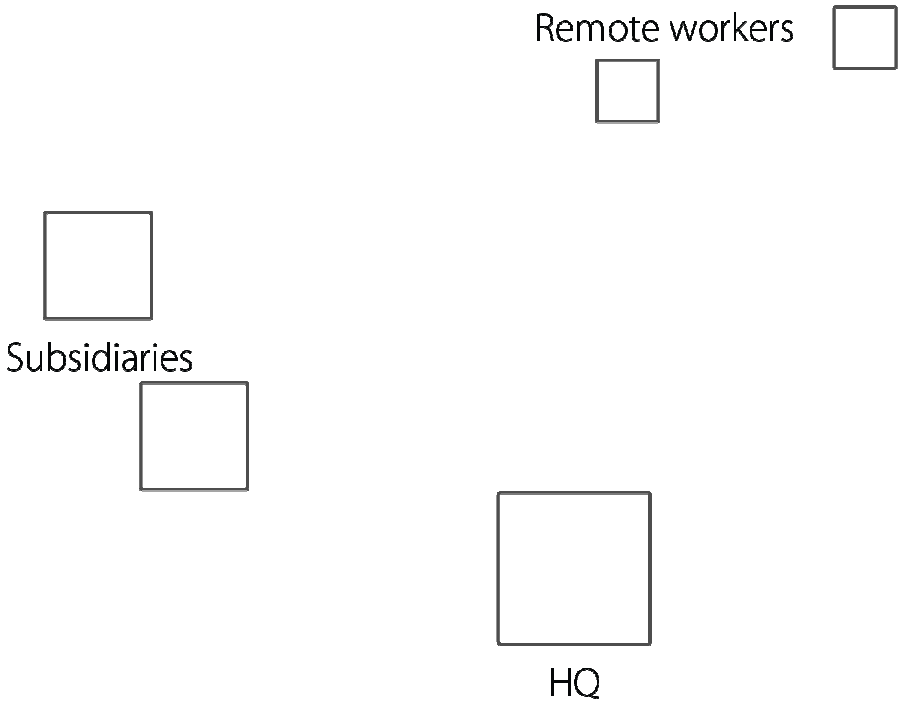

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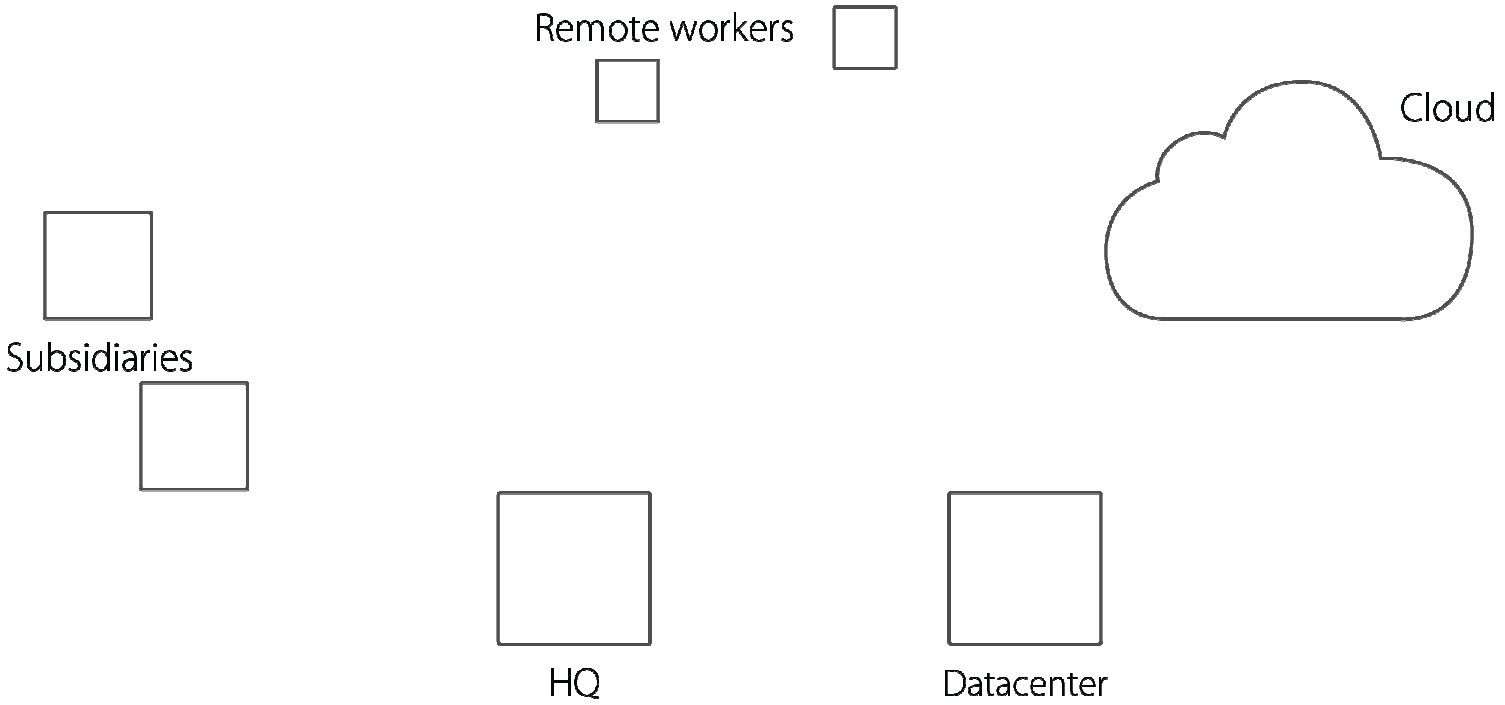

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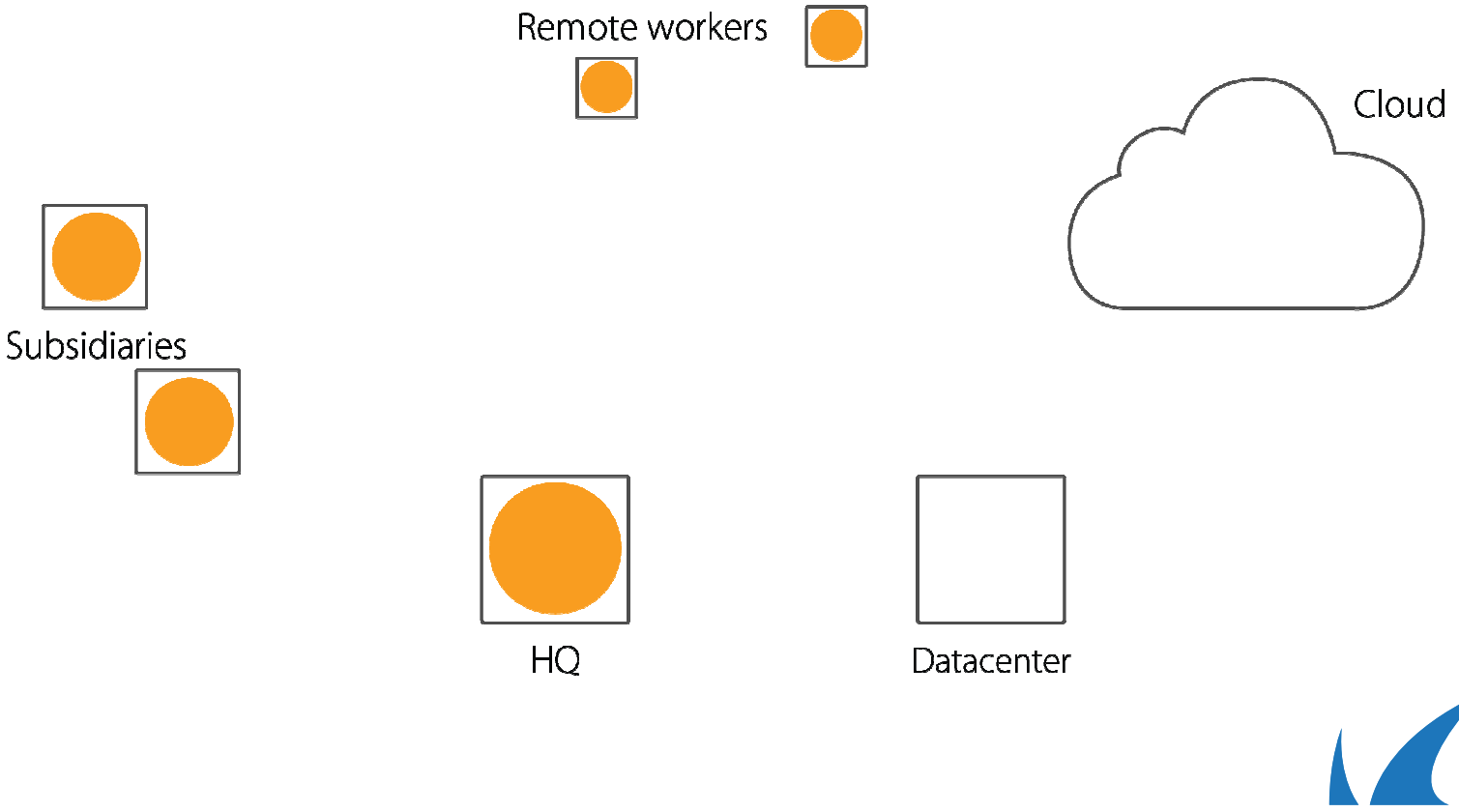

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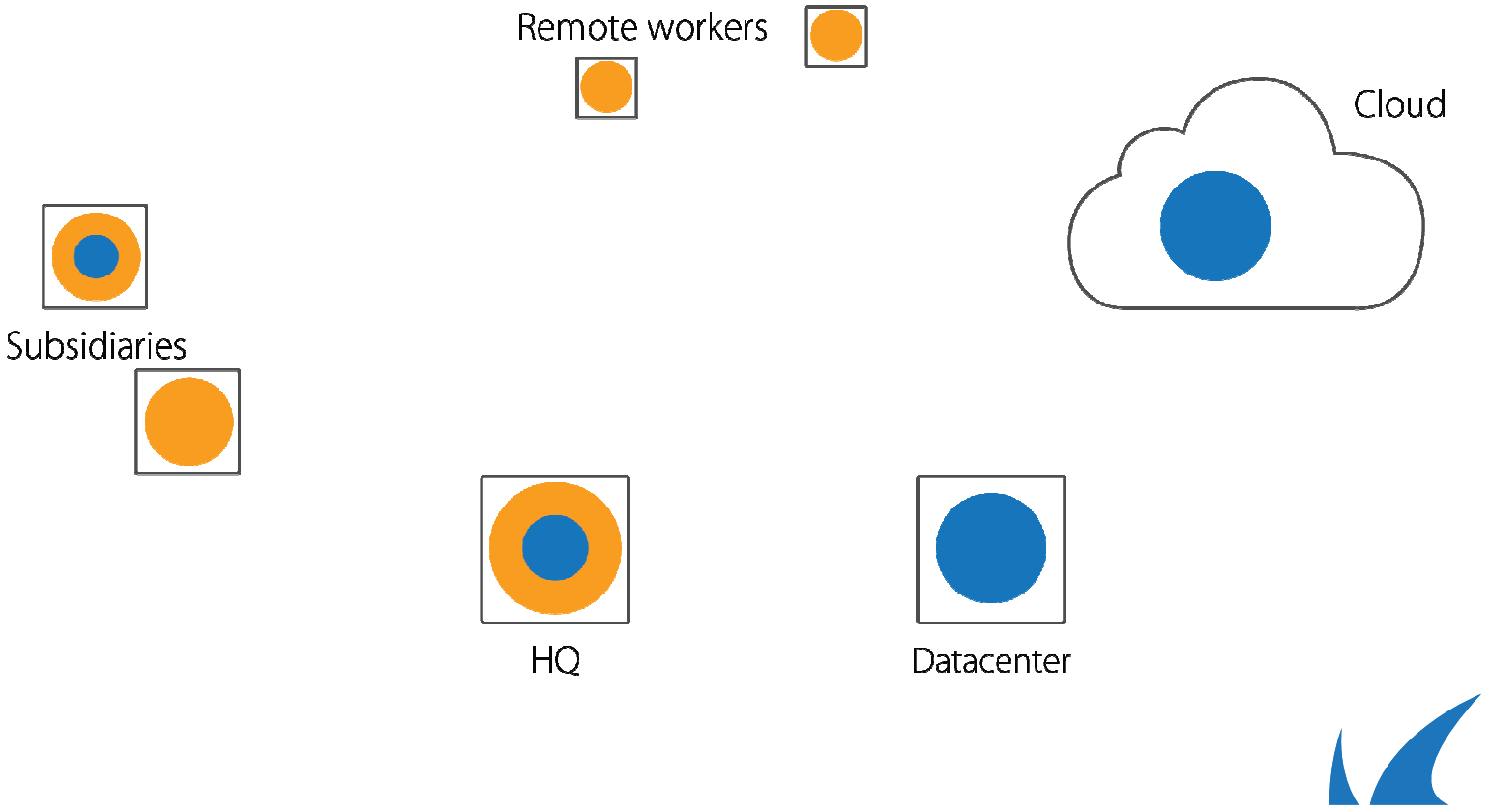

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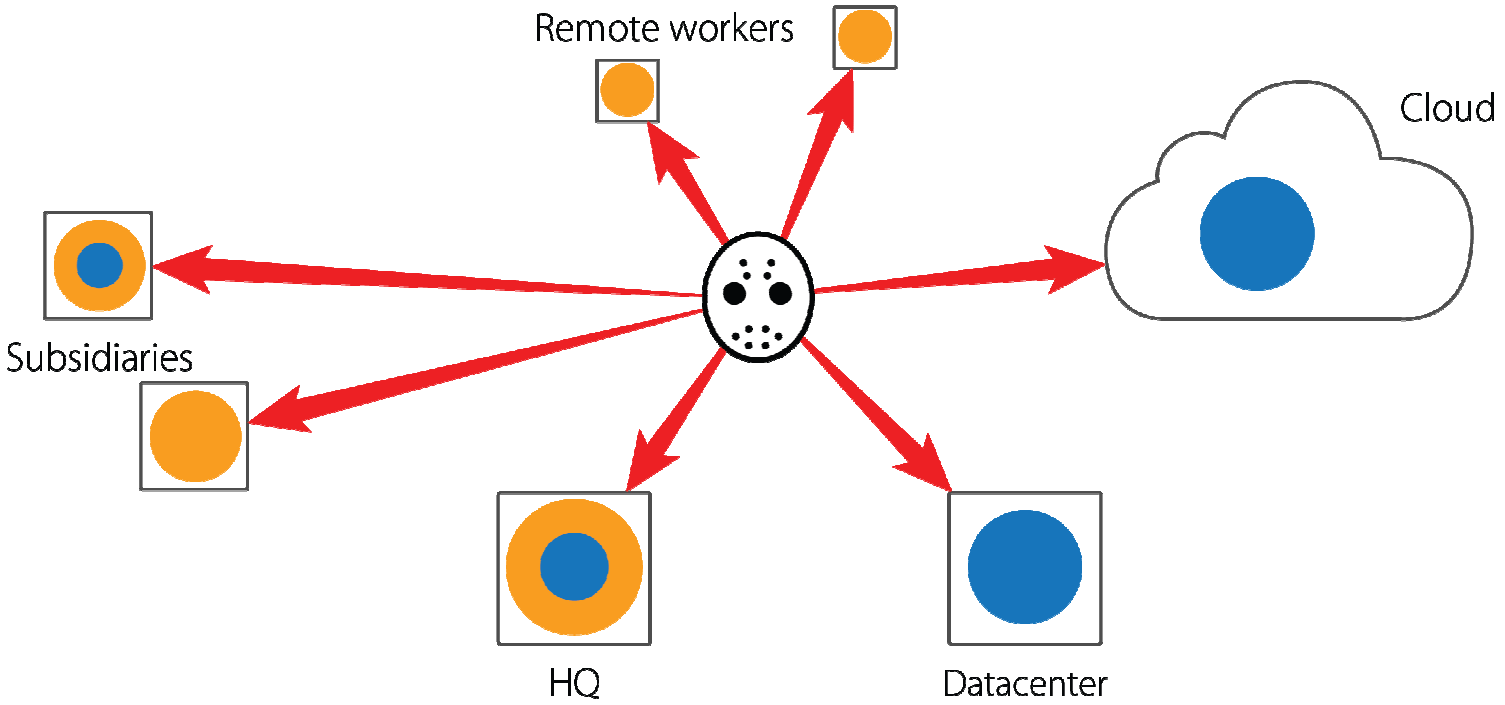


Zero Trust Environments

The perimeter is gone

The attack surface grows inflationary

It is a MESS! But we will manage it!

Zero Trust Environments

DO NOT TRUST:

- Users
- Internet Service Providers
- IT people handling tapes
- Governments
- Single enforcement points

Zero Trust Environments

DO NOT TRUST:

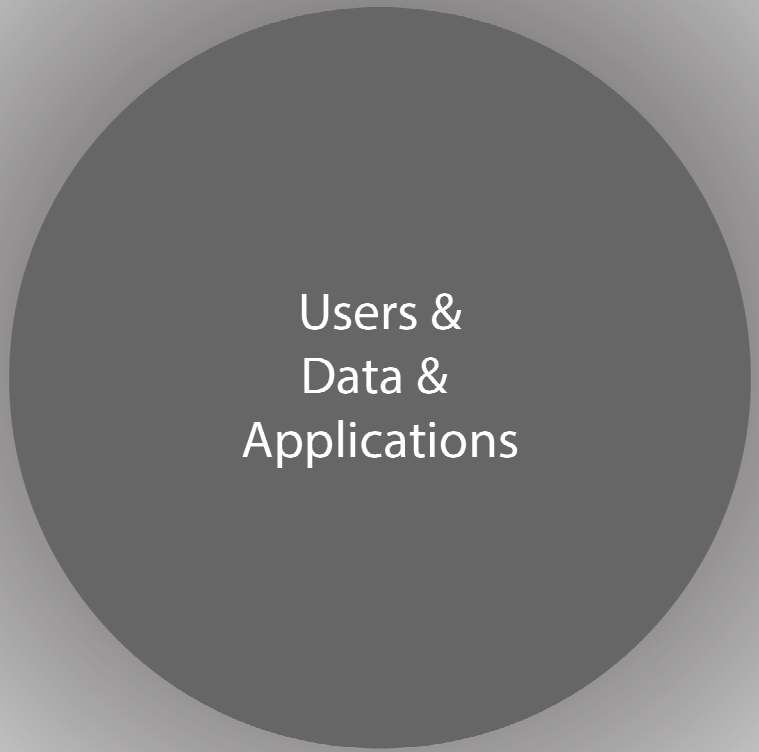
- Accounting Departments
- Earthquake Forecasts
- Flooding Protection
- Construction Workers
- Your Own Judgment (sic!)

Zero Trust Environments

THE ESSENCE:

- Protection follows potential victims
- Flexibility of deployment: hardware, software, virtual, cloud
- Smooth evolution of separation of duty: From UTM to multi-component best-of-need designs
- Scalable from 1 to 3000 components
- Affordable !!!!!

A Glimpse of a Zero Trust Environment



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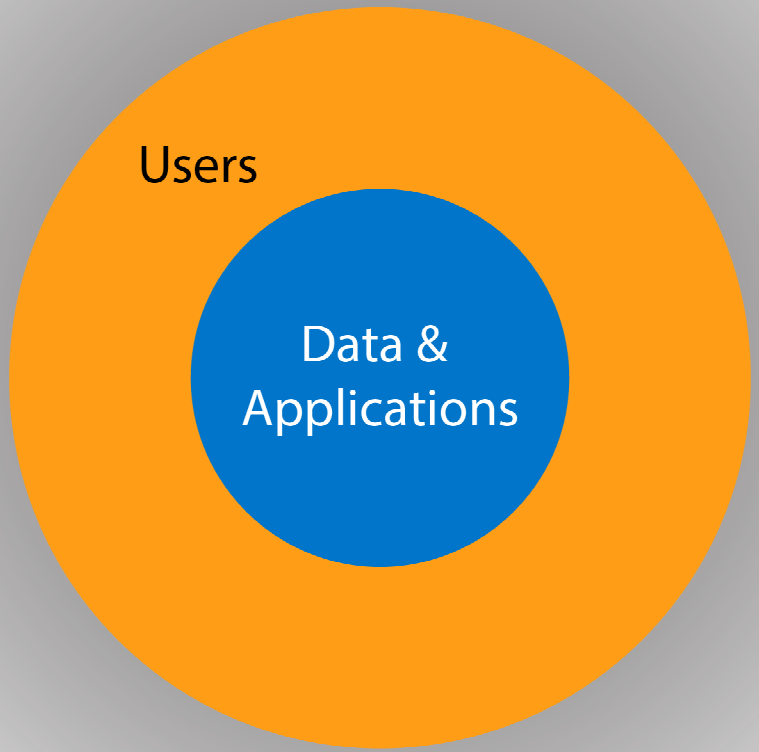

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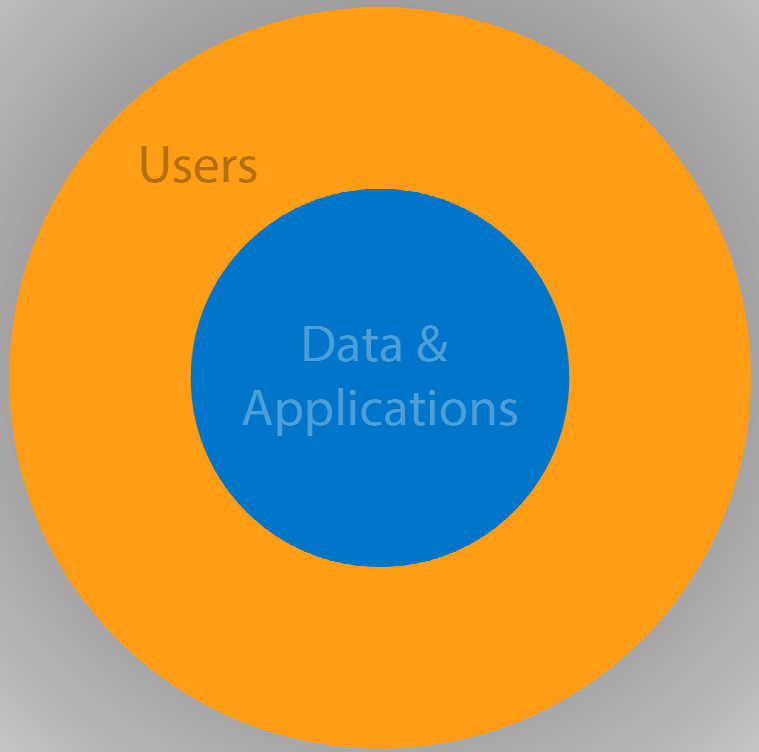

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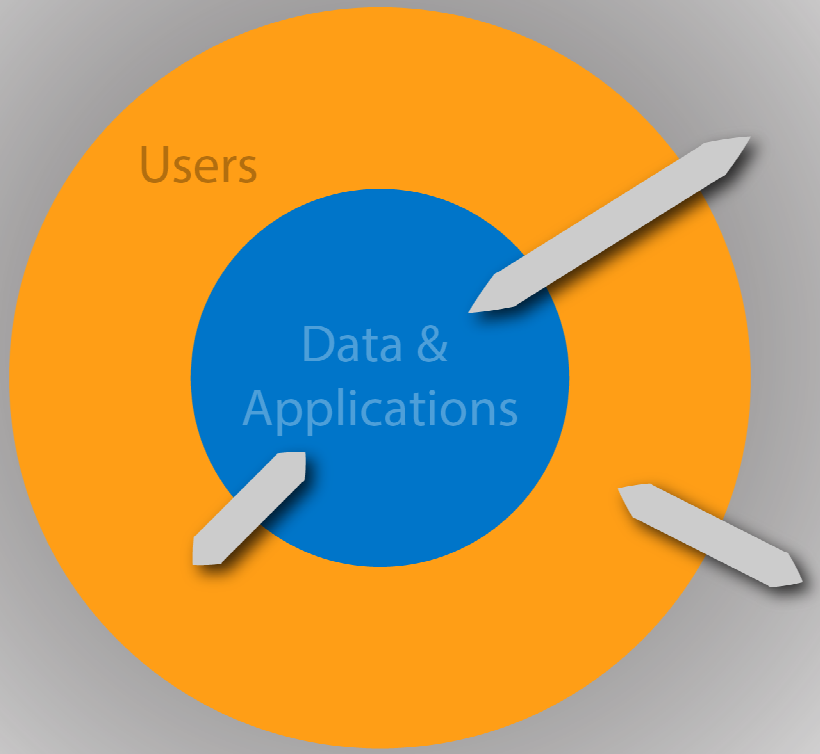

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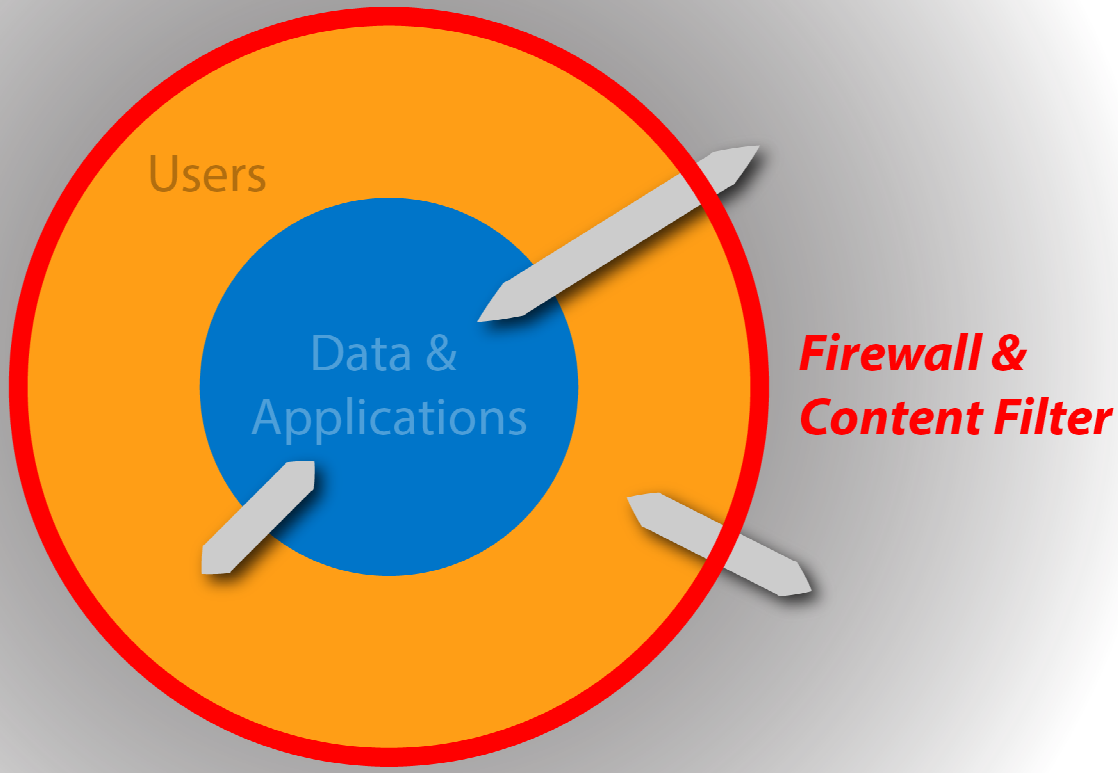

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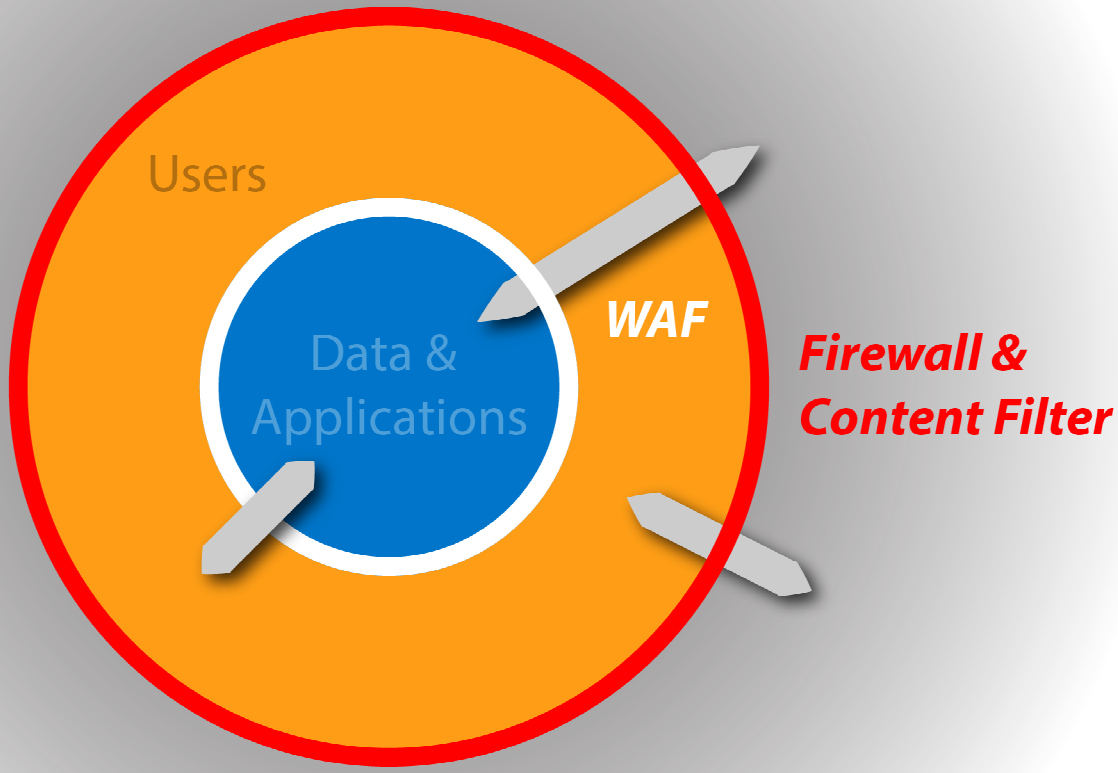

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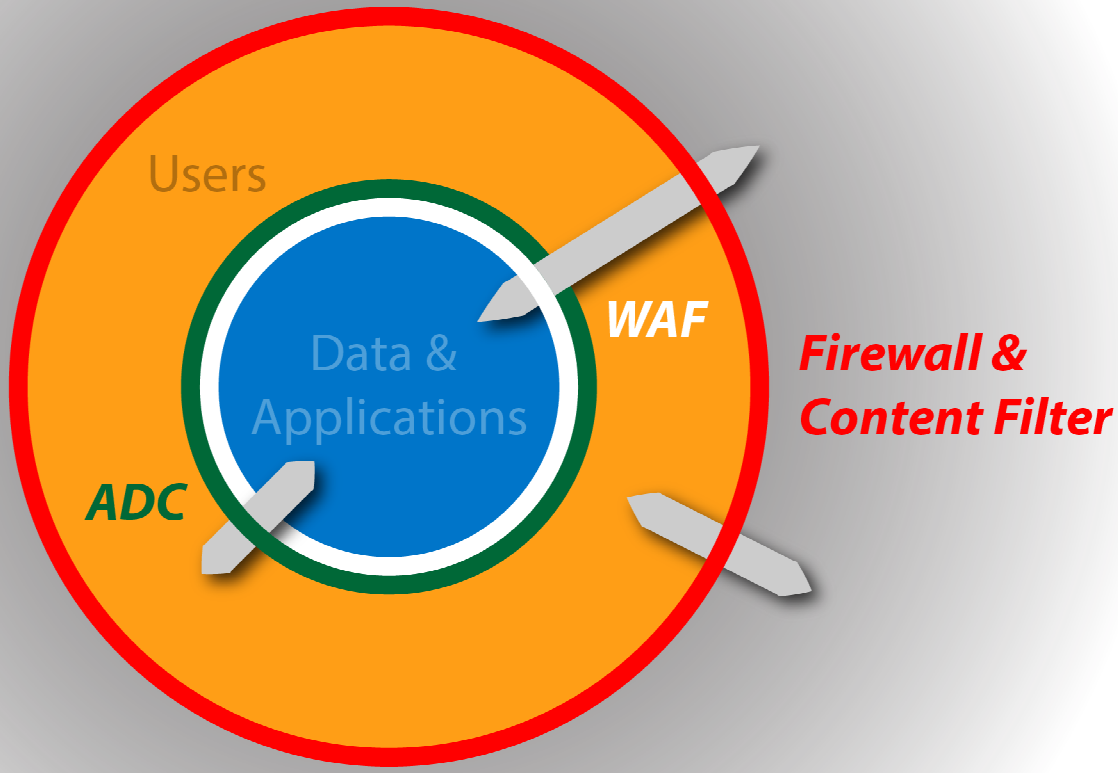

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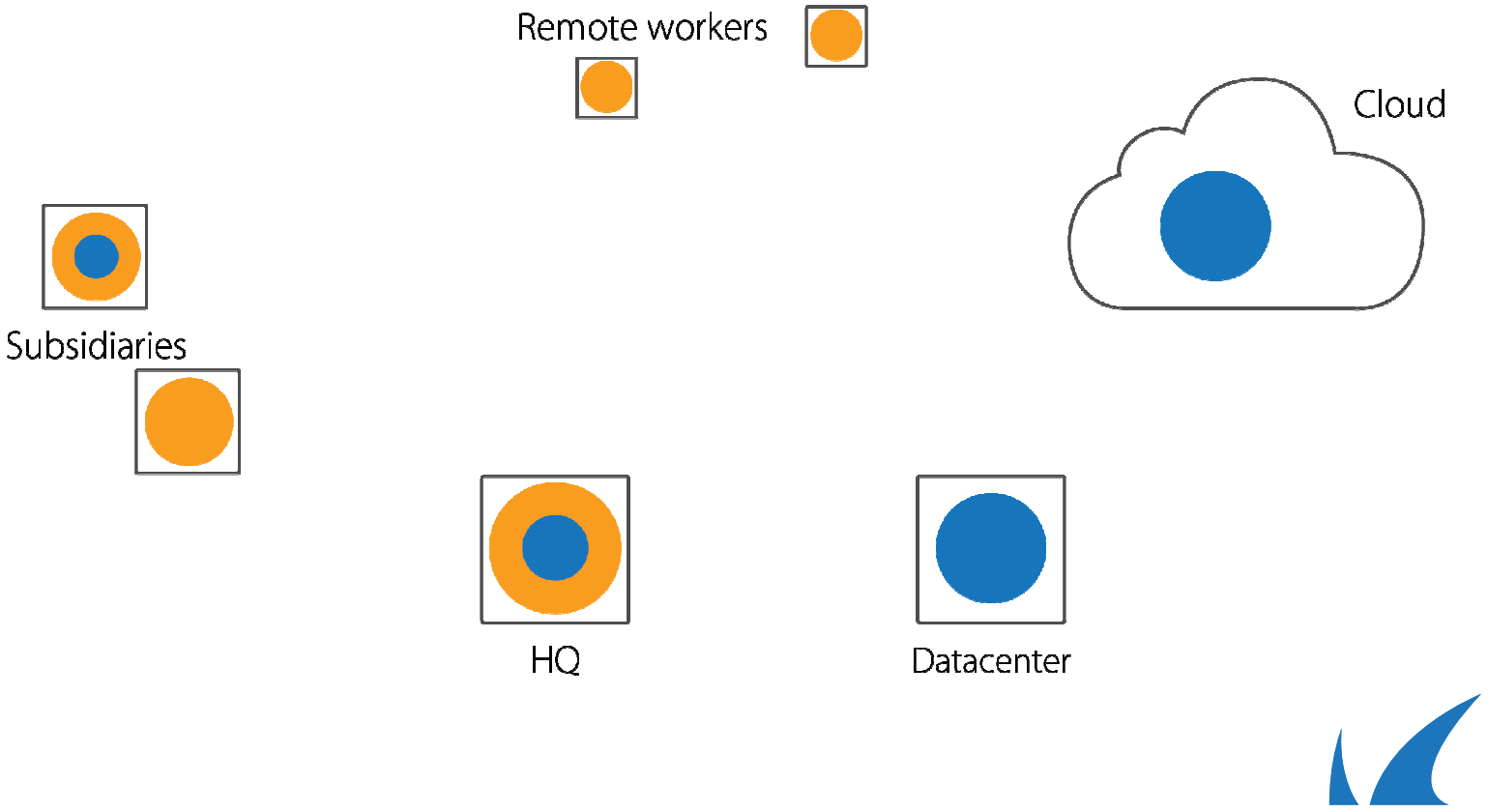

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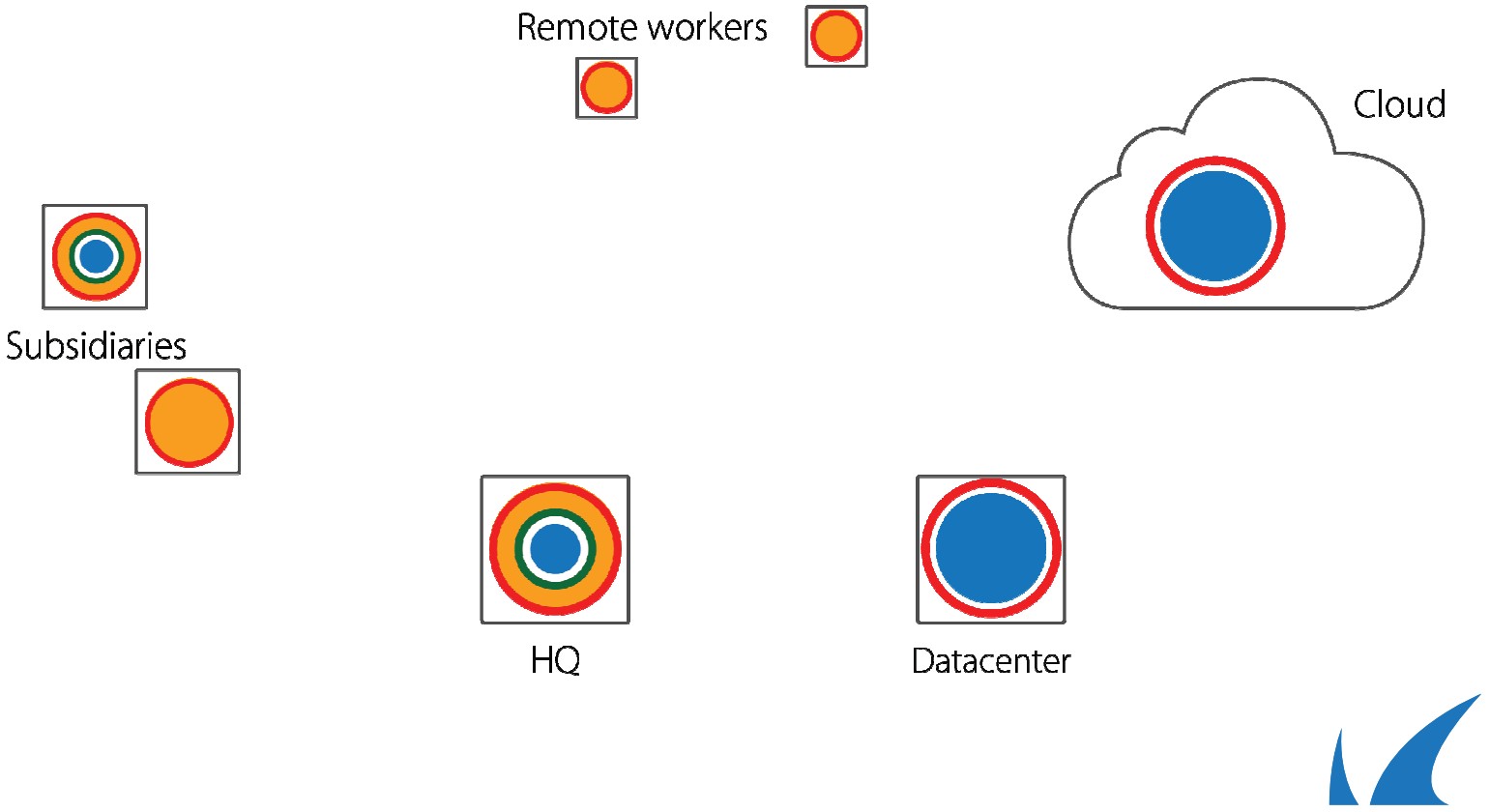

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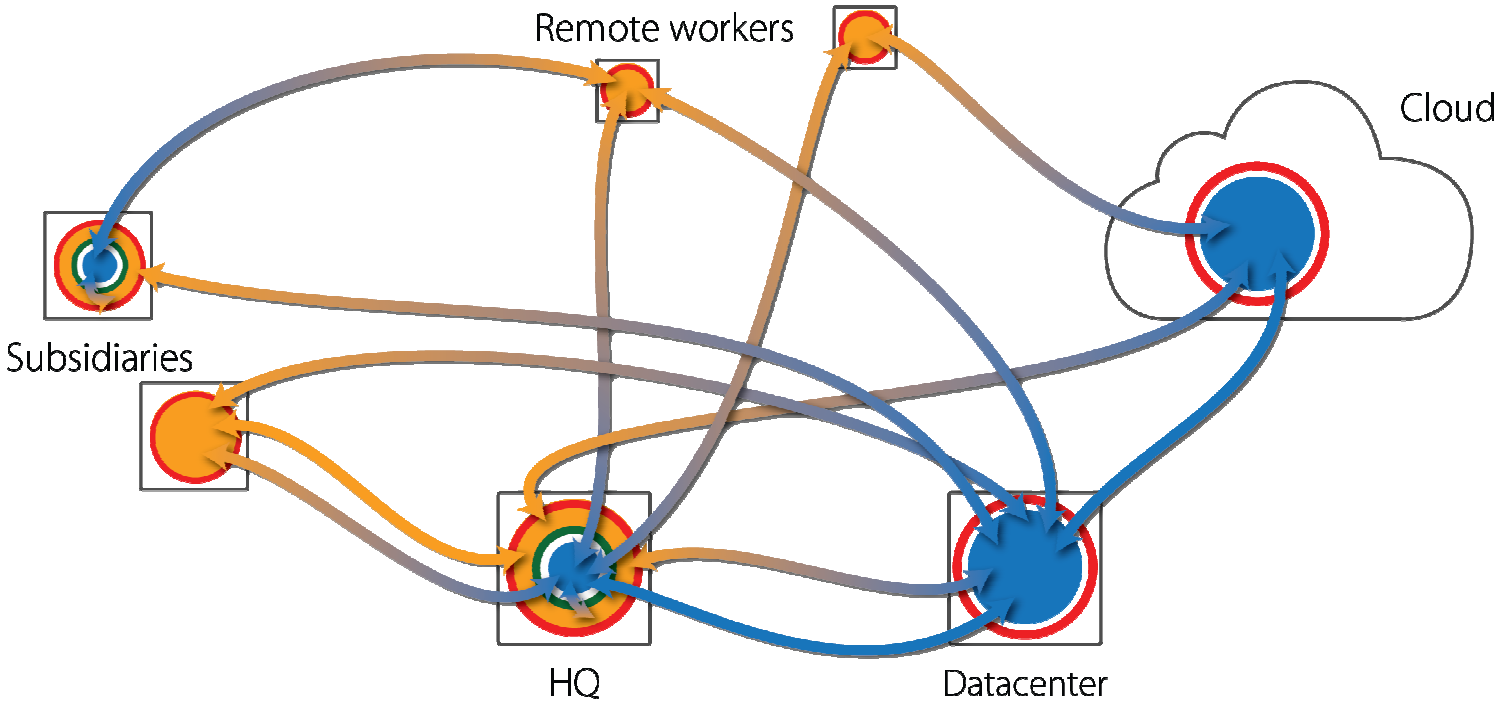

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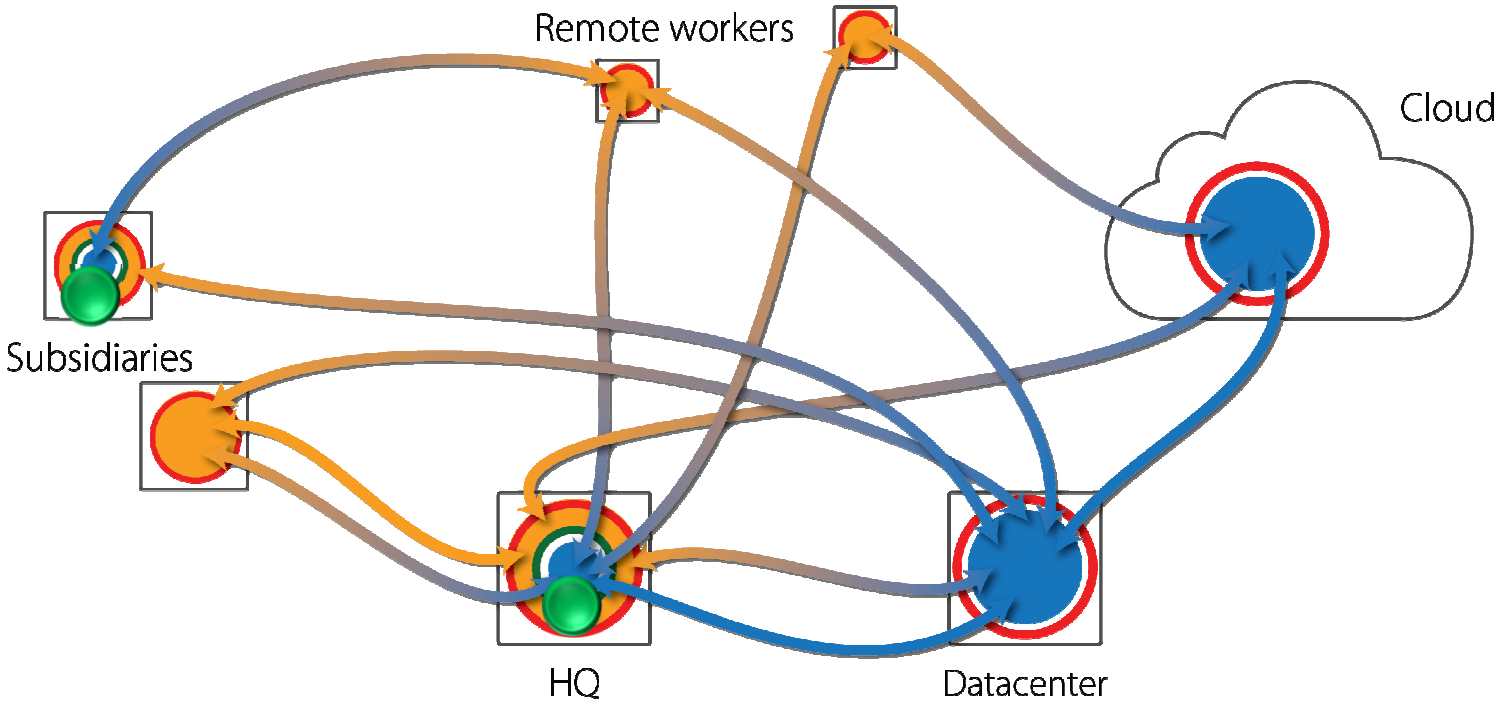

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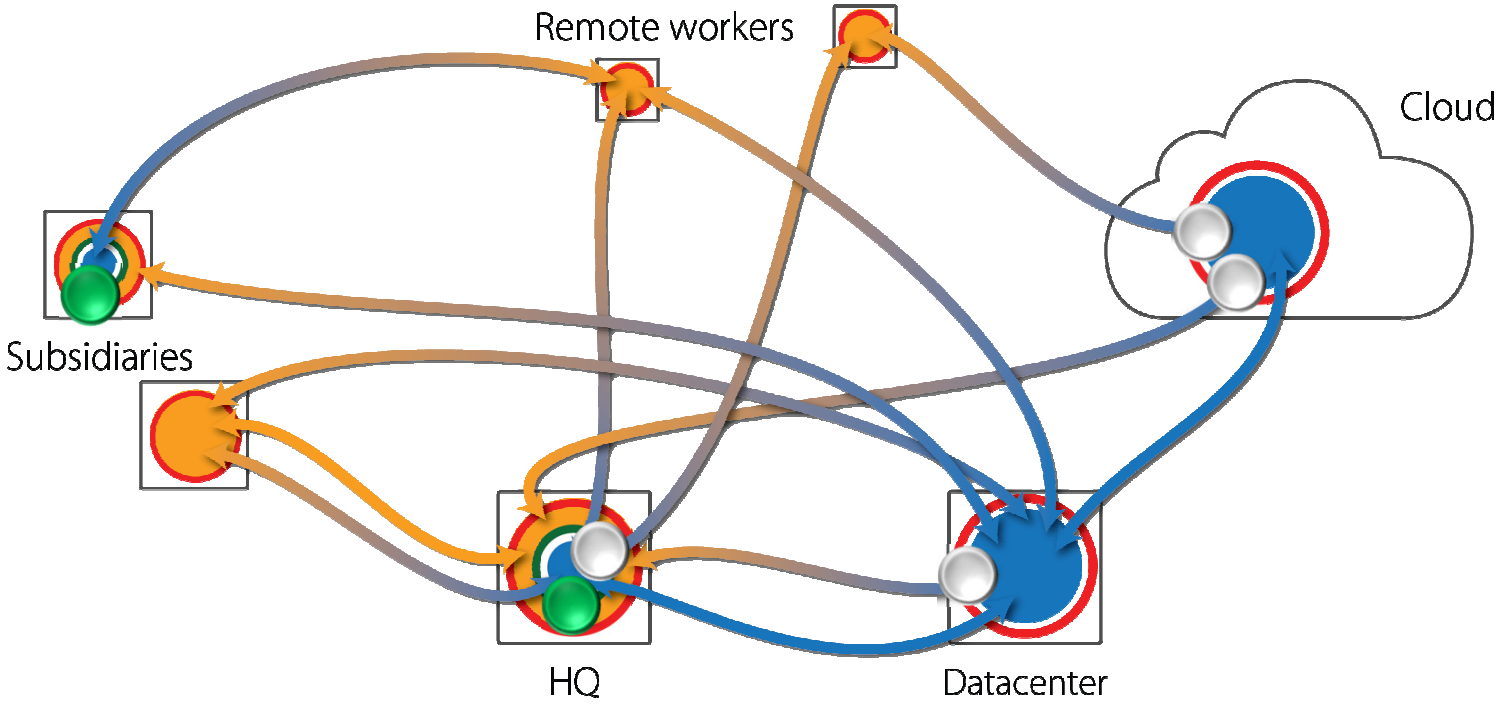

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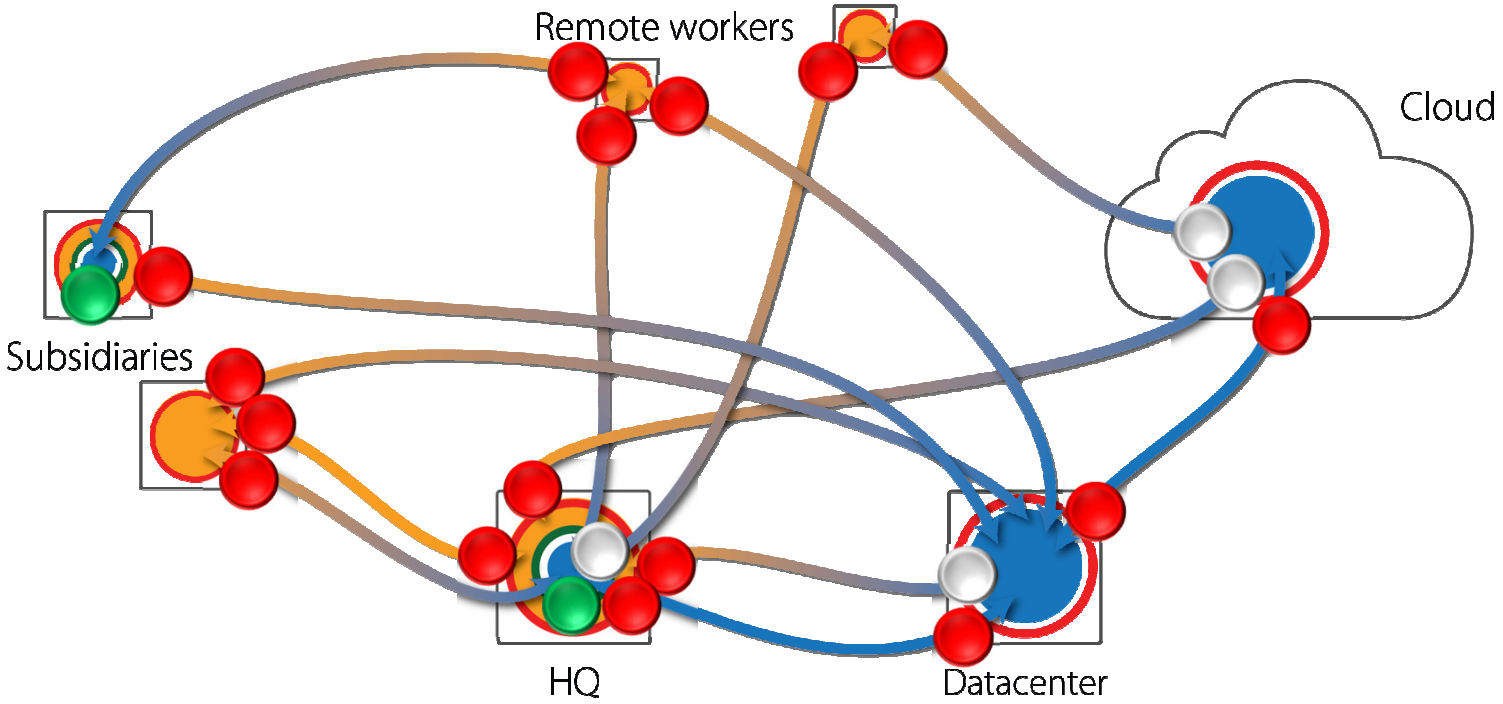

Conclusions

"The" perimeter disappears, but perimeters reappear all over the place

Every firewall is an application delivery device and vice versa

You MUST use perimeter-designed devices for all internal traffic

There is no alternative or compromise

General Summary

Business defines and drives IT infrastructures

Each IT infrastructure is unique

Protecting IT is a mess-type of a problem

General Advices

Hope Remains:
The defense not only knows the terrain, it created the terrain and can change the terrain.

Reserve 5% of your IT budget for social events:

- IT experts meet AND work with business people

You and Barracuda

Your Challenge

You design and build YOUR tailor made zero trust environment

Our Commitment

We provide you with products that enable you to do that in a secure, consolidated, cloud-connected fashion