stateless

Corporate Overview

THE DIGITAL NEEDS OF THE FUTURE

The Internet of Things (IoT) and Big Data are growing at incredible rates:

2020 ≫ 2030

51 BILLION
IOT DEVICES

producing

50 ZETTABYTES (ZB)
OF DATA

4 TRILLION
IOT DEVICES

producing

150+ ZETTABYTES (ZB)
OF DATA

This growth is only a symptom of a much larger phenomenon known as the Digital Transformation. Each day, more of the world around us is recorded and experienced digitally - as ones and zeros.

The tools we use to process, store and move all of this digital data have to evolve to keep up with this digital transformation.

Modern networking technology was developed at the time when electronics were transitioning from tubes to transistors and since then, it has changed very little.

BUT NETWORKING IS HARD...

Despite all the changes that have made processing and storing data easier, networking technology is still **complex, rigid and inefficient.**

With the introduction of everything as a service, we should be able to access practically any type of application or data within minutes, yet for most organization it often takes weeks, if not months, to build the connectivity needed to link together digital resources. Changes to the network are service disrupting and networks are difficult to manage.

Network users have changed as well. Today's networks need to be able to be configured by not only network engineers but also application developers, business unit process designers, DevOps teams and other machines.

Networking needs to be simple.

OUR MISSION
NETWORKING NEEDS TO BE SIMPLE

It's time for networking to be reinvented. Our mission is to make networking simple, evolvable and scalable.

At Stateless, we are creating an extensible software platform to connect anything, anywhere which anyone can easily use to deploy their own custom applications, no matter how complex they are.

HOW WE DID IT

Stateless is applying our unique intellectual property combined with a cloud-native software architecture to build a *Stateless Microservice Network Functions (MNF) Platform called Luxon* to reinvent networking.

LUXON SOFTWARE PLATFORM
ON COMMODITY HARDWARE

Separation of State

Our patented method for separating state from packet processing allows Luxon to be constantly upgradable, fault tolerant and simple to use.

Microservices-Based

By using a cloud-native architecture Luxon consumes resources 10x more efficiently than traditional networking technologies.

100% API Control

Luxon natively built to be fully controlled via API

LUXON POWERS THE FUTURE OF
NETWORKING

MONOLITHIC HARDWARE (OLD)

VS.

MICROSERVICE NETWORK FUNCTIONS (NEW)

SIMPLICITY

- Complex hardware causes downtime, security loop-holes due to misconfigurations, and service delays due to convoluted provisioning processes

VS.

- Use modern software design principles so they are inherently simple to control, manage and provision because they are fully programmable
- Control and processing fully separated

EVOLVABILITY

- Deliver all-or-nothing services - bloated with features that cause drain in resources
- Designed for static uses that never change
- Upgrades impact service
- Changes hard to implement

VS.

- Designed for continuous integration (CI) and continuous delivery (CD)
- Can be updated or transformed with no service interruption

SCALABILITY

- Designed to operate in fixed manner
- Resource usage predictable, but inefficient - will always run same amount of resources no matter how much traffic is processing
- Should traffic exceed prescribed amount, network fails

VS.

- Shares common system resources amongst multiple traffic flows - which leads to efficiency improvement
- Allocates resources as needed - system can be truly elastic
- No minimum traffic flow size
- Additional resources can be added without disruption at any time
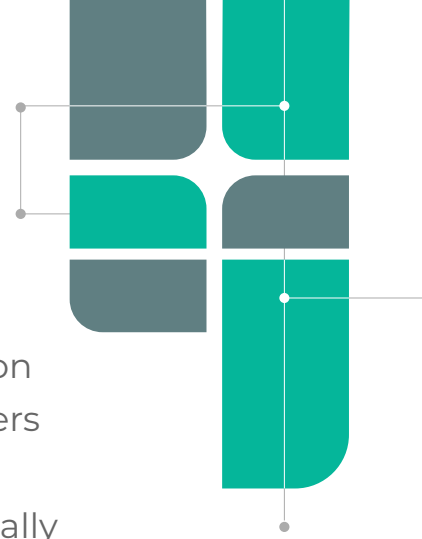
MULTI-TENANCY

- Difficult to manage
- Designed to be controlled by single user
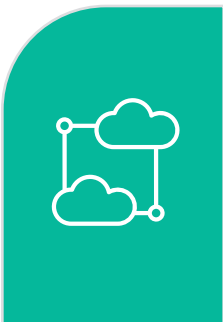- Not flexible when organizational needs change

VS.

- Networks powered by a MNF platform can be sliced by end point, function and traffic flow by user
- Each network resource managed as independent object
- Single platform can support delivery of services to users within 1 organization or fully isolated services for multiple orgs

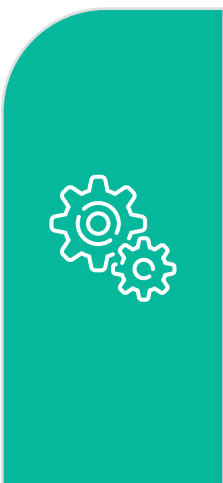# SOFTWARE-DEFINED INTERCONNECTION (SD-IX)

The Stateless Luxon MNF software platform provides the foundation for the creation of Software-Defined Interconnection (SD-IX) solutions. Luxon software operates on commodity servers and can be deployed in business, enterprise, data center or service provider environments. Use SD-IX to connect to practically anything, anywhere at any time.

AUTOMATED MULTI-CLOUD CONNECTIONS: Users have yet to experience the promise of being able to interexchange hyperscale services on demand. A large part of the issue is that every hyperscaler has a different method for supporting access to their services. An SD-IX solution can fully automate multiple cloud onramps allowing end-users to dynamically use resources from multiple hyperscalers transparently.

ENCRYPT EVERYTHING: Cyber-attacks continue to increase. The threat of internal attacks is growing faster than external attacks. Data encryption offers a strong defense against these attacks; however, encryption is a resource intensive network process. An SD-IX solution uses the inherent efficiency of a MNF platform to allow encryption to be applied everywhere using a fraction of the expense of traditional methods.

DEVOPS PLAYGROUNDS: IT teams and DevOps both have the same goals of bringing innovation to the organizations they support. However, they achieve this goal in very different ways. IT teams typically will execute 5-6 major projects per year, build for the long-term and they need to fully control the network. DevOps teams may test 100's of ideas, their projects may only last weeks, and they need to be able to program the network. SD-IX allows both IT and DevOps to have the access to the network that they each need. IT can maintain full control while DevOps can have access to their own 'playground' from which they can continuously mold and test network configurations.

UNLOCK THE POWER HIDDEN IN YOUR NETWORK

CREATE NEW APPLICATIONS

MONETIZE NEW SERVICES

FUTURE PROOF YOUR INFRASTRUCTURE

INCREASE THE SPEED OF INNOVATION

IT'S SIMPLE WITH STATELESS

◁stateless