

# TZ LIMITED SELECTS CLOUDZITI TO SECURELY DEPLOY & REMOTELY MANAGE ITS SMART LOCKER SYSTEMS

SOFTWARE



**TZ LIMITED**  
Smart Lockers

**COMPANY** TZ Limited

**LOCATION** Sydney, Australia

## CLOUDZITI ARCHITECTURE



TZ develops end-to-end integrated locker solutions that help companies manage secure access, optimize workflows and productivity, and capture and use transactional data. The company helps clients transition their workplace to a truly smart environment. TZ is a leader in the design of intelligent locker solutions for agile workplaces and offers solutions that support and enable the corporate workplace from employee storage, package delivery and management to asset management and tracking. Customers include Bank of America, Apple, Microsoft, Adidas, and Schneider Electric.

## STORY HIGHLIGHTS:

### Zero trust third party customer access

Private, zero trust IoT fabric renders all smart locker systems and server side assets invisible to the Internet, eliminating open inbound ports.

### Operational excellence and satisfaction

Automated provisioning, remote management, and service delivery processes improves customer deployment speed and uptime.

### Extensive and scalable outcomes

Leveraging a global, zero trust IoT overlay network ensures uniform deployments across customers, regardless of hardware, networks, geographies or clouds.

“Our customers don’t even need to open a single inbound firewall port in order for TZ to manage our software which is deployed on their networks. This greatly strengthens security for our customers, and streamlines their operations. For example, InfoSec reviews which historically can take weeks became single-meeting events.”

— JOHN WILSON, CEO, TZ Limited

## CHALLENGE:

### Delivering a fully integrated software platform

TZ made the strategic decision to reposition its Smart Locker management systems to leverage growing market demand for information management systems that capture and integrate data at important exchange points in geographically distributed networks where items are deposited or collected by people. “Our new solutions positioning more clearly reflects customer demand drivers, wider market growth potential, adjacent market opportunities, and core business capabilities.” TZ Limited CEO, John Wilson, said.

TZ’s software infrastructure represents a fully integrated and flexible platform that starts at the localized client application at the locker bank for workflow implementation, synchronizes with an enterprise level centralized server for remote system reporting, live locker unit monitoring and integration with third party systems. With sophisticated features such as remote locker bank control and management, real-time granular transactional reporting, locker reservation, smartphone app operation, and integration with third party back-end systems for streamlined operation.

Typically companies remotely managing IoT devices face the problem of on-premise deployments due to traditional security measures such as VPNs, static IP addresses, and port forwarding, which results in costly engineering truck rolls to update software. With this type of infrastructure, customers scrutinize security threats of open inbound ports required to access the on-premise IoT devices. Ultimately, costs continue to rise due to ongoing operations and management of multiple types of customer endpoints and infrastructure.

When integrating CloudZiti into their IoT architecture, NetFoundry customers on average experience the following gains:

**25%**

Increase in customer revenue

**33%**

Expansion of global footprint

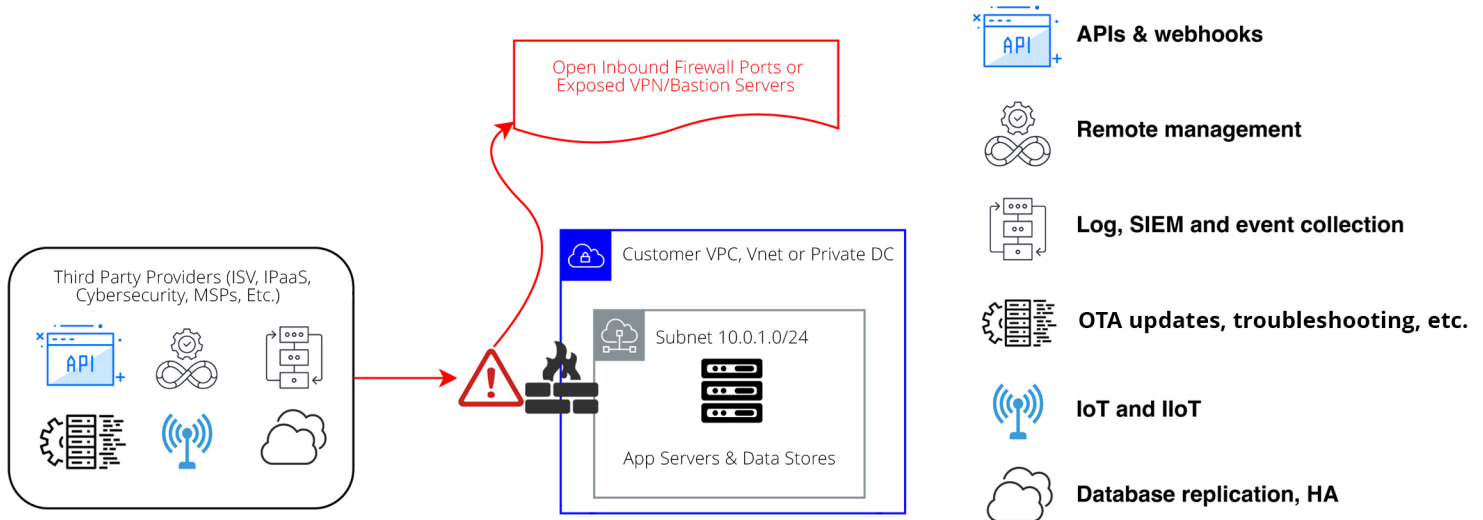
**50%**

Reduction in deployments costs

**85%**

Reduction in customer downtime

## TRADITIONAL INSECURE IOT ARCHITECTURE



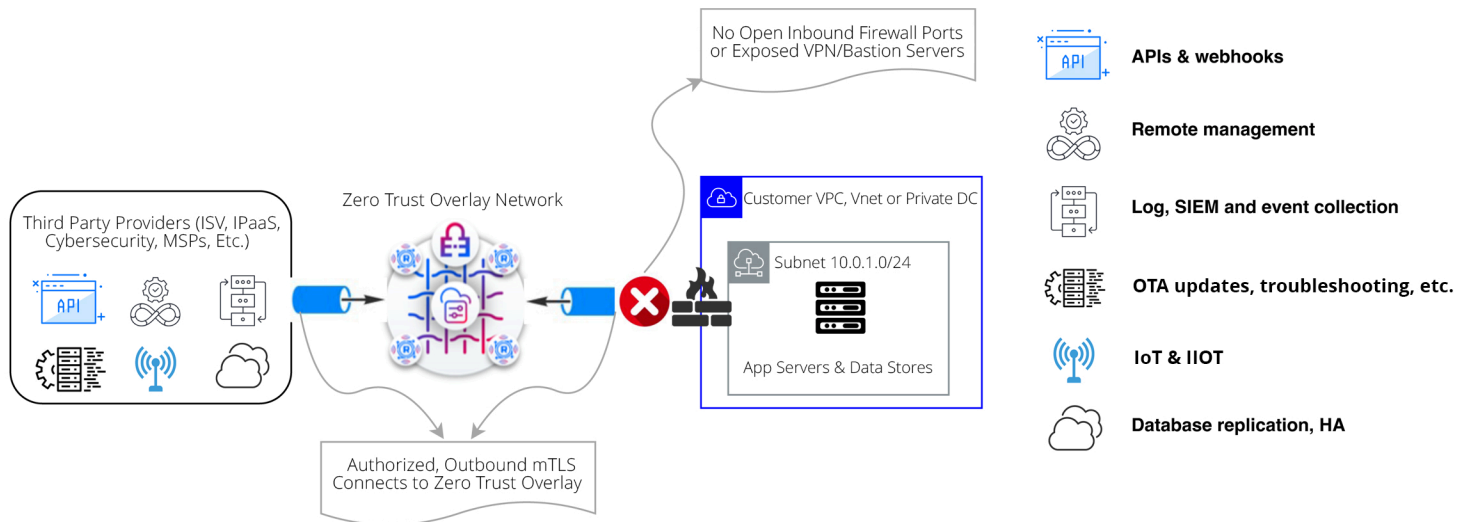
### Inherent vulnerabilities:

Any software deployed on customer networks requires open inbound firewall ports, permitted IP addresses, VPNs or bastions

InfoSec reviews are long and unpredictable. Often these reviews would mandate that additional software be bolted-on to compensate for the vulnerabilities

Static IP addresses and port forwarding are required for identification and routing adding further complexity and security concerns for customers

## TZ ZERO TRUST IOT ARCHITECTURE WITH CLOUDZITI



### Inherent strengths:

Secure by default private, IoT fabric (software defined network) renders all lockers and server assets invisible to the Internet, closing all open inbound firewall ports

Embeds zero trust into any app or any edge instantly extending anywhere, leveraging prebuilt solutions - connect "anything to anything"

Removes the need for split tunneling, static IP addresses, and port forwarding for each kiosk, eliminating the vulnerability of changes to the store network

Enables least privileged micro-segmented app connections for data collection from IoT smart locking devices and admin access to network devices across all customers

Exceeds federal government zero trust mandates with mutual TLS (mTLS), encryption and bi-directional X.509 certificate-based identity and authentication

## SOLUTION:

### Achieving critical security with less complexity and cost

Switching to CloudZiti further enabled TZ to increase its infrastructure security, deliverability, and scalability with less complexity. Ingesting and transferring customer data from smart locking devices across a private, zero trust IoT fabric eliminated open inbound ports with a secure by default solution. TZ now has a far simpler and faster operating model when scaling from tens of thousands of devices.

Most traditional IoT models have an operational burden associated with deploying and maintaining customer solutions with dependencies on IP addresses, port forwarding, and split tunneling for each device. TZ engineers can directly connect to kiosks independent of a connection to Azure, facilitate remote maintenance, and the pre- and post provisioning of kiosks.

The full-mesh, self-healing, global CloudZiti fabric is more reliable and resilient than VPN tunnels, supporting more than 300 global cloud regions compared to OpenVPN's 35, and enables simple and scalable remote management of TZ's global admins and heavily distributed lockers. Where RDP and SSH over VPNs across long internet links can be painful and slow for remote admins, the CloudZiti fabric optimizes latency and reliability of these sessions.

Automation, accelerated deployments, and reduction in downtime also improved the company's time to revenue.

### Improving performance and product delivery experiences

CloudZiti improved TZ's business speed and agility to respond to changing market dynamics, while enabling new innovation across operations and customer offerings. Its multi-cloud native technology and automation provides TZ with the simplicity and scalability to grow its business anywhere in the world regardless of customer volumes, geographies, and use cases.

With multi-cloud native, embedded zero trust security, TZ can now easily extend into any cloud with centralized orchestration via API or web console, giving unparalleled visibility and control. CloudZiti's private DNS and mesh network offers near real-time intelligent routing across

clouds, so there are no single points of failure as the real-time performance of the Internet is a constant factor in dynamic route selection. This battle tested performance allows TZ to automate and scale solution deployments across the globe with significantly reduced TCO, network response times, and business risk, supporting growth well beyond hundreds of thousands of kiosks and lockers.

Smart routing and closer proximity to infrastructure and customers by utilizing the constantly growing coverage and reach of cloud service providers' expansion also improved QoE. This creates new addressable markets as TZ is now able to meet country specific regulations like data privacy concerns, and became a unique selling point in the company's value proposition and customer acquisition strategy.

## FUTURE:

### Streamlining operations with customer expansion

Securely ingesting and transferring data from IoT devices across all customers is a priority for TZ Limited. CloudZiti will enable innovative outcome delivery at the highest level of quality while substantially reducing the risks and costs associated with meeting or exceeding these secure outcome expectations. According to Wilson, "CloudZiti has been a main enabler in our shift from a smart locker hardware manufacturer to a supplier of logistics software solutions."

CloudZiti will also make it easier for TZ to deploy new revenue models and service offerings without building additional security infrastructure.

**“Leveraging CloudZiti as a trusted partner to facilitate secure customer operations will further innovate the scalable adaptability of our core software modules to address our customer use case opportunities.”**

— JOHN WILSON, CEO, TZ Limited

## ABOUT NETFOUNDRY

Networking was once a barrier to app innovation and automation with dependencies on after-the-fact security and performance engineering. NetFoundry is shifting the paradigm in cybersecurity by embedding zero trust networking and security as code. Our CloudZiti solution embeds zero trust as software into apps, APIs, IoT devices, and other valuable assets rendering critical infrastructure invisible to the Internet – and unreachable by potential attackers. It is the world's first programmable, cloud native, zero trust network with near unlimited scale, concurrency, and performance. CloudZiti represents a new art of the impossible by enabling developers, network engineers, DevOps, and cloud teams to programmatically control private, zero trust, high performance networking. CloudZiti is built on NetFoundry's OpenZiti solution, the world's most used and widely integrated open source secure networking platform.