

# Orchestrated Authorization at the Edge

How Axiomatics and Avassa are  
supporting enterprises to deliver  
authorization in IoT environments

avassa



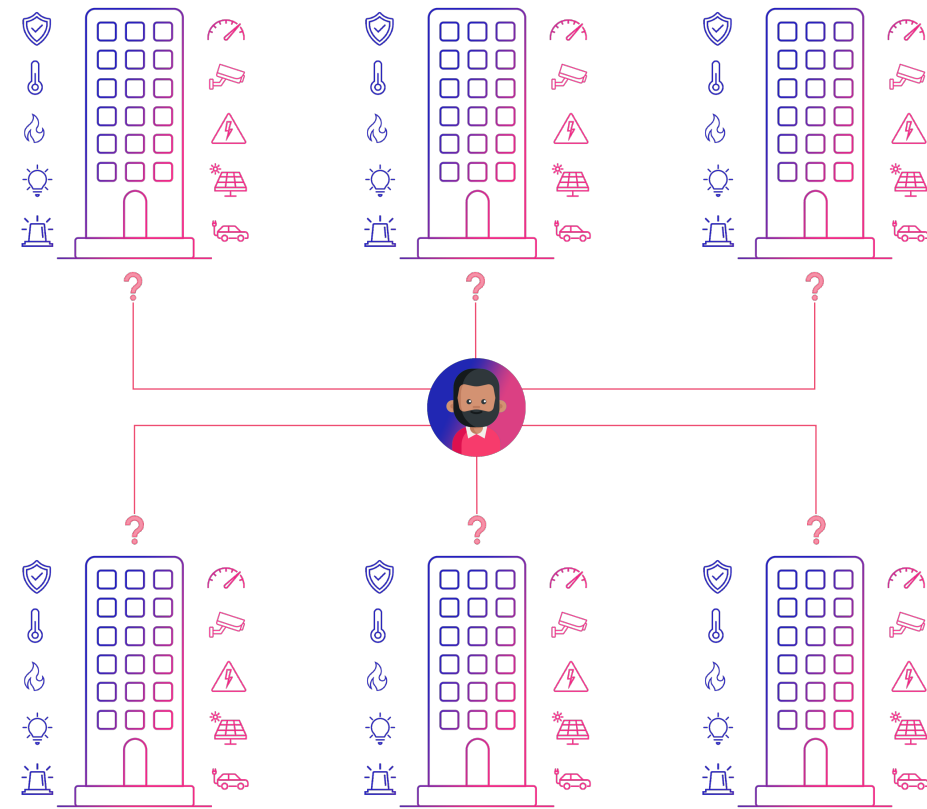
AXIOMATICS

# Isolated authorization compromises security posture



Hugo, an employee of a company with operations in many locations, should access the applications and data only in the location where he is stationed. However, when authorization control is centralized in e.g. a public cloud, the company has limited ability to manage which locations an employee are authorized to access the application in. This lack of granularity in control weakens the company's security posture.

Hugo's assigned workplace



## ■ Orchestrated Authorization at the edge

## ■ Key business outcomes of Avassa and Axiomatics solutions



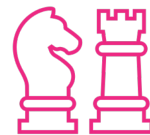
### Harmonize security

Bring authorization benefits to edge applications, minimize risks in real-time. Enable teams to build and deploy applications to the edge that include fine-grained authorization.



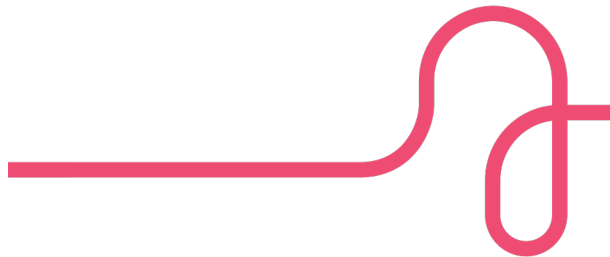
### Reduce complexities

Avoid complexity and facilitate deployment with distributed authorization at the edge.



### Take Zero Trust strategy to the edge

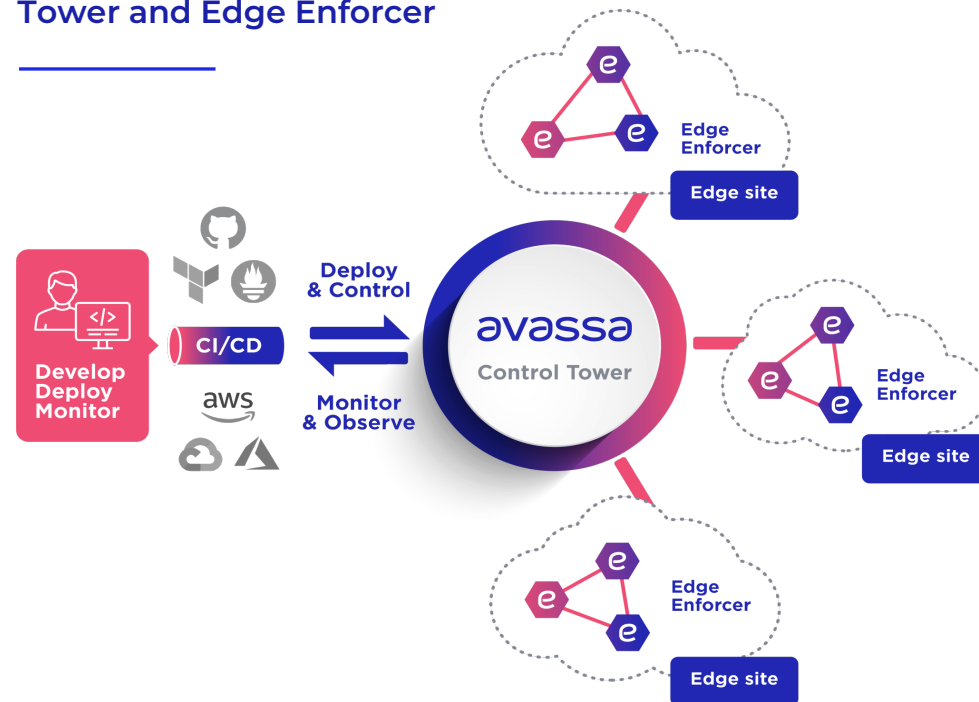
Ensure continuous verification of access based on dynamic attributes is applied to all applications, including the ones sitting at the edge.



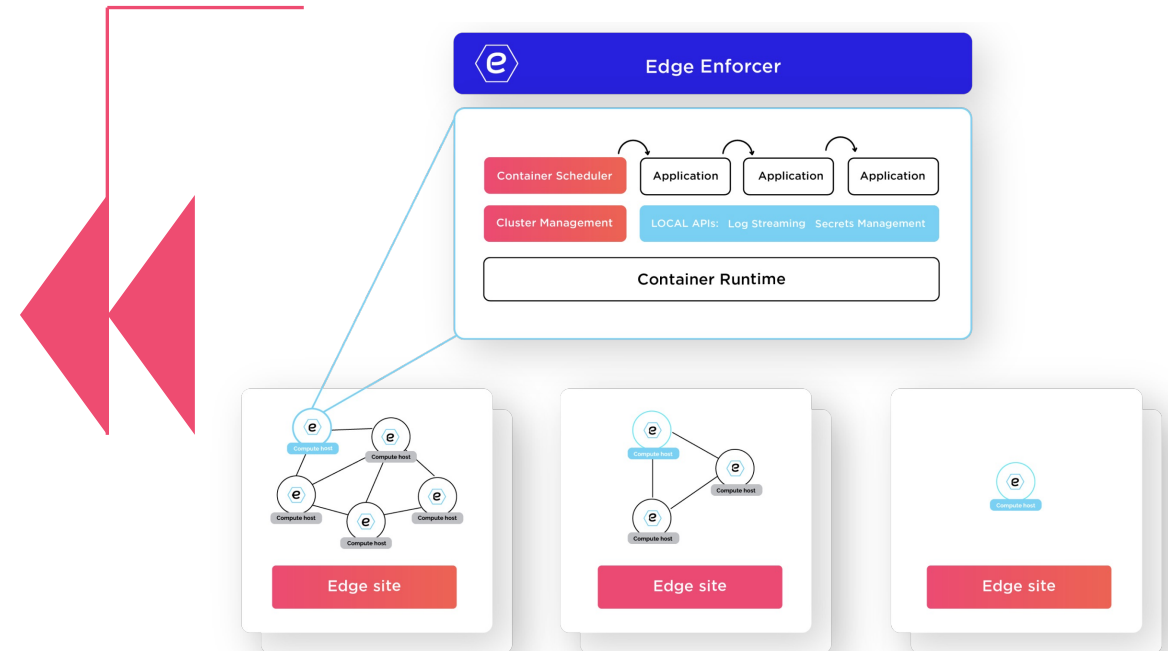
# Avassa: An application orchestration platform for the edge

Enables enterprises to orchestrate containerized application workloads using well-known tools and practices in environments with many locations and where location matters.

## Platform overview: A Control Tower and Edge Enforcer



## Zoom on the Edge enforcer



# Axiomatics brings orchestrated authorization to the edge with **Avassa**

There are three options to achieve  
Axiomatics orchestrated authorization at  
the edge with Avassa



## **Option 1:** Native Autonomous

An Axiomatics PIP and policy decision point (PDP) are installed in the edge site via Avassa's edge enforcer and communicate directly.

Runtime authorization (collecting attributes and decisions) is performed autonomously at the edge enforcer for faster decisions better reliability and less dependencies



## **Option 2:** Central non-autonomous

The Axiomatics PIP is running in a central location, on-prem. Axiomatics policy decision point (PDP) in the edge connects with the PIP but is vulnerable to potential network instabilities.

The PIP is running in a central location on-prem, to cater to the needs of enterprises having complex IAM systems. The systems has some limits especially in case of network instability, it can slow down the connection with the PDP.



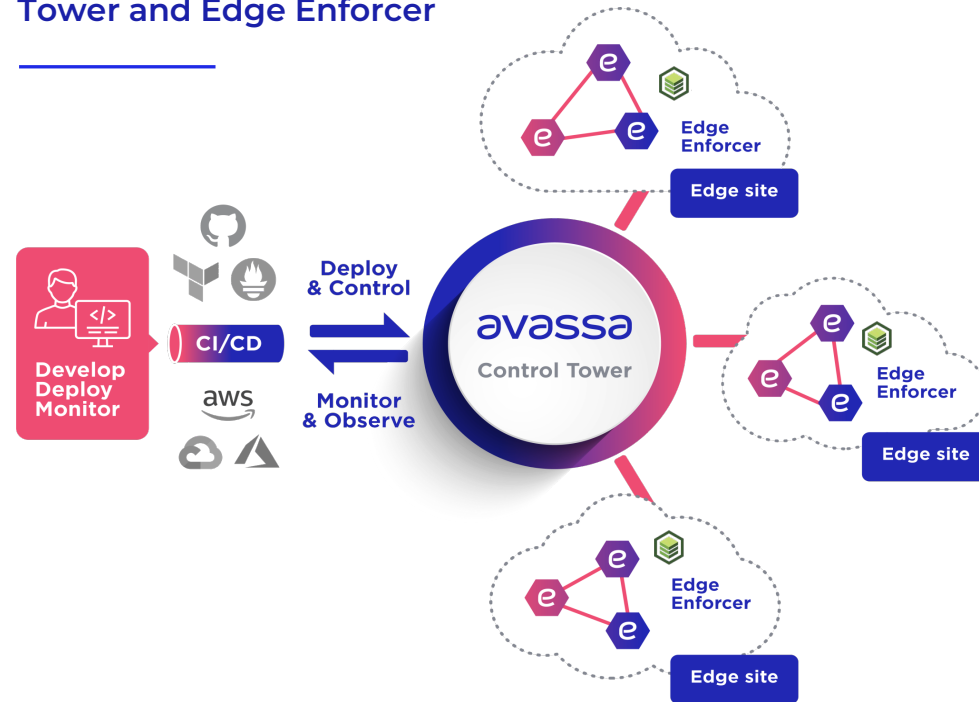
## **Option 3:** Autonomous via provisioning

PIP data is provisioned into the edge site from the Avassa control tower. PDP is sitting in the edge enforcer.

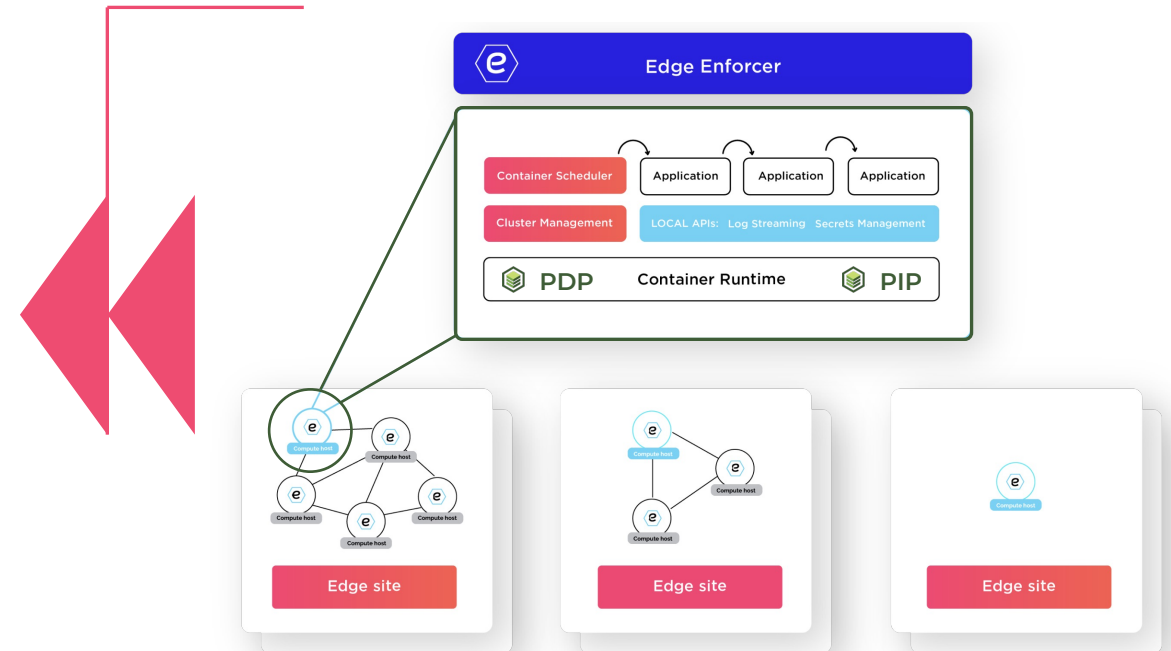
Avassa control the PIP but the authorization decision is made at the edge. The entire authorization orchestration is run on Avassa system and not on the customer premisses.

# Option 1: Native autonomous

Platform overview: A Control Tower and Edge Enforcer

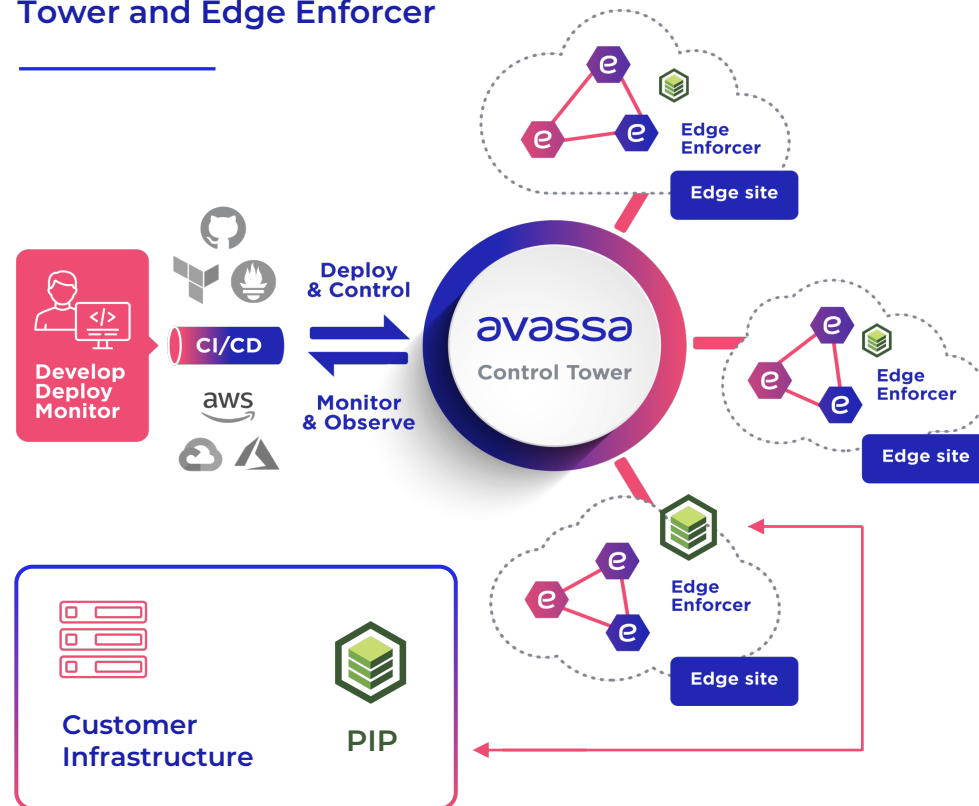


Zoom on the Edge Enforcer

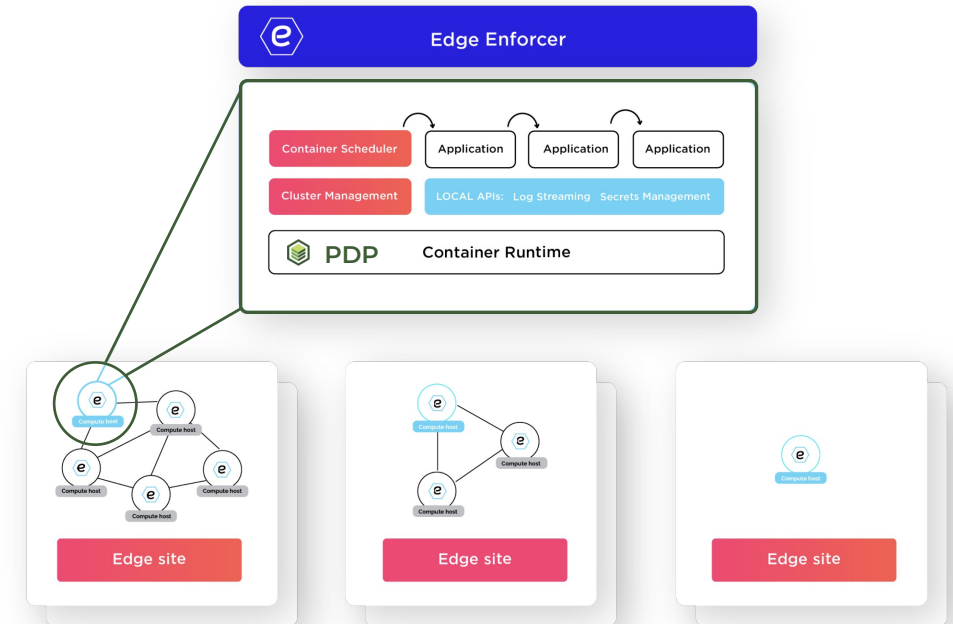


# Option 2: Central non-autonomous

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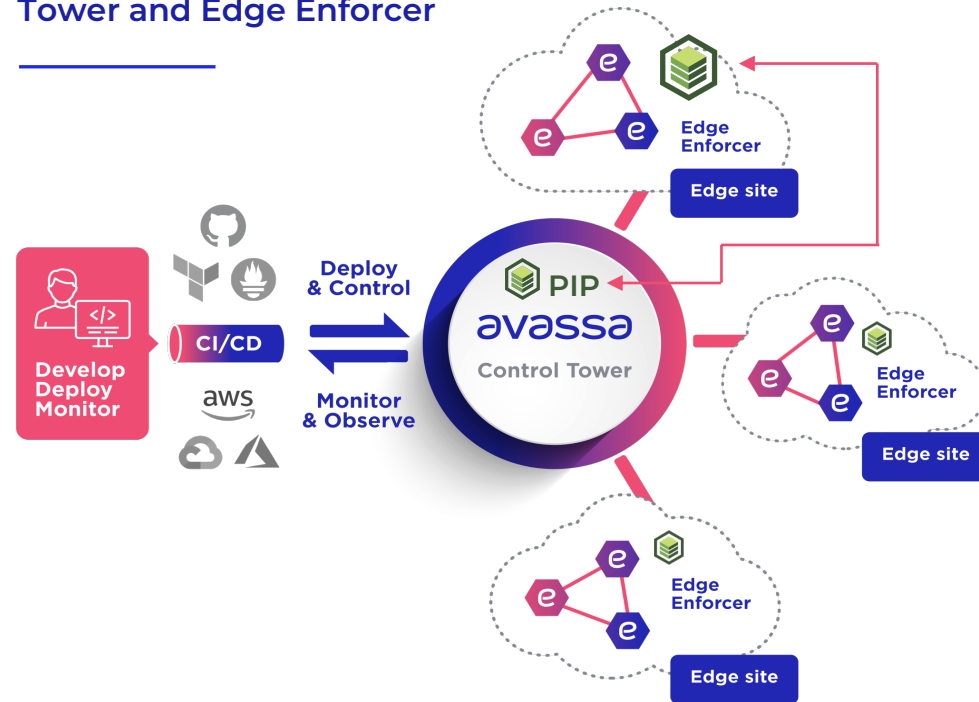


Zoom on the Edge Enforcer

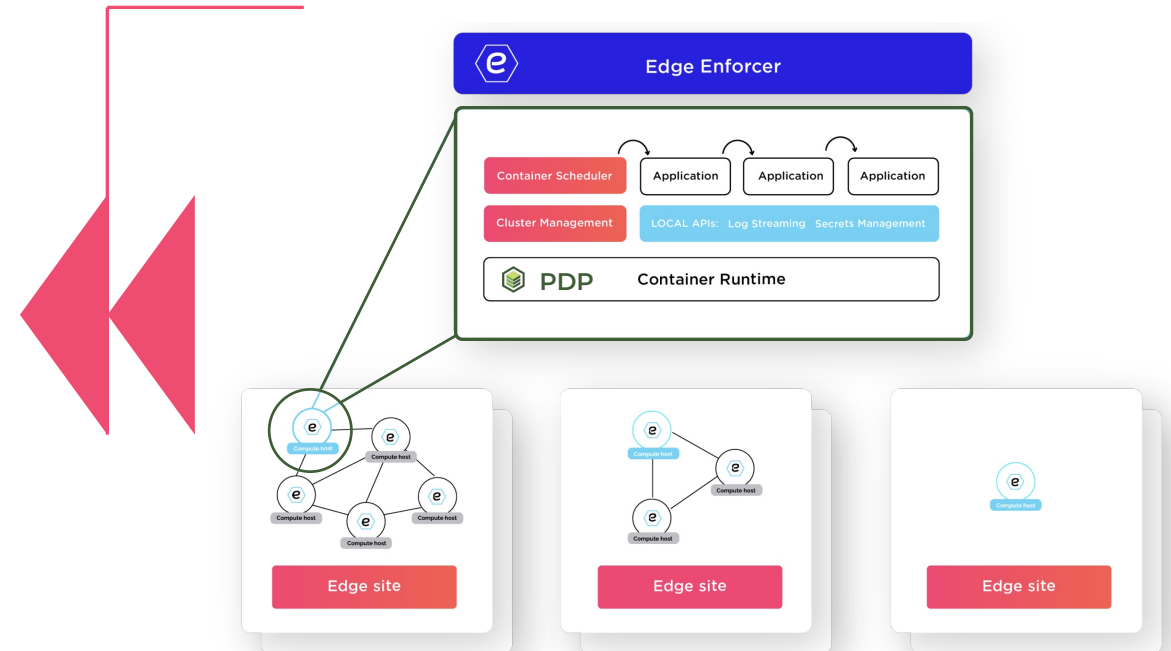


# Option 3: Autonomous via provisioning

Platform overview: A Control Tower and Edge Enforcer



Zoom on the Edge enforcer

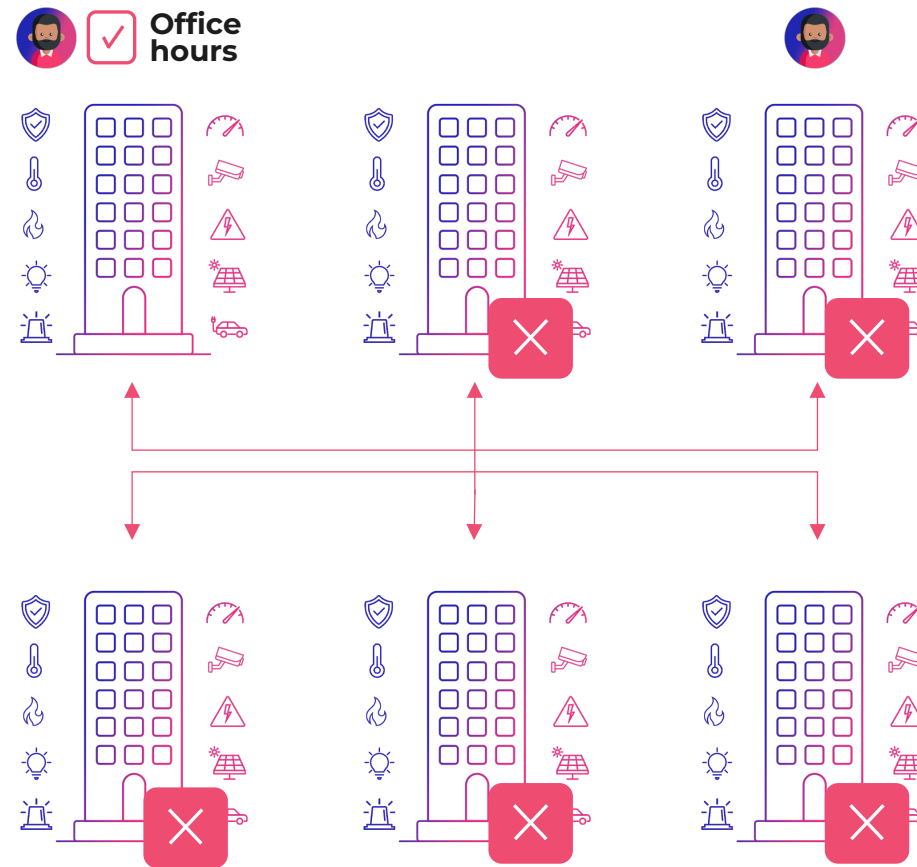




# Use case 1: Securing applications at the edge in an IoT environment



Every smart building has sensors or devices capturing security events or data. For example, it monitors lights or ensures a charging station for cars is available. Data is stored in each application at the edge. Hugo the building manager can only access its own building data. When Hugo goes to another smart building, access to data to a specific application is denied.

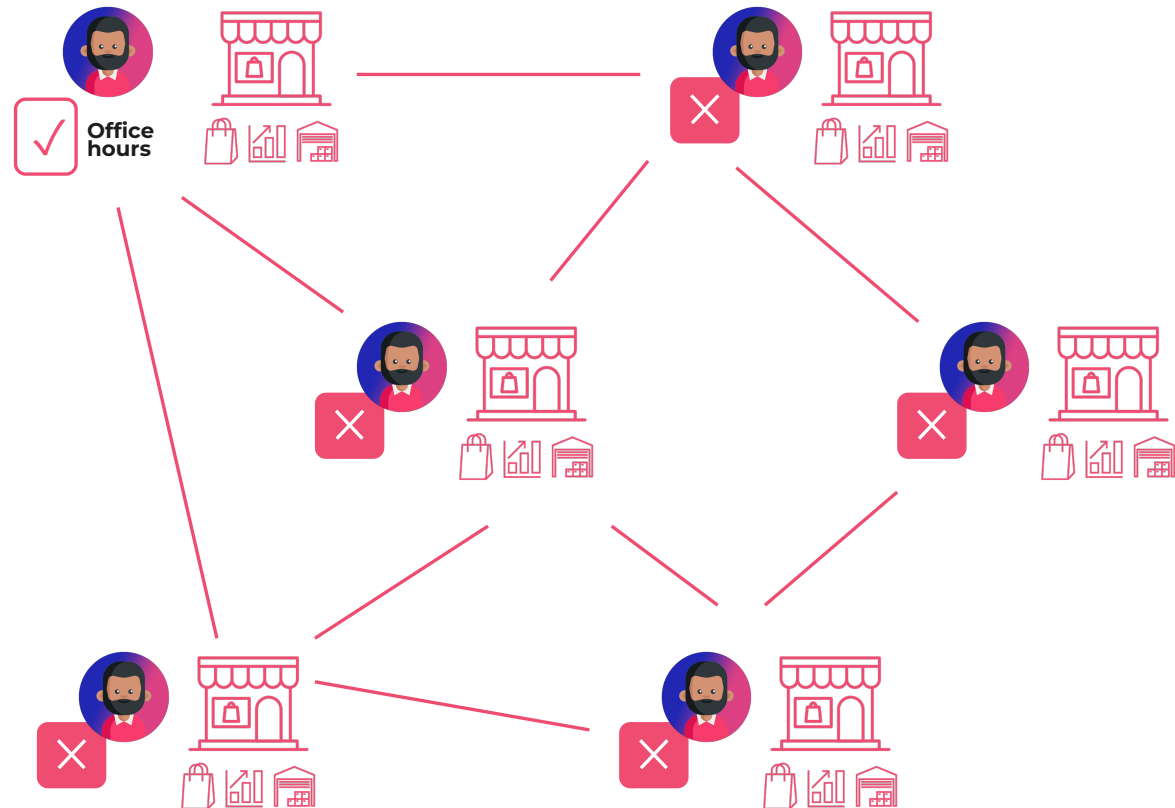


# Use case 2: Securing customer information at the edge



In the store of the future or Retail 2.0, consumer data, and stock management are all stored and managed in various applications, that require a different level of access.

Hugo the store manager accesses sales and stock management in-store during store opening. When visiting other stores, Hugo cannot access these data.



# Learn more

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