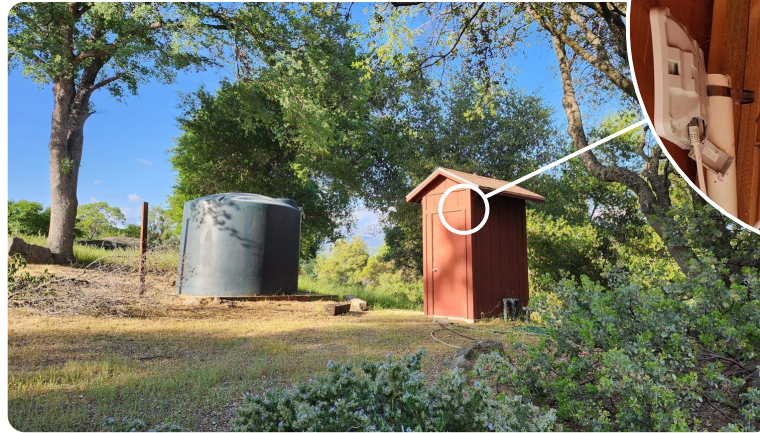


# **Central Gateway operation with The Things Stack and Atsign**

# Setting up a single gateway is a challenge.

But *very* rewarding when it's done!



LoRaWAN setup in my well house

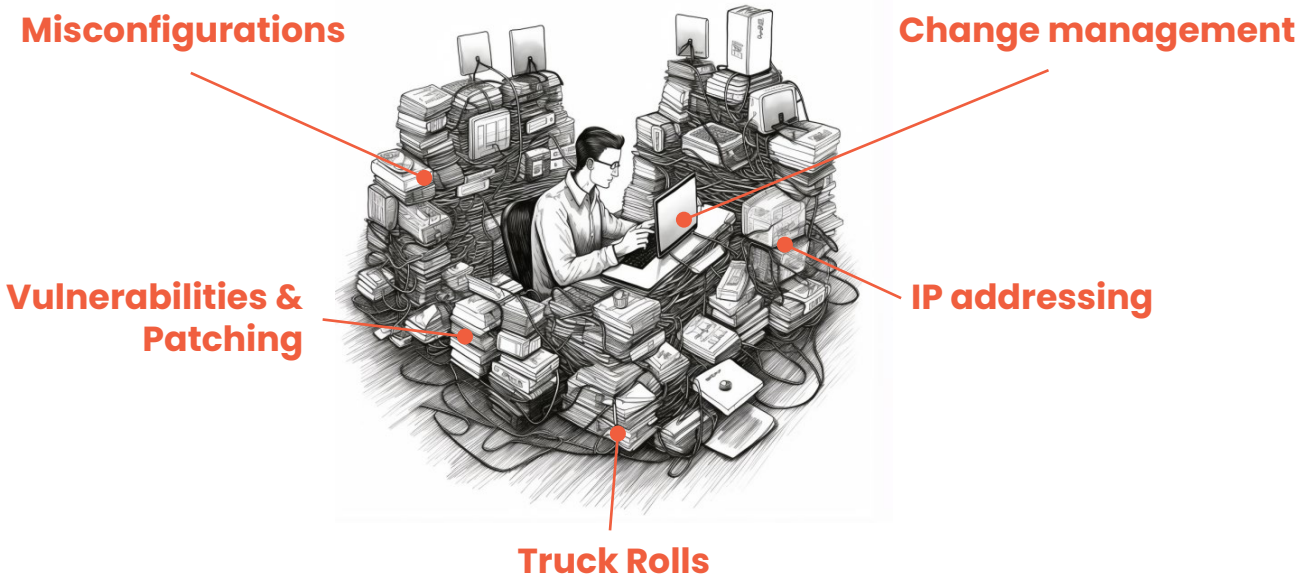


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**Colin Constable**  
Co-founder & CTO

@atsign

# Managing gateways at scale is a drag...



**..until now.**

**Efficiently and securely manage  
LoRaWAN gateways at scale with**

**Atsign**

**A control plane built for Scale**

# IP Addresses

Yes we need them

But we do not have to know them

@lw\_gateway01

```
cconstab@ionos1:~/sshnoports$
```





# NAT/1918/Firewall Rules/Mangles/IPTables

**No one wants to manage them**

**So let's not worry about them**

**Deny All Inbound**

```
cconstab@ionos1:~/sshnoports$
```



## VPNs

**No one wants to manage them either**

**So let's not worry about them**

**End to End Data Encryption + TLS v1.3**

cconstab@ionos1:~\$



## Management GUI's

**No one wants a GUI at scale or to trust an API**

**So let's have a**

**Global Network Control Plane**



## Standards + Tools

**No one wants to be locked in**

**So let's not worry about either**

**OpenBSD 3 license fully extendable**

# Atsign ecosystem

## Software



## Hardware



arm



## Our SDKs





**Sound interesting?**

**Want to get involved ?**

**Yay!**

# Colin@atsign.com

See more demos and peek into the code.

