

# BifrostConnect IP Tunnel

How to take critical OT infrastructure offline while boosting remote access capabilities through air-gapped IP communication

In an ever-expanding threat landscape, organizations are constantly in danger of cyber-attacks. With a Bifrost IP Tunnel, you can authorize momentary Out-of-Band IP communication without configuring your company network or on-site applications. Eliminate attack surfaces in your OT infrastructure while ensuring Business Continuity whenever Zero Trust Access is required.

## Connect With Your Equipment Like Never Before

### Air-gapped IP Communication

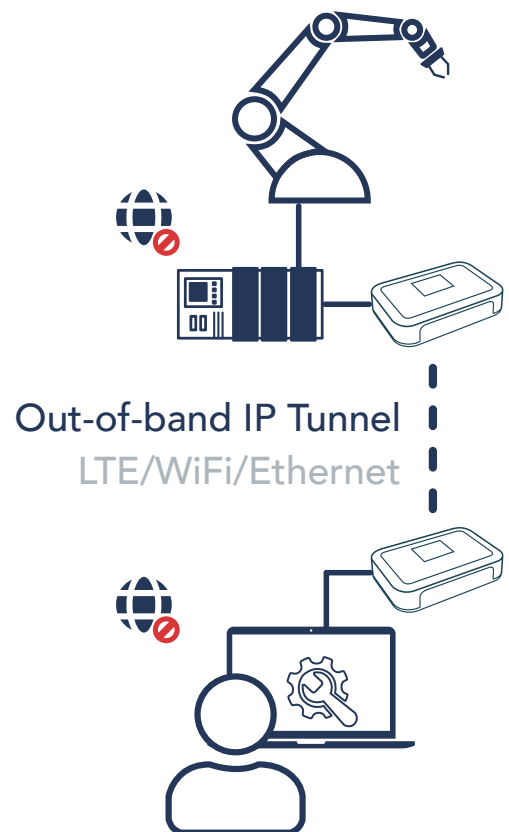
Establish an Air-gapped private network between IT/OT equipment – **without VPN tunneling** – so your perimeter security can remain intact. Provide secure Out-of-Band access without any additional network latency. Apply secure End-to-End encryption for every session.

### Robust Access Management

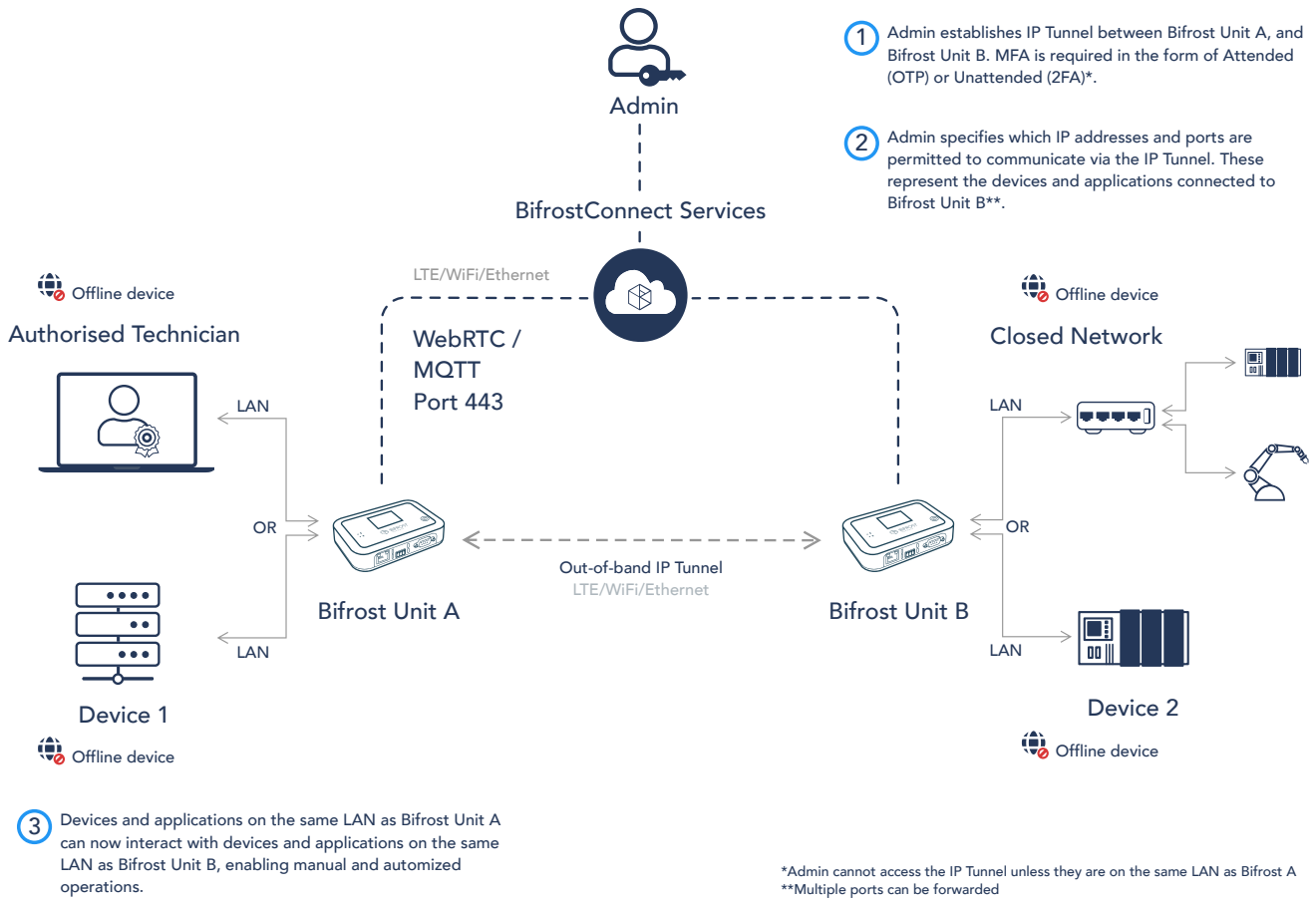
Ensure that devices are only accessible on demand and that 2FA or SAML authentication is required. Allow admins to apply the least privilege and granular permissions to define how technicians, 3<sup>rd</sup> parties, and remote systems interact. Choose whether you want to limit access to one single IP and Port or a network of multiple IPs and Ports. Support Attended Access: The end-user receiving support must establish connectivity and verify the session. Support Unattended Access: The privileged remote operator can establish access without relying on on-site personnel.

### Audit logging

Monitor and document activities across your organization. Streamline your reporting with an extended audit trail that integrates directly with your preferred SIEM solution.



# HOW IT WORKS



## Example A – Zero Trust 3<sup>rd</sup> party access

**Problem:** You need 3rd party vendor support to remotely configure an offline device like a PLC in your production line. The proprietary software required to configure the PLC is installed on the vendor's PC, but you can't allow a VPN connection, and waiting for on-site support is very expensive.

**Solution:** The IP Tunnel enables you to establish a temporary offline remote LAN connection between the Vendors' PC and the PLC, allowing the vendors' technician to configure the device with on-site capabilities without exposing the PLC to the internet.

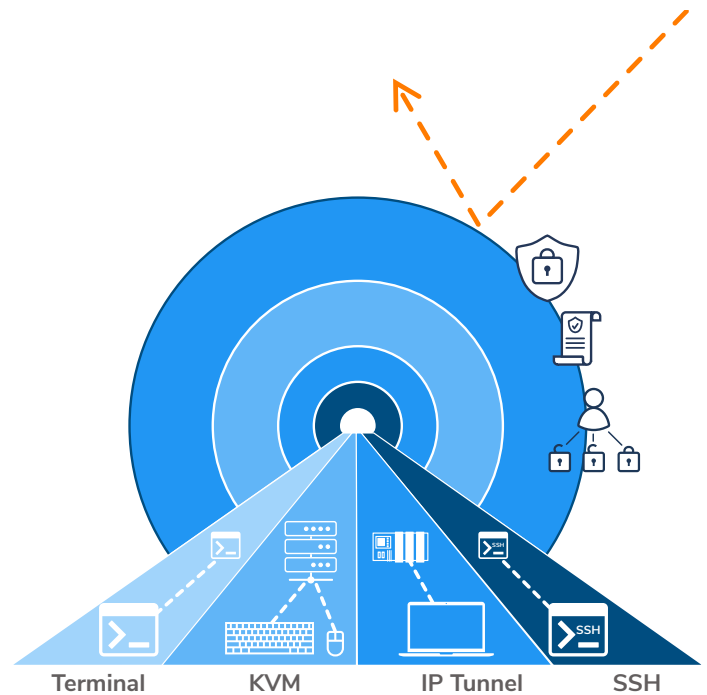
## Example B – Air-gapped data extraction in OT environments

**Problem:** You must extract data from an offline OT device to process them on a remote Predictive Maintenance server. Connecting the OT device to the internet jeopardizes operations, and bringing the server online increases the risk of sensitive data theft. Thus, both devices must be kept offline at all times.

**Solution:** The IP Tunnel enables you to establish a temporary offline remote LAN connection between the OT device and the server allowing secure data transfer without internet exposure.

## YOUR BENEFITS

- Minimize attack surfaces by avoiding static Remote Access to your OT network systems.
- Take OT offline while still being able to pull data for predictive maintenance and establish remote access.
- Eliminate the overhead of operating a VPN for partners, vendors, or remote privileged users.
- Standardize on a single remote access tool to minimize the need to track many tools in your environment.
- Allow temporary access to authorized remote operators without granting additional user rights beyond those provided via the organization's internal IT security policies.



### Summary

BifrostConnect simplifies Zero Trust Access for your IT and end-users. When adding the IP Tunnel to your BifrostConnect Solution, you enable your authorized users and apps to access devices and data across your IT and OT infrastructure in an air-gapped environment. Whether you need KVM, Terminal, or IP-based access, the BifrostConnect Solution allows you to reach your critical infrastructure Out-of-band without exposing any endpoints to the internet.

#### Zero Trust

- ✓ Air-gapped Remote Access
- ✓ Out-of-band LTE connectivity
- ✓ End-to-End Encryption
- ✓ Transitory Session Data
- ✓ Multi-Factor Authentication
- ✓ SAML integration
- ✓ Access Management
- ✓ Audit Logging

#### Flexible

- ✓ Support all platforms
- ✓ IP Tunnel Sessions
- ✓ KVM Sessions
- ✓ Terminal/Serial Sessions
- ✓ SSH Sessions
- ✓ File Transfers
- ✓ BOOT/BIOS Access
- ✓ Portable/On-demand

#### Plug and Play

- ✓ Offline Remote access
- ✓ Hassle-free implementation
- ✓ No software installs
- ✓ No network configuration
- ✓ No on-site configuration
- ✓ Out-of-the-box commissioning
- ✓ Easy to use
- ✓ Private Infrastructure (optional)