



# MET Connect™

REMOTE ACCESS FOR YOUR  
CONTROL SYSTEM NETWORK



# Why MET Connect?

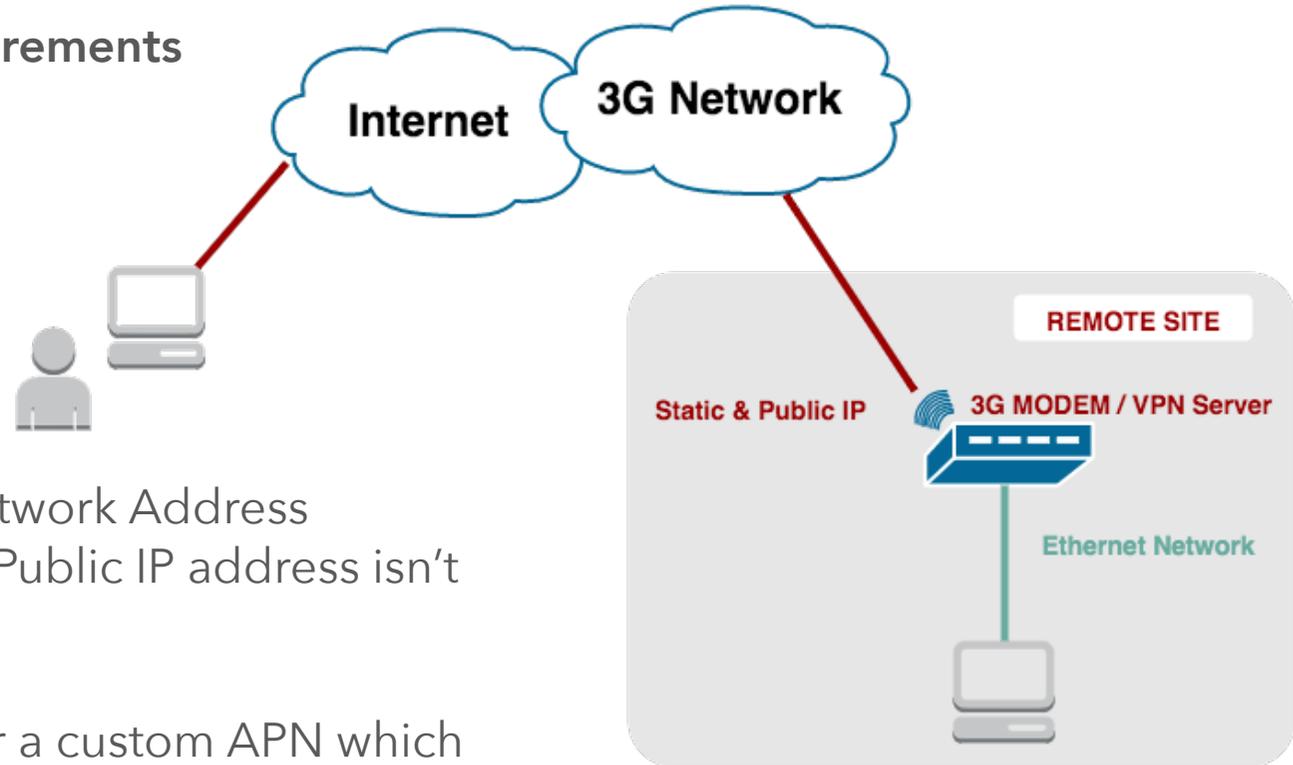
Issues with current approaches to remote access:

## 3G Network Requirements

- Public IP
- Static IP or Dyn-DNS

## Issues

- 3G Networks use Network Address Translation (NAT) so Public IP address isn't usually possible
- Some providers offer a custom APN which locks you to one provider
- Dyn-DNS services to track a changing IP address are not scalable to many devices



# Security Implications of current approach

## **Consequences of VPN server running locally on the 3G MODEM:**

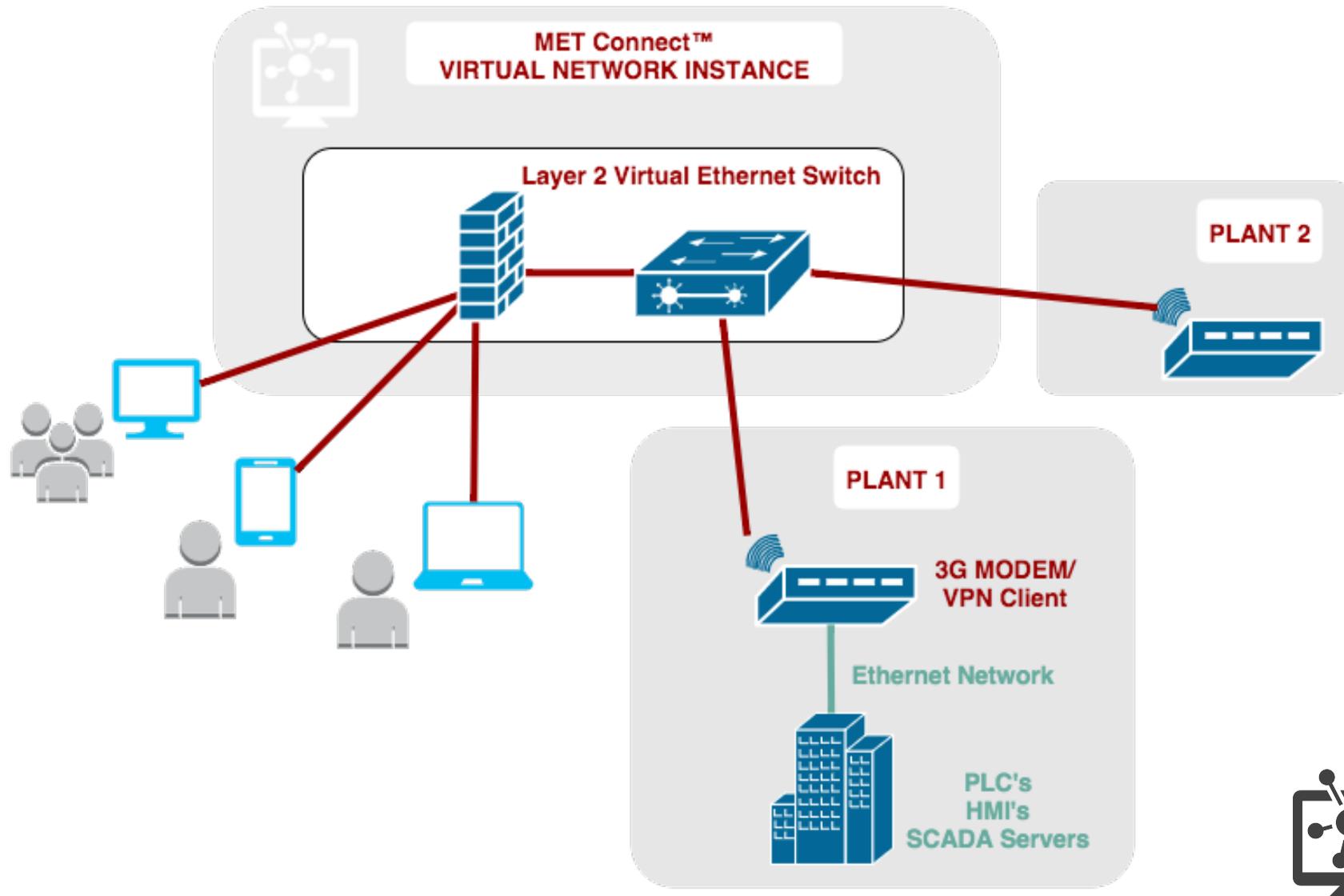
- One shared username and one shared password for everyone to remotely log-in
- Staff member leaves the company but still retains access to a “secure” system
- No audit trail of who logged in, what they did on the network and when
- Unfettered access to all - not possible to create user-based firewall permissions

## **Other Drawbacks:**

- Not possible to aggregate multiple sites into one virtual network
- One VPN login per site at one time - No collaboration between remote technicians
- No continual remote monitoring possible with this configuration

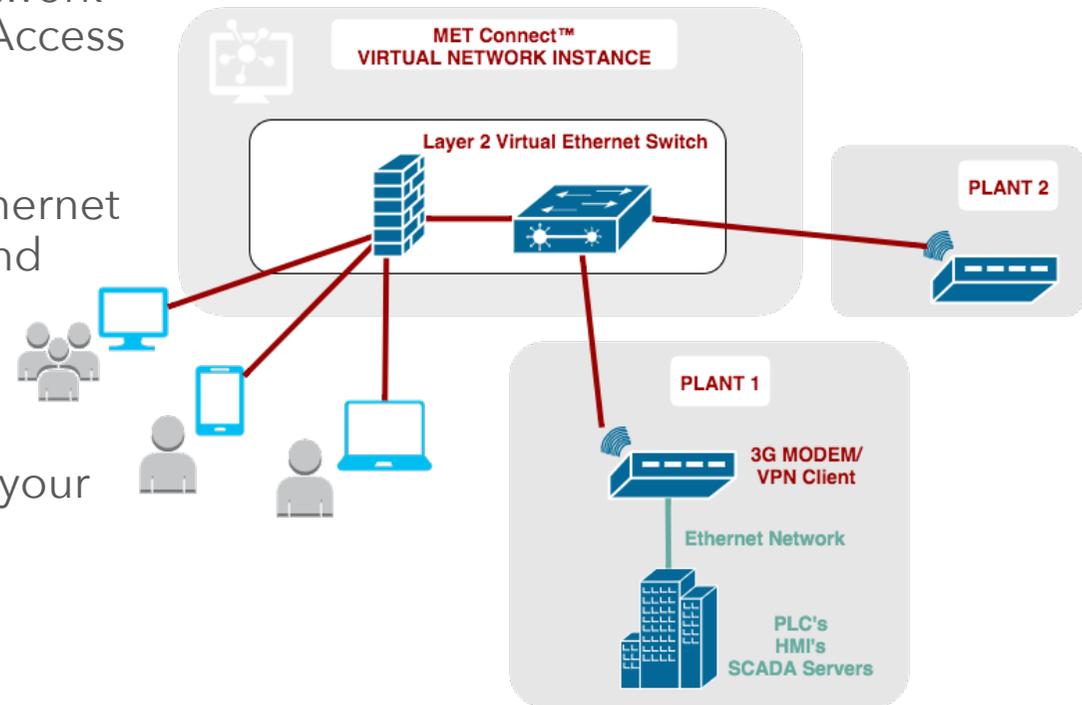


# The MET Connect™ Solution



# How it works

- Remote MODEMs connect as VPN Clients to your private Virtual Network Instance (VHUB) on our Remote Access Server
- MODEM acts as a transparent Ethernet Bridge between Local network and VHUB
- Users connect as VPN Clients to your VHUB



Your VHUB is completely private to you. It acts as a Virtual Ethernet Switch allowing transparent Ethernet Communication between client devices and plant network devices



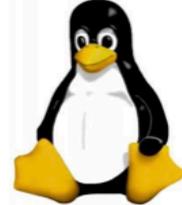
# You're In Control

- Site admin creates separate accounts for each user
- Tight control over who can access the network
- Audit Trail - See who logged in and when
- Packet Log - option to log all packets for the really paranoid
- Apply custom firewall rules based on users or group membership.

e.g. **jblogs** can only access IP cameras, but **jsmith** can access whole network



# Native Support Built-in to your OS of Choice



## Every Major VPN Protocol Supported

L2TP/IPSec

OpenVPN

Microsoft SSTP

L2TPv3/IPSec

EtherIP/IPSec

**No Software to install. Use the VPN Client built into your:**

iPad, iPhone, android phone, android tablet, windows laptop and mac



# Layer 2 – Ethernet Connection

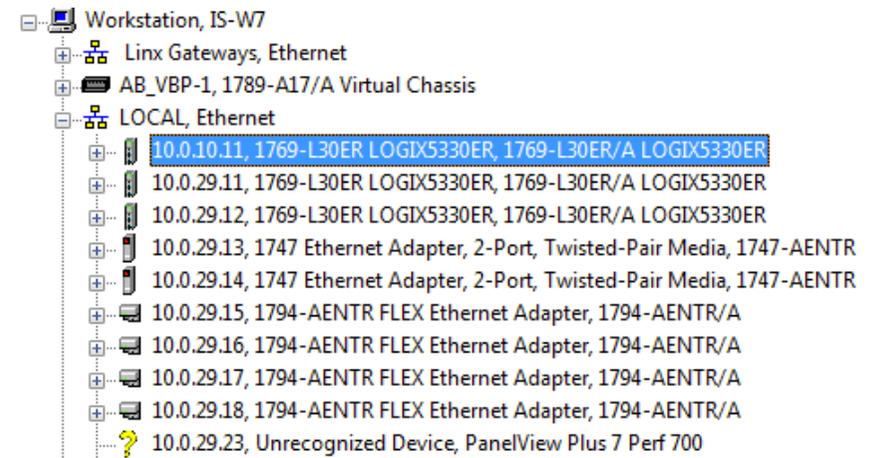
## Transparent Layer 2 Ethernet Network

### This means:

- No *Default Gateway* needs to be programmed on remote devices
- Both Users and Remote Network devices appear on the same logical Local Subnet. No routing rules need programmed.

e.g. remote user IP can be 192.168.1.100  
and PLC can be 192.168.1.11

- Broadcast Packets Work – e.g. RS Logix 5000 can browse 'Local' subnet and 'Go Online' with PLC
- Use any Layer 3 Network Protocol, not just IPv4



**RS Logix 5000 works remotely!**



# Virtual Network Topology

The MET Connect™ Virtual Ethernet topology facilitates transparent linking of multiple remote sites into one large logical Local Area Network

- Remote Inter-PLC Communication
- No gateway addresses required
- No additional routers required
- Option for Level 2 Bridging or Layer 3 routing between multiple VHUBs
- Highly scalable architecture - connect thousands of remote sites together



# Manage your own Network

**MET Connect™ Manager Software** gives the local network administrator full control over their VHUB:

- Creating / deleting users and groups
- Account password management
- Firewall rules
- Audit trail - access and packet logs
- DHCP configuration
- No need to contact MET Connect to manage *your* own network

Management of Security Database:

-  **Manage Users**  
Add, delete or edit user accounts.
-  **Manage Groups**  
Add, delete or edit groups.
-  **Manage Access Lists**  
Add or delete access lists (Packet filtering rules).



# Monitor your Remote Network

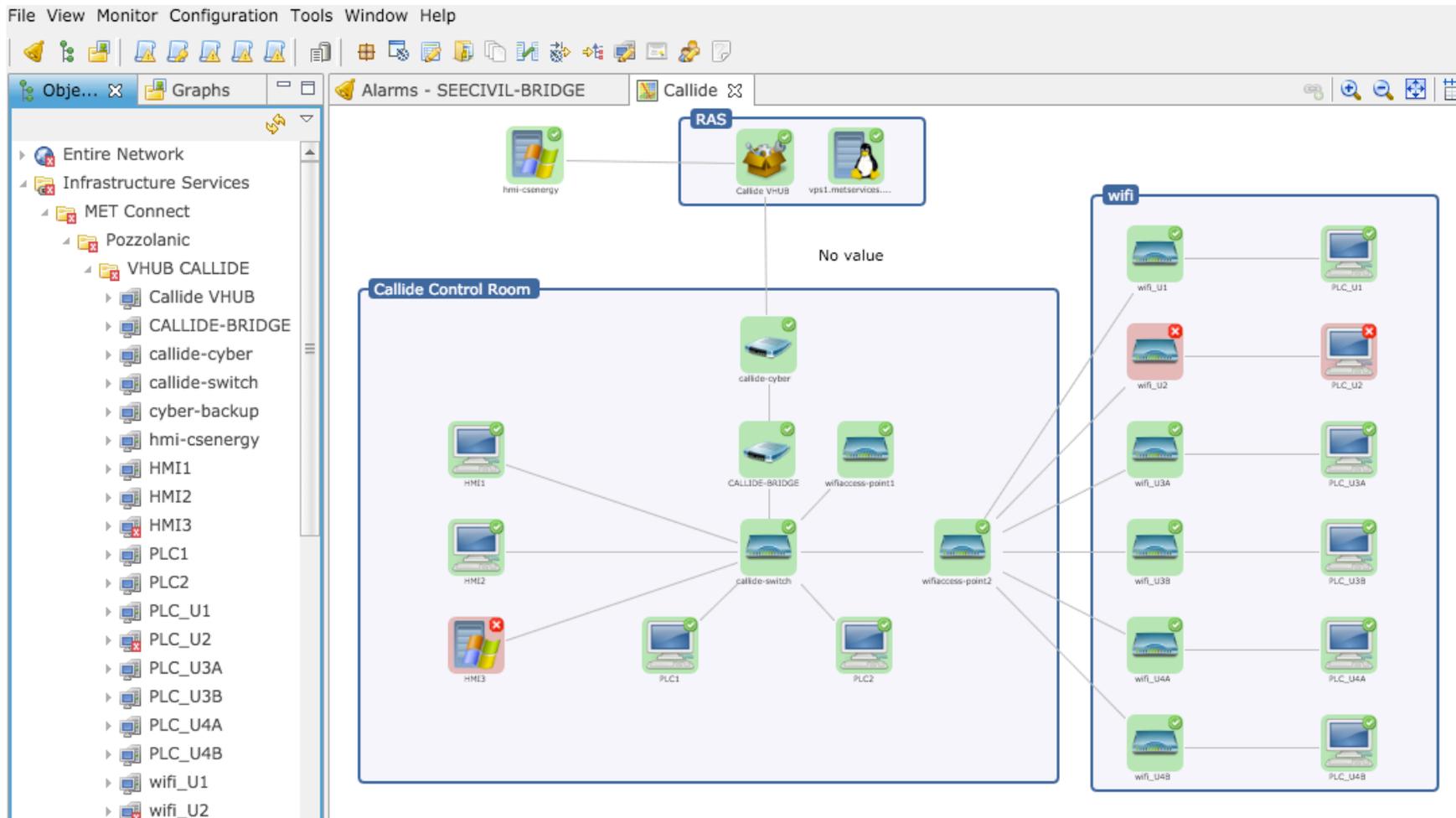
**MET Connect™ also offers a 24/7 Remote monitoring platform:**

- Remote monitoring server connects into your VHUB and monitors your remote devices such as PLC's, HMI's, SCADA servers etc...
- Poll any network device via SNMP
- Monitor for SNMP Traps
- Monitor health and availability of remote devices
- Network map visualisation
- Aggregate data from multiple sites and store and graph your process parameters





# Monitoring Infrastructure



Monitor your network infrastructure via secure website



# Our Back-End Network

The MET Connect™ Service is hosted in Australia in a Tier 1 Data Centre

- Extremely Reliable - High Uptime
- Runs on High Availability Redundant Cluster Servers
- Trusted for 24/7 Operations by:
  - **NRG Power Station**, Gladstone - Ash Plant Remote Access
  - **Callide Power Station** - Pozzolanic Ash Plant Remote Control
  - **ERA Ranger Uranium Mine** - Dredge
  - **SEE Civil** - 24/7 Remote monitoring of Trommel Rock Screening Plant
  - **Pro Crush** - Multiple mobile cone crushers - remote access and monitoring
  - **Cement Australia** - various batching plant control systems
  - **Various Superyachts** for Power Management System and Engine monitoring



# Required Hardware

We send you all the necessary hardware, pre-configured:

## 4G MODEM

Redlion SN-6901 4G LTE MODEM will ship to you pre-configured to connect to your VHUB

## Antennas

Choose an antenna that will suit your application:

From a small stubby omni-directional antenna for good signal areas up to very high-gain direction yagi antennas which provides excellent throughput in areas of poor Cell Reception.

**SIM Card** - We send you your Telstra SIM card provisioned and ready to go

You just need to supply the MODEM with 24VDC and Plug a patch lead between your network switch and the MODEM's Ethernet port and you're up and running.



# How do I get MET Connect™?

Step 1: Create an account at: [www.met-connect.com](http://www.met-connect.com)

Step 2: - Log-in to the portal:

- choose your VHUB Name
- choose a 4G Monthly Data Plan (for SIM Card)
- Purchase User and MODEM Connection Licences
- Purchase your MODEM

Step 3: Download MET Connect™ Manager from the portal, connect to your VHUB and create user accounts

Step 4: Receive your MODEM - it's pre-configured, so just plug it in and switch it on.

**You're up and running!**



# Easy Accounting

Only one quarterly invoice - this covers all your on-going costs:

- MODEM connection licences
- User connection licences
- Telstra 3G / 4G Network data charges
- Remote Monitoring Platform costs

**Customer portal at [www.met-connect.com](http://www.met-connect.com)**

From the portal you can:

- Manage current services, view invoices and order new services
- Contact technical support
- Download MET Connect Manager Windows Software for managing your VHUB
- Access a number of useful Knowledge-base articles



# Further Information

Please contact us to discuss your individual requirements:

[support@met-connect.com](mailto:support@met-connect.com)

07 3390 8155

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