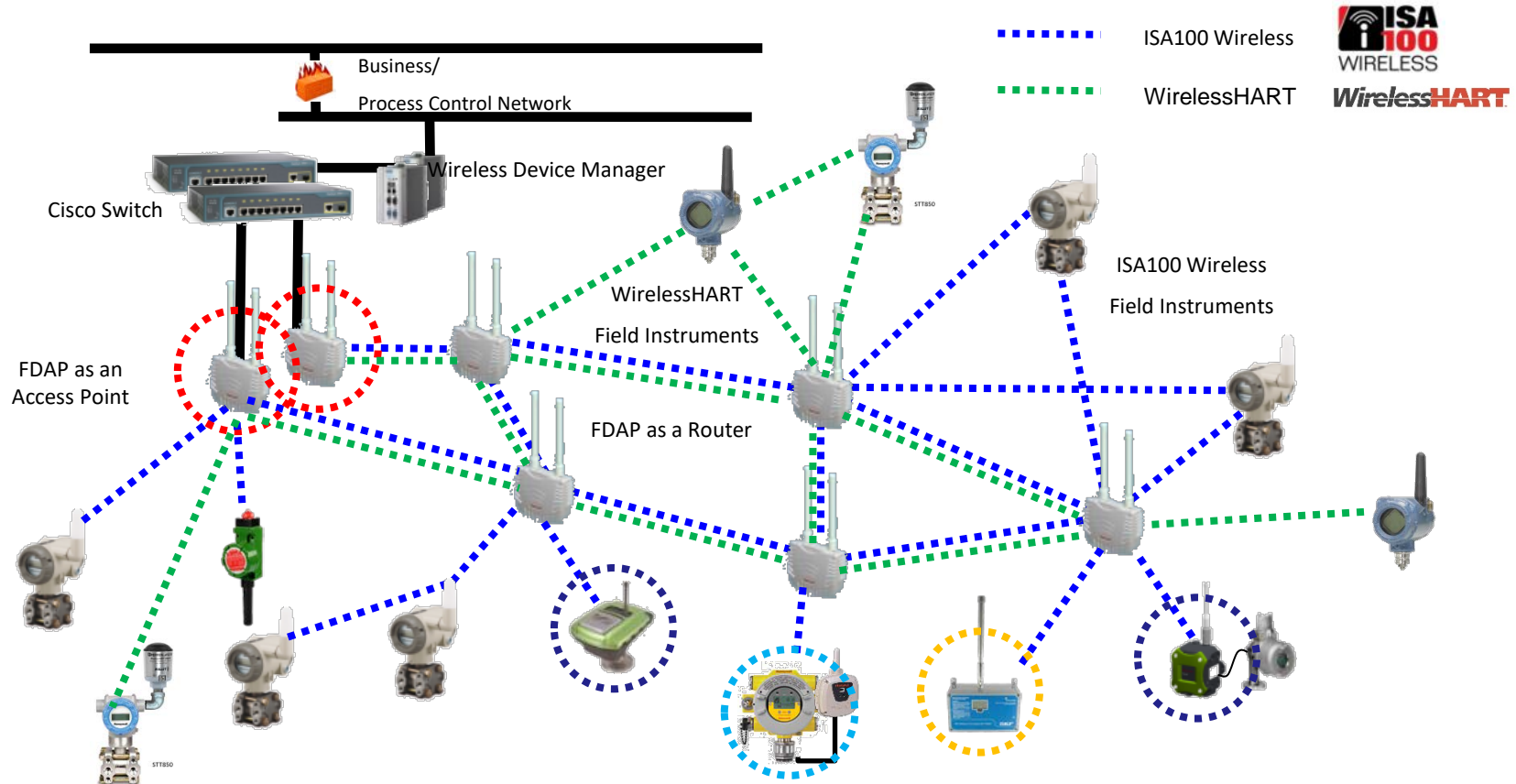


The OneWireless Network – Multiprotocol Wireless IO



OneWireless – Field Instrumentation Only

Wireless Device Manager



**Manages
field devices and network**

Easy to use

Field Device Access point



**Wireless Coverage for
ISA1– field instruments**

Fast and Reliable

XYR 6000 Field Instruments



**Battery powered wireless
field instruments**

**Multi-Year battery life
with fast update rates**

Field Device Manager and System Gateway

Wireless Device Manager

Role and Benefits

- Manages wireless ISA100 as well as WHART field instruments and network devices
- Gateway for field devices and host systems
- Acts as security manager controlling device and message key distribution
- Reduces engineering required to commission and maintain the wireless field instrument network

Features

- **Interfaces:** Modbus , HART, OPC UA/DA, CDA and GCI
- Web based interface **simplifies** network configuration and usability
- Integrated firewall
- Fully redundant capability



Access Point for Field Devices

Field Device Access Point

Roles and Benefits

- Access point for field instruments only
- Forms a self-healing, self-meshing ISA100.11a/WHART network
- Superior Rx/Tx data integrity with dual antennas
- Reduces wireless field I/O cost

Features

- 450 meter data access of wireless field instruments with standard integral antennas
- Operating Temperature -40 to +75 °C
- 24V DC and 110/230V AC powered
- FM/CSA Class 1 Div 1(or DIV 2) and ATEX safety ratings
- Dual antennas for diversity (*improved read rate*)
- Supports up to 60 field devices (*@5 sec. reporting period*)



XYR6000 Wireless Transmitter

Wireless Field Instruments

Roles and Benefits

- Measures and wirelessly transmits data in industrial and hazardous area environments
- Configurable data routing
- Provides flexibility of field instrument I/O use

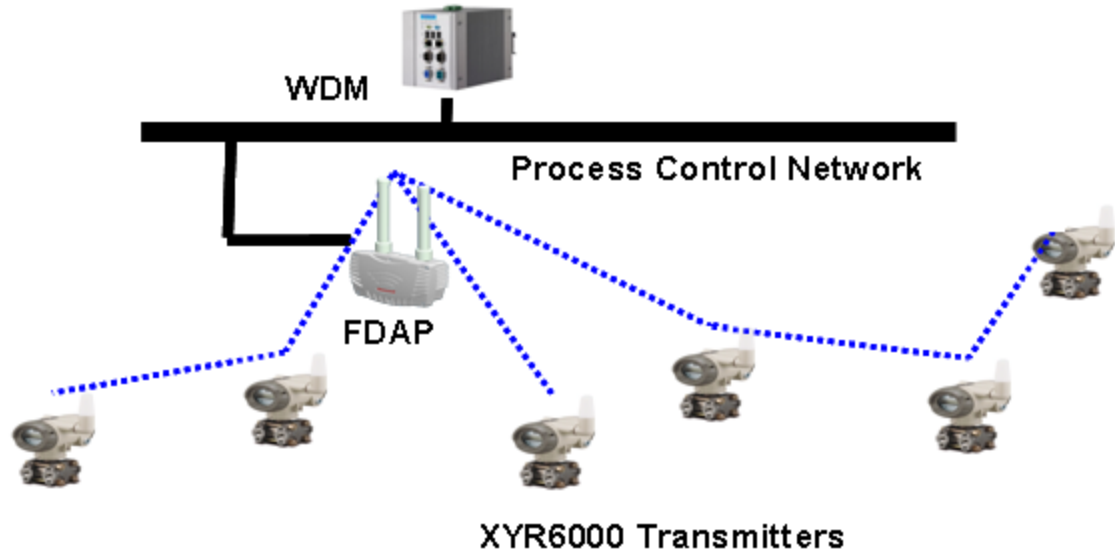
Features

- Up to 250 Field Devices on a single Mesh Network
- 450 meter range with standard integral antenna
- Wired-like performance over wireless with configurable 1, 5, 10, 30, 60 sec. update rates
- Innovative power management, and over-the-air firmware update and configuration change
- FM/CSA Class 1 Div 1 and ATEX, IEC Ex safety ratings



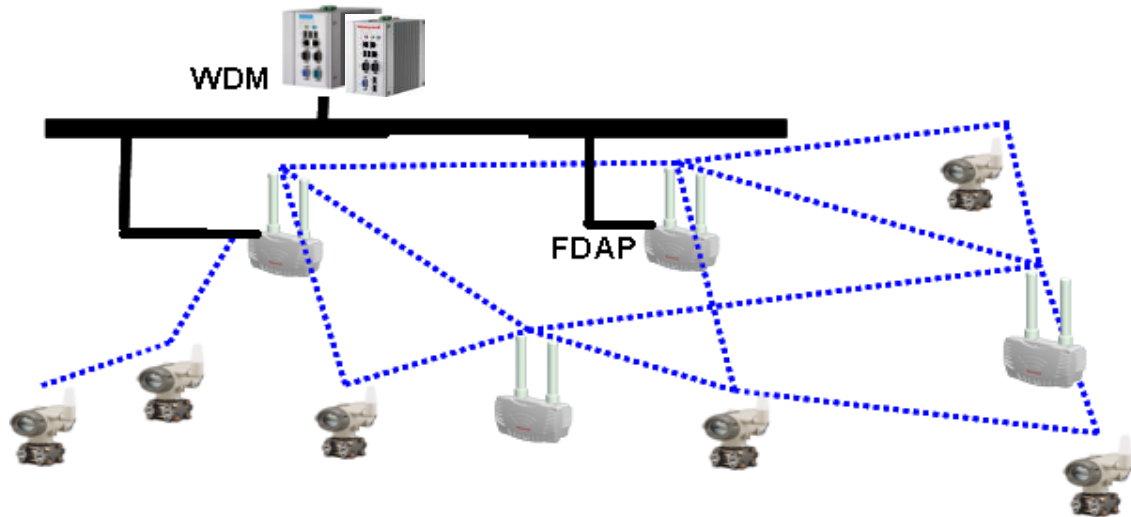
Honeywell OneWireless Implementation

Single Wired FDAP- No redundant path creation



Field Instrument
Meshing
Variants

2 Wires FDAPs for redundant path creation



OneWireless – Components

Cisco Aironet 1552S Access Point



Wireless coverage for
Wi-Fi and Ethernet
devices, and
all field instruments

Wireless Controller (2500 and 5500 series)



Centralized
management of
the IEEE 802.11
devices

Wireless Device Manager

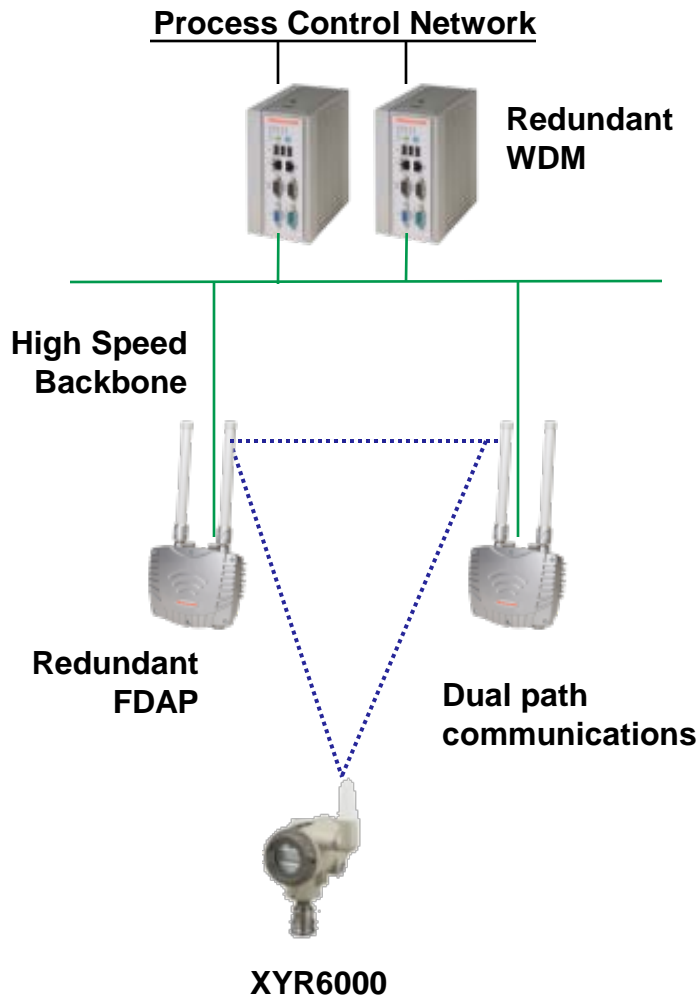


Centralized
management of the
all Field devices

Wireless Standards

- **802.11a(n) Mesh**
- **802.11bg(N) Wi-Fi**
 - (2.4GHz global standard)
- **ISA100.11a and WHART**
- End users, wireless suppliers, DCS suppliers, instrument suppliers, PLC suppliers, technology suppliers, research firms, consultants, government agencies and consortiums
 - OneWireless is able to accommodate both ISA100.11A and WHART field devices on the same wireless infrastructure.

Today's Requirements for Wireless Implementations



➤ Redundancy

- Dual path communications from both the transmitters as well as the infrastructure
- Redundant system manager/gateways

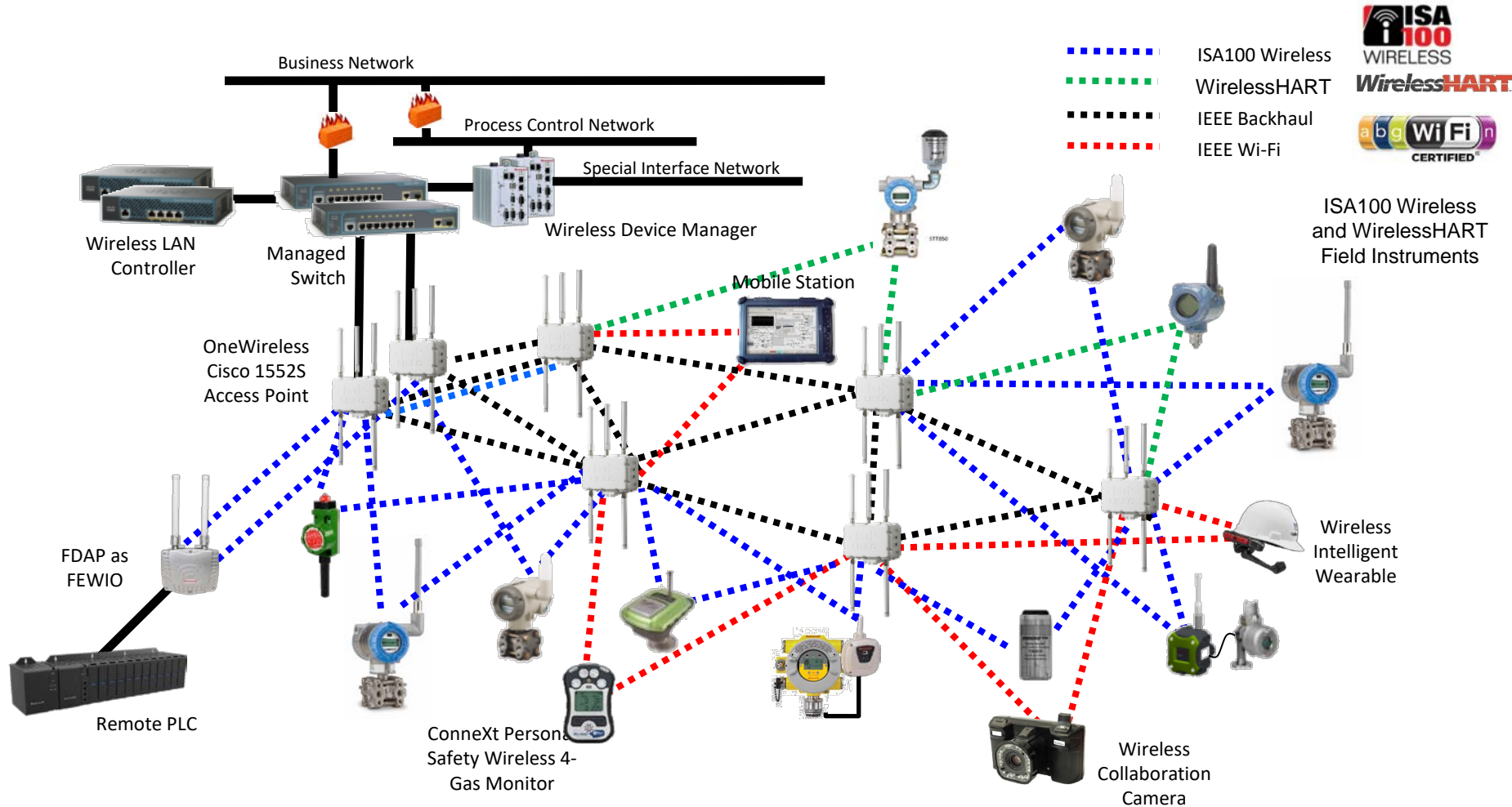
➤ Flexibility

- Modular Growth using Mesh Architecture
- Flexible network layout including adding field routers
- WiFi, ISA100.11A, and WHART devices on one multifunction mesh network.

➤ New solutions that weren't practical or possible with wired

- Wireless vibration, safety shower monitoring, redundant level monitoring, etc..
- Wireless Gas detection- both portable as well as fixed.

Multiprotocol OneWireless Network with FEWIO



The End

Honeywell®