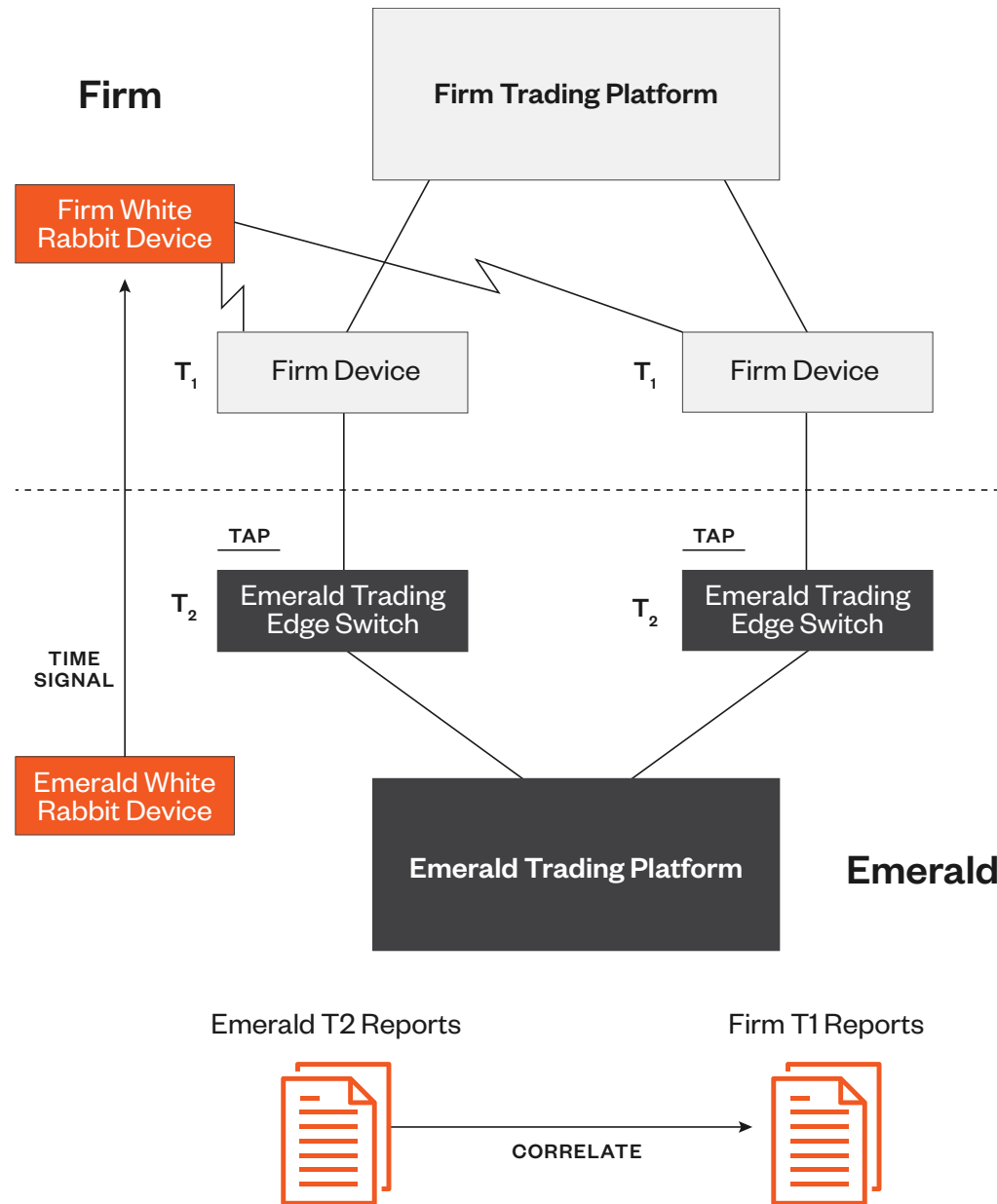# MIAX®
Emerald

High Precision Network
Time Signal Service

Enhanced PTP/White Rabbit

Firms can utilize the Time
Signal Service to synchronize
their devices to MIAX Emerald's
GPS clock at sub nanosecond
level accuracy for correlated
Firm ⟷ MIAX Emerald
latency measurements.

Firm

Firm Trading Platform

Firm White
Rabbit Device

T_1 Firm Device T_1 Firm Device

TAP   TAP

T_2 Emerald Trading Edge Switch T_2 Emerald Trading Edge Switch

TIME
SIGNAL

Emerald White
Rabbit Device

Emerald Trading Platform   **Emerald**

Emerald T2 Reports   Firm T1 Reports

CORRELATE

DETAILS

**Single Mode Fiber cross
connects (non-equalized) in
NY4 will be required to receive
the time signal from MIAX.**

MIAX can provide BiDi Optics with
the matching wavelength for the
deployment. Please note that only
one strand of the fiber will be used.

**To synchronize their systems to
the MIAX clock, firms will need
to deploy White Rabbit (WR)
technology in their environment.**

Firms will need to use White Rabbit
compliant switches to synchronize
the time and provide 1PPS signal to
their hardware devices for the highest
precision synchronization. MIAX uses,
and recommends, Seven Solution's
WR ZEN TP 32BNC switches for
compatibility reasons.