Not All Gateways are Created Equal
ERIC OH, P.Eng
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About AltaLink

Largest TFO in Alberta, Canada

- Own half of Alberta’s transmission grid and serve 85% of population
- 13,000 km (~8000 miles) of transmission lines, 300 substations
- North America’s second largest fully investor-owned utility
Traditional Deployment

- HMI
- RTU
- Clock
- PDC

Substation Network

- Mimic
- SER
- PMU
- DDR
- SCADA I/O
- SCADA Meter
- Protection Relay
- PLC
- Alarm Annunciator

- Protection
- Control
- Measure

240 kV

Transformers

138 kV

WAN

EMS
Hardwire Reduction
Device Reduction

Substation Network

- PMU
- DDR
- SCADA I/O
- SCADA Meter
- Protection Relay

Protection
Control
Measure

240 kV Transformers

138 kV

WAN

EMS

RTU
SER
HMI
PLC
Alarm
Mimic
PDC
Clock

Network Components:
- PMU
- DDR
- SCADA I/O
- SCADA Meter
- Protection Relay

Connections:
- Protection
- Control
- Measure
Eric Oh
Senior SCADA Engineer, Technical Lead
AltaLink Management Ltd.
Calgary, Alberta, Canada
Eric.Oh@Altalink.ca