

Welcome!

- Thank you for joining today's webinar:
OpenADR and Its Impact on Building Control Systems
- If you have a question please use the question box located on the right side of your screen.
- Questions for our speaker will be addressed at the end of the presentation.
- This webinar will be recorded for future playback.

Today's Speakers



- **Anno Scholten**, C.E.M, C.D.S.M, is President of Connexx Energy, a leading developer of applications and solutions that connect Smart Building with the Smart Grid. Anno has spent the last 25 years driving innovation in smart building systems and smart grid technologies.



- **Jim Boch**, Principal Electrical Engineer, Jim joined IPKeys with 30 years of industry experience with Fortune 500 companies. Jim has experience in the electrical power distribution, lighting and information technology sectors. He has assumed progressively greater responsibilities from project engineer to national product sector manager.



- **Allen Jones**, is an independent consultant specializing in the interaction between facilities and the Smart Grid. He has almost ten years of experience working on Smart Grid related topics. He serves on several national and international Smart Grid-related committees and also serves as an adviser to the BACnet Smart Grid Working. Group.

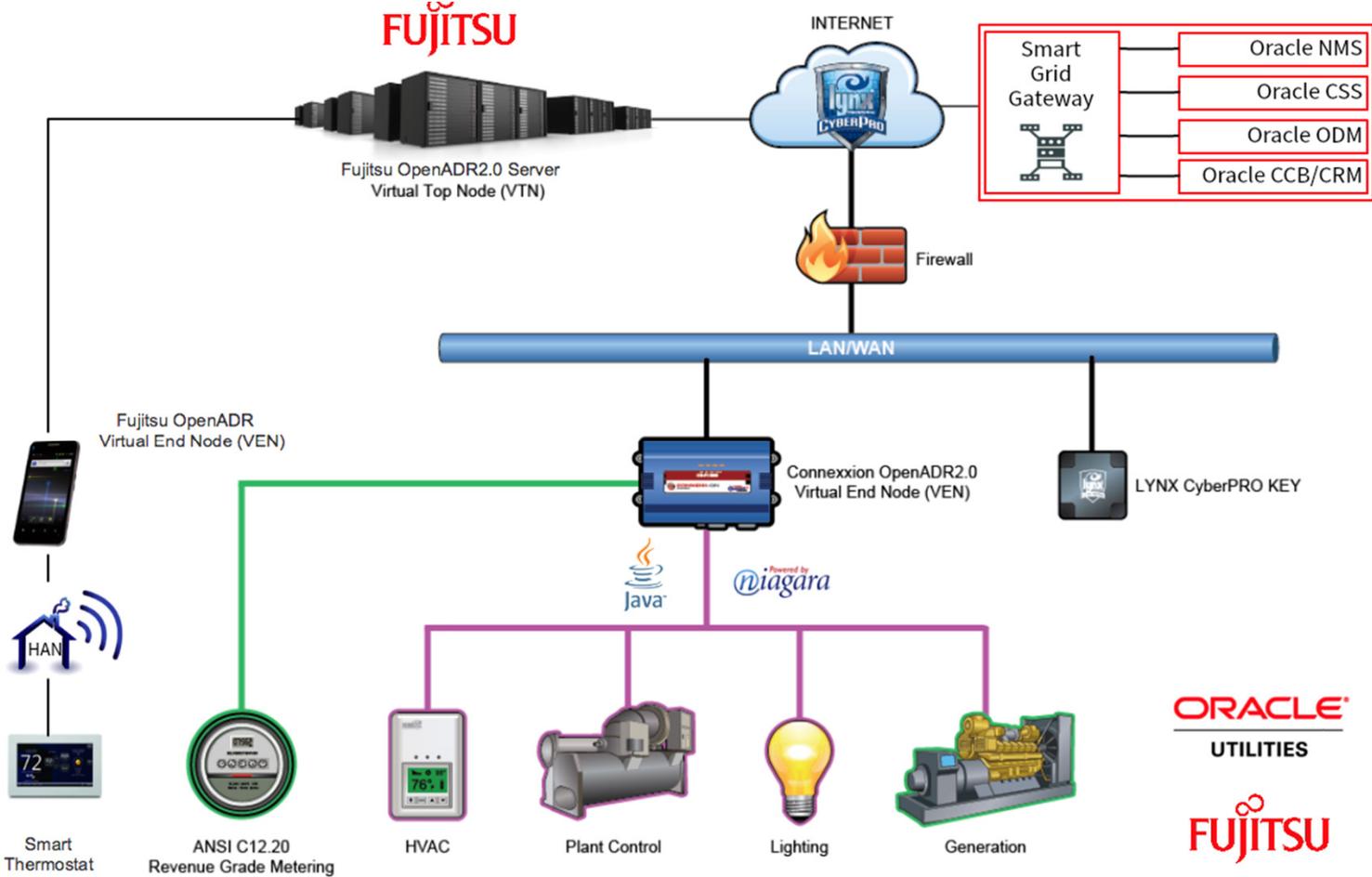


CONNEXX
ENERGY

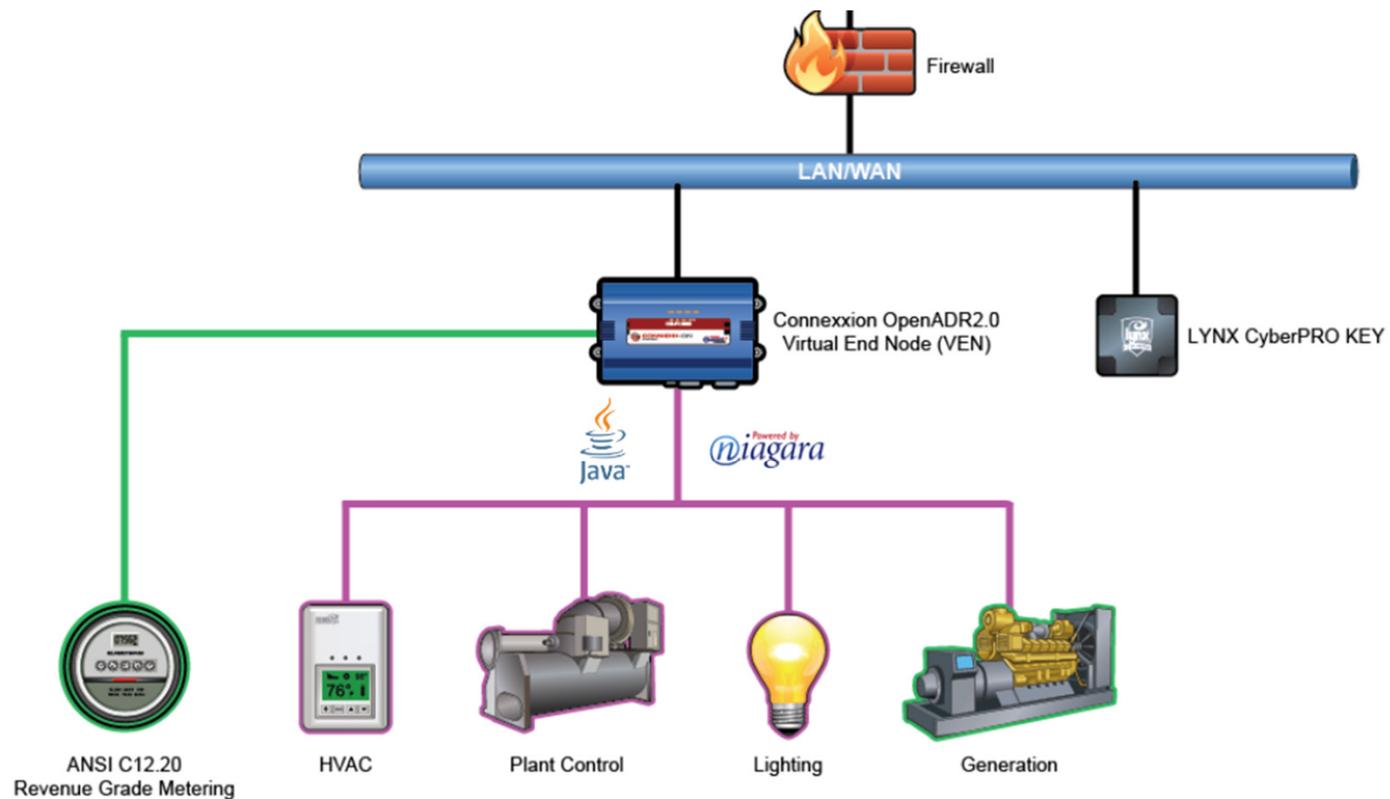


OpenADR Impact on Building Control Systems

Fully Integrated OpenADR



OpenADR Integrated into Building Control Systems





Impact is driven by ADR user needs

- Demand Response Strategies
 - Flexibility
 - Extensibility
 - User Control
 - Return to Normal
- Security
 - Remote Management
 - Auditing
- Measurement and Verification (M&V)
 - Real-time
 - Playback
 - Settlement

Demand Response Strategies

Floorplan



Flexibility

Floorplan

On Off

Standby Generator

Offices

Training

Kitchen

President

VP

Warehouse

NORM Level Event

- Opt In Normal ADR Event
- Opt In Moderate ADR Event
- Opt In High ADR Event

Room: Warehouse

Lights: **On** Off Status: Off

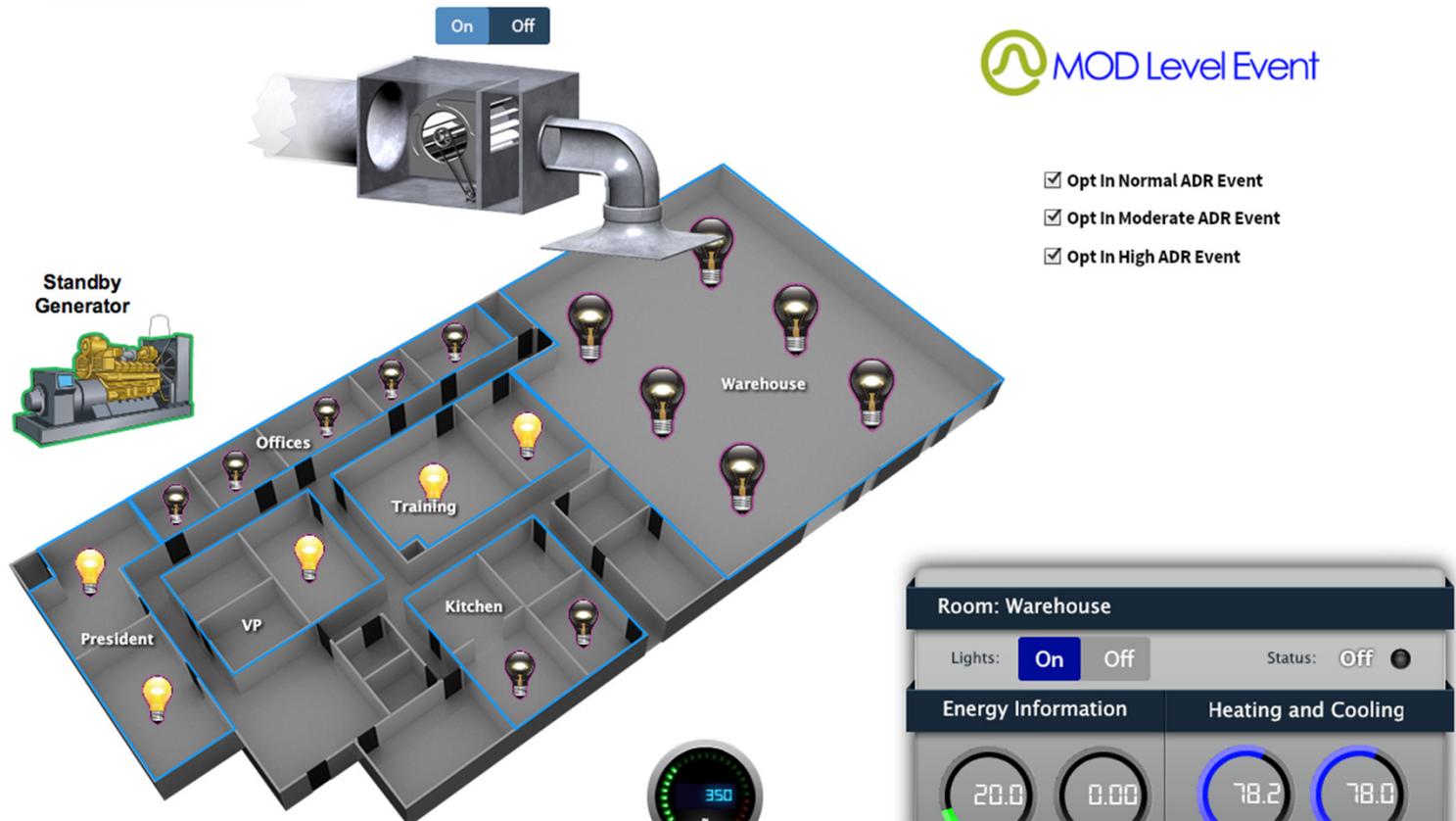
Energy Information Heating and Cooling

50.0 0.00 75.7 76.0

790

Extensibility

Floorplan



User Control

Floorplan

On Off

Standby Generator

Offices

Training

Kitchen

President

VP

Warehouse

HIGH Level Event

- Opt In Normal ADR Event
- Opt In Moderate ADR Event
- Opt In High ADR Event

Room: Warehouse

Lights: On Off Status: Off

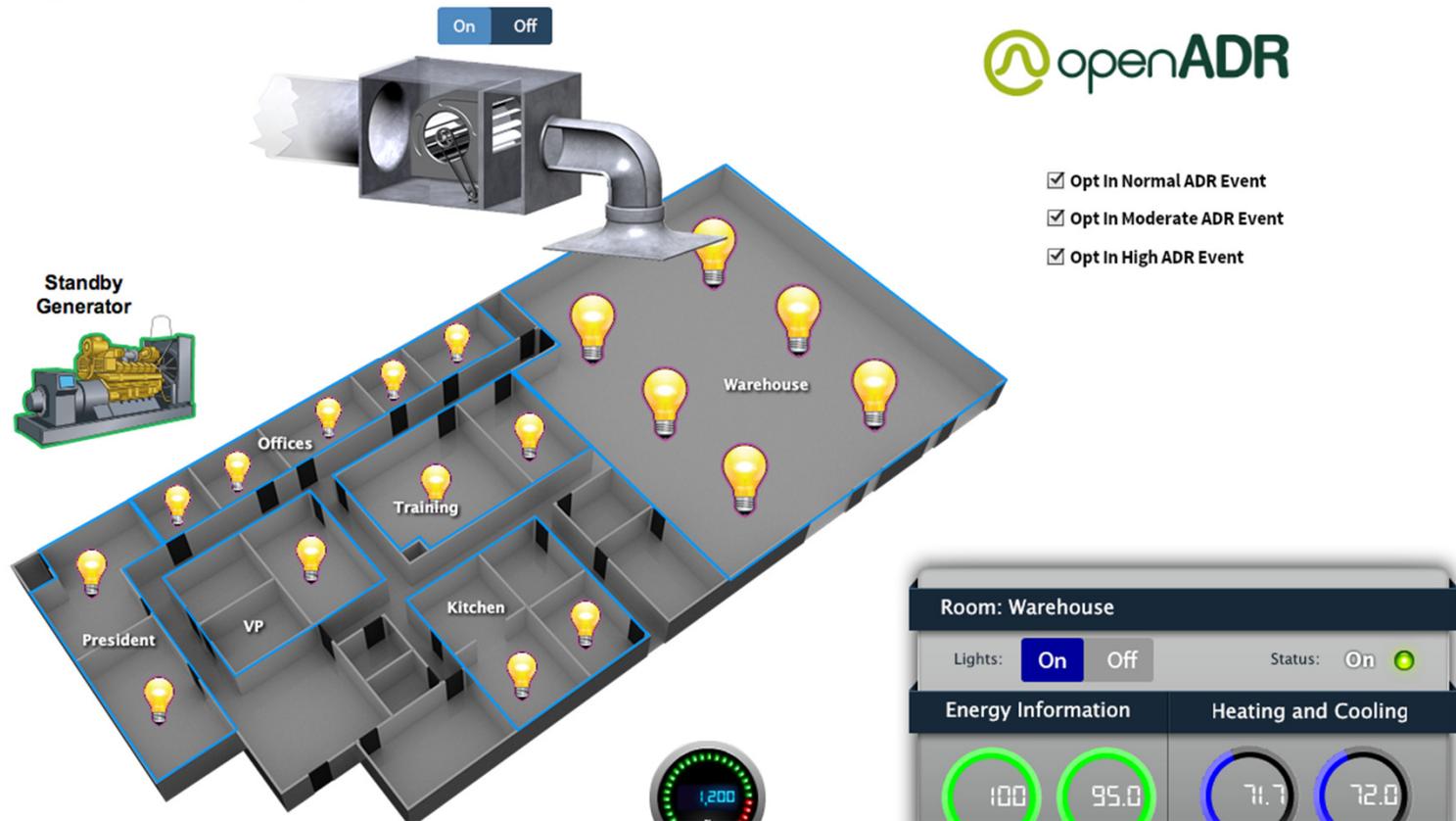
Energy Information Heating and Cooling

0.00 0.00 79.7 80.0

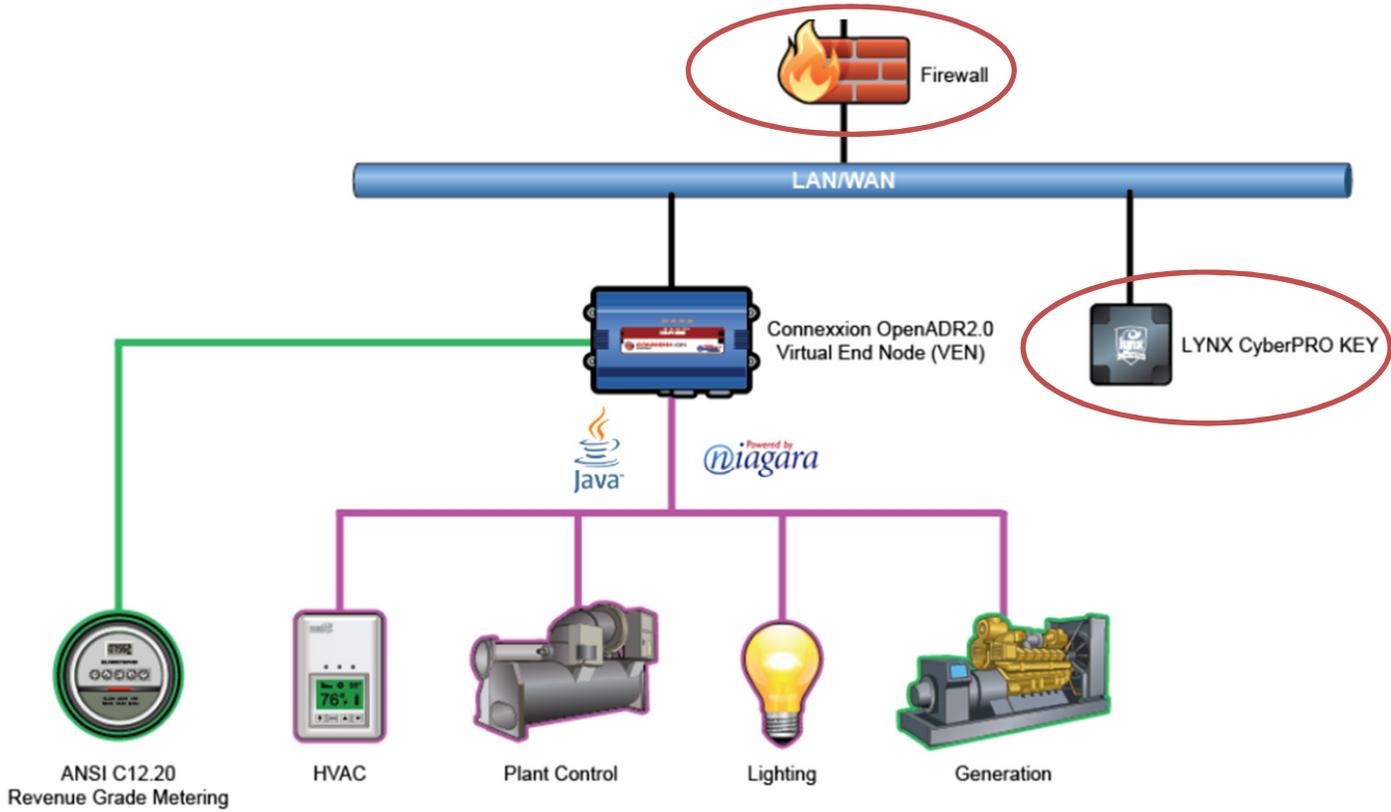
75.0

Return to Normal

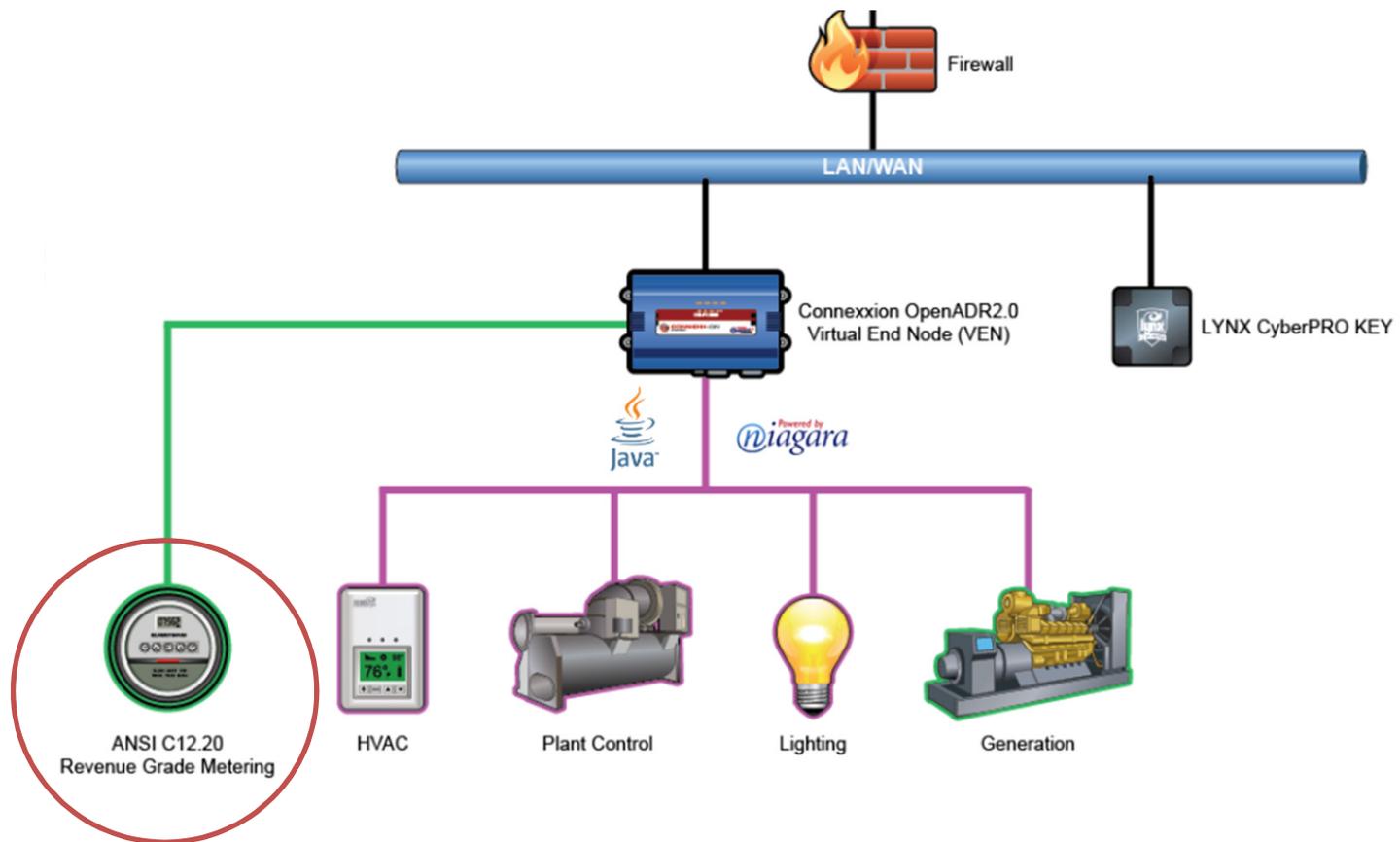
Floorplan



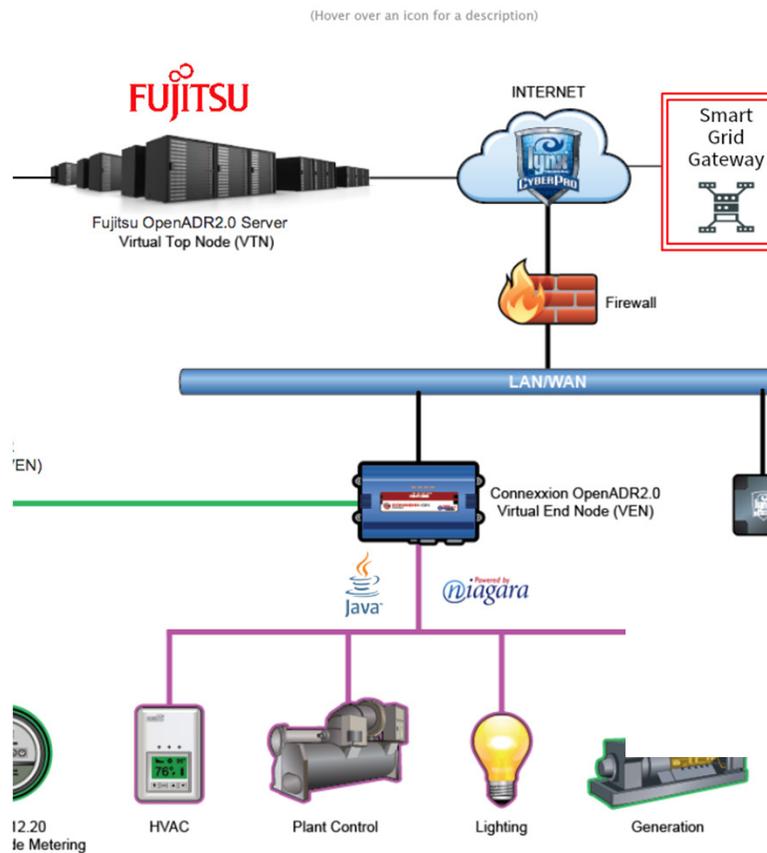
Security



Measurement & Verification



OpenADR Impact on Building Control Systems



- Flexibility
- Extensibility
- User control
- Security
- M&V



Anno Scholten

anno.scholten@connexenergy.com

THANK YOU