S4 BACnet ecobee Integration

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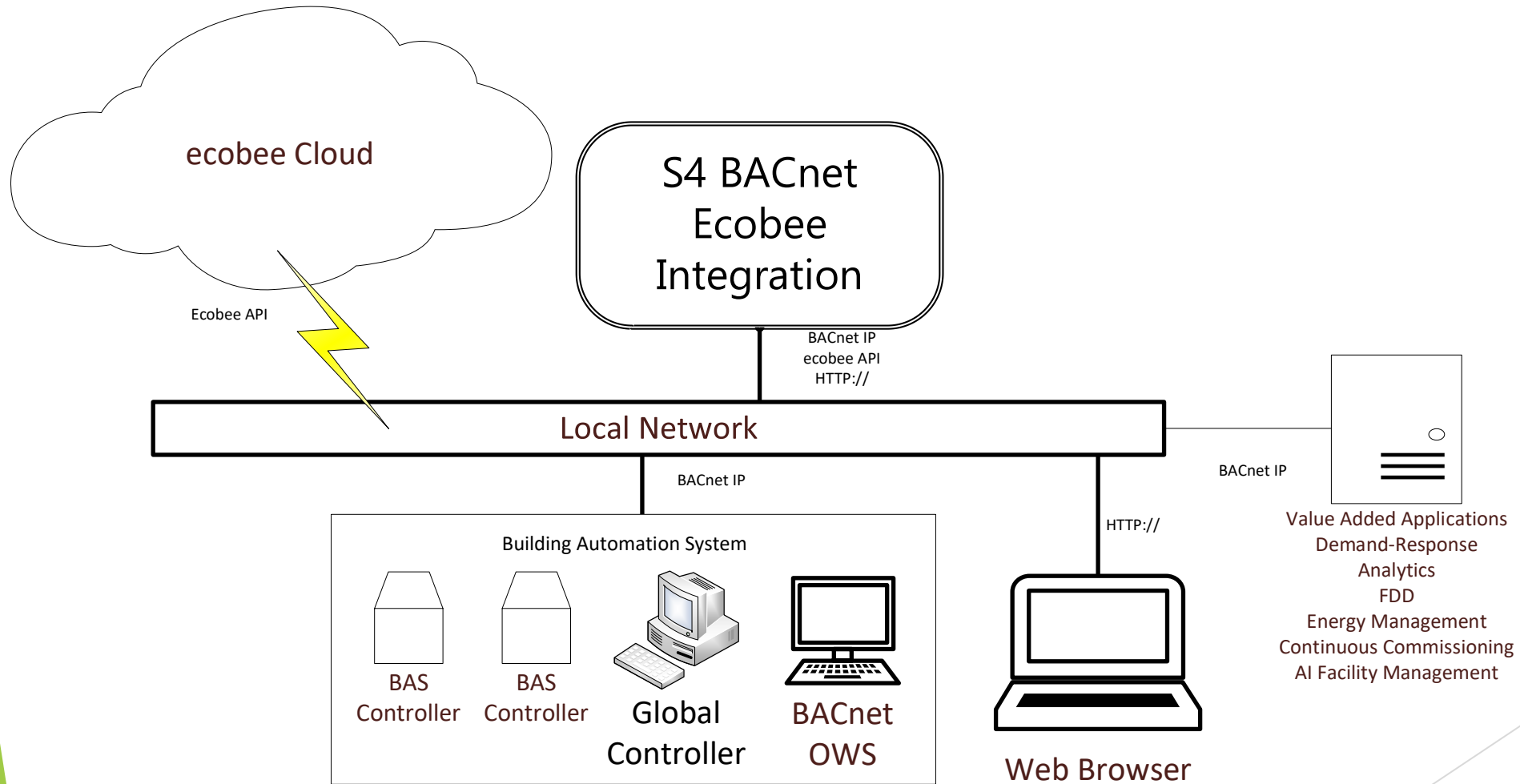
ecobee native architecture

ecobee Cloud

Local Network

Web Browser

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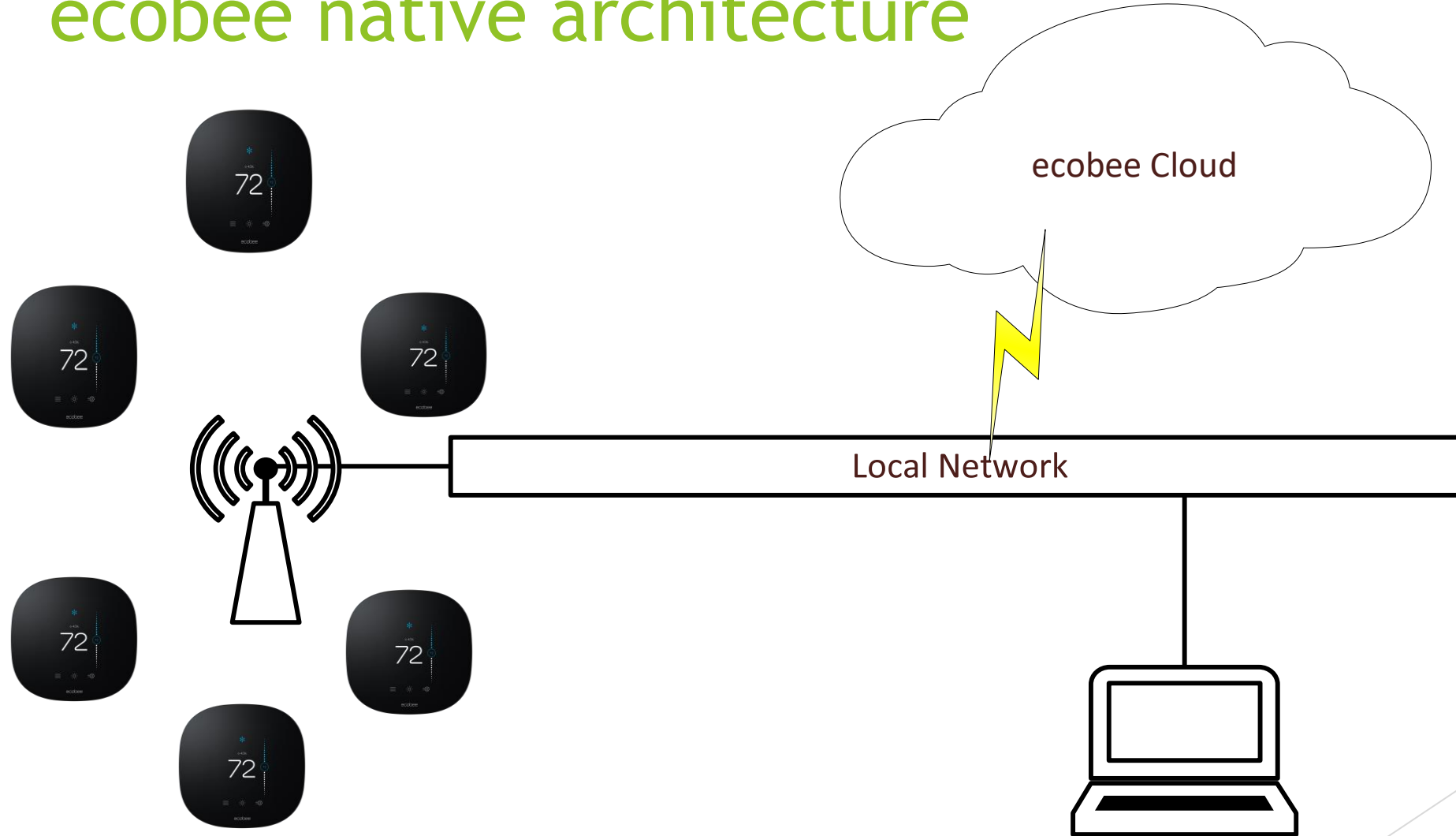
ecobee native features

- ▶ Architecturally appealing design
- ▶ User friendly interface
- ▶ Advanced optimization algorithms and services
- ▶ Multiple models to choose from
- ▶ Remote Sensors
- ▶ Thermostat data synchronized to ecobee cloud (IoT device)
- ▶ Focused on single family residential and light commercial users
- ▶ Supports Alexa and other Smart Home integrations
- ▶ Consumer Portal
- ▶ SmartBuildings Commercial Portal
- ▶ Public API

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S4 BACnet ecobee Integration Architecture

ecobee Cloud

Ecobee API

S4 BACnet
Ecobee
Integration

BACnet IP
ecobee API
HTTP://

Local Network

BACnet IP

HTTP://

BACnet IP

Building Automation System

BAS
Controller

BAS
Controller

Global
Controller

BACnet
OWS

Web Browser

Value Added Applications
Demand-Response
Analytics
FDD
Energy Management
Continuous Commissioning
AI Facility Management

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features

- Hosted on a dedicated industrial computer.

- Securely connects to the building or campus ecobee® SmartBuildings accounts via Ethernet TCP/IP utilizing the ecobee API credentials: Client ID, and Secret Code.

- Bi-directional access to thermostat data via public API to the ecobee cloud

- Automatic thermostat discovery and configuration.

- Commissioning wizard guides the installer through system installation and setup.

- S4 Device Templates make configuration easy and highly customizable.

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BACnet integration details

- Thermostats are published as standard BACnet IP Annex J objects.

- BACnet objects are published as local devices (BACnet BBMD support is not required).

- Full integration to the 16-level BACnet Priority Array.

- BACnet addendum AI is fully supported.

- BACnet priority array entries are persistent to meet the special requirements of Demand – Response, continuous commissioning, and energy management applications.

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benefits

- SmartBuildings service and Thermostat installation, configuration, operation and services are unchanged.

- Support for all BACnet clients including Operator workstations, Global controllers, and value-added applications.

- Enables value-added applications including Demand-Response, energy management, analytics, FDD, and many others from any manufacturer following the BACnet standard.

- SmartBuildings Thermostat objects are readable and writable via BACnet.

- Continuous data synchronization between BACnet and the ecobee SmartBuildings service.

- Enables full building optimization.

- SAAS licensing and subscriptions guarantee ongoing support and product quality.

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use cases

- Buildings with existing BACnet BAS and ecobee thermostats installed gain the benefit of single seat management and full building optimization

- Buildings with an existing BACnet BAS (and possibly central plant) who want to upgrade to WiFi thermostats can choose ecobee knowing they will be able to integrate the new thermostats into their BACnet environment

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requirements

▶ ecobee thermostats appropriate for the building mechanical systems

▶ ecobee SmartBuildings service subscription

▶ S4 BACnet ecobee Integration subscription

▶ ecobee SmartBuildings credentials: client ID and Secret Code

▶ TCP/IP access to the ecobee SmartBuildings cloud service

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next steps

- Select, purchase, and install ecobee thermostats and remote sensors appropriate for your mechanical systems and environment. For guidance visit https://support.ecobee.com/s/articles/What-types-of-HVAC-systems-are-ecobee-thermostats-compatible-with

- Contact an ecobee representative for additional assistance with thermostat selection or purchase

- Contact S4 Integration Solutions (or visit our product page https://www.s4integrationsolutions.com/products/ecobee)for information about the S4 BACnet ecobee Integration

- Contact an S4 Integration Solutions distributor (listed on our website) to purchase the S4 BACnet ecobee Integration and value-added applications

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results

▶ Individual spaces optimized with ecobee thermostats and services

▶ Integration to BACnet with the S4 BACnet ecobee Integration

▶ Complete building optimization and efficiency improvements

▶ Potential increase in property value

▶ Potential rebates for efficiency improvements

▶ Comfortable and productive occupants

▶ Major contribution to business profitability

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