

## SaaS Service Monitoring Enablement with Edge Computing Resources

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#### Problem



- USDA Funded Webex Boards
- Distributed in diverse locations with distinct IT organizations
- Management of equipment and of the service is a challenge
- Limited access to local resources, limited visibility
- This is just one of many use cases

# Cisco WebEx SP ISP Other Community Colleges IsP ISP Other Community Colleges Govt. public institutors

### **Solution**

- Augment the Webex Boards with managed edge computing resources
- Develop the edge device to meet operational conditions, safety conditions and compute requirements
- Implement a cloud-based management platform for the edge devices and the tools for monitoring services

### Implementation and Research

Multi-disciplinary Project

- · Raspberry PI 4, Gig Switch
- Printed Case
- Research: New designs for optimized and more diverse use



- Secured device to Webex Board
- Cloud based management of local resources and data collection
- Research: Intelligent, predictive monitoring and reporting algorithm, personalized for each IT environment



- Baselining of current HW choices, regression suites for HW evolution
- Research: Evaluation of best choices of compute platforms for each use case

