BP Implemented Esri Arc Indoors for COVID Contact Tracing

Agenda / Schedule

- Introductions
- Business Case
- Technical Solution
- Business Impact
- Take Aways

Introductions – Who is LOGIC?

esri Partner Network Silver

Enterprise GIS Services

- GIS strategy assessments / roadmaps, planning, design
- Custom Esri Web AppBuilder Widgets
- Enterprise GIS implementations
- Fit-for-purpose business solutions
- Integration with line of business systems
- Knowledge transfer, governance, & training
- Ongoing support, maintenance, upgrades

Introductions – Who is bp?

- bp is a global super major energy services company with interests in Solar, Hydrocarbons, Wind, and other energy markets around the globe

- Justin Piwetz:
  - Service Portfolio Owner – Geospatial and Digital Twins

Business Case

As COVID spread globally in early 2020, BP pivoted their ongoing GIS related safety program into COVID related tracking and tracing. The effort morphed into a three-pronged business case that included safety, facility usage and COVID contact tracing.

1. **Security:** quickly identify people and their locations in the campus buildings (although access to this data is restricted)
2. **Facility Planning:** understanding how BP's spaces (floors and areas within the floors) were being used. If low traffic areas were determined, then that area might be repurposed.
3. **COVID Contact Tracing:** identify potential contacts upon receiving report of COVID positive cases

- NOTE: While the original intent was to also utilize Esri's Space Planner functionality, BP chose a different technology for this use case (Executive Decision, not Technical)

Technical Solution

Esri

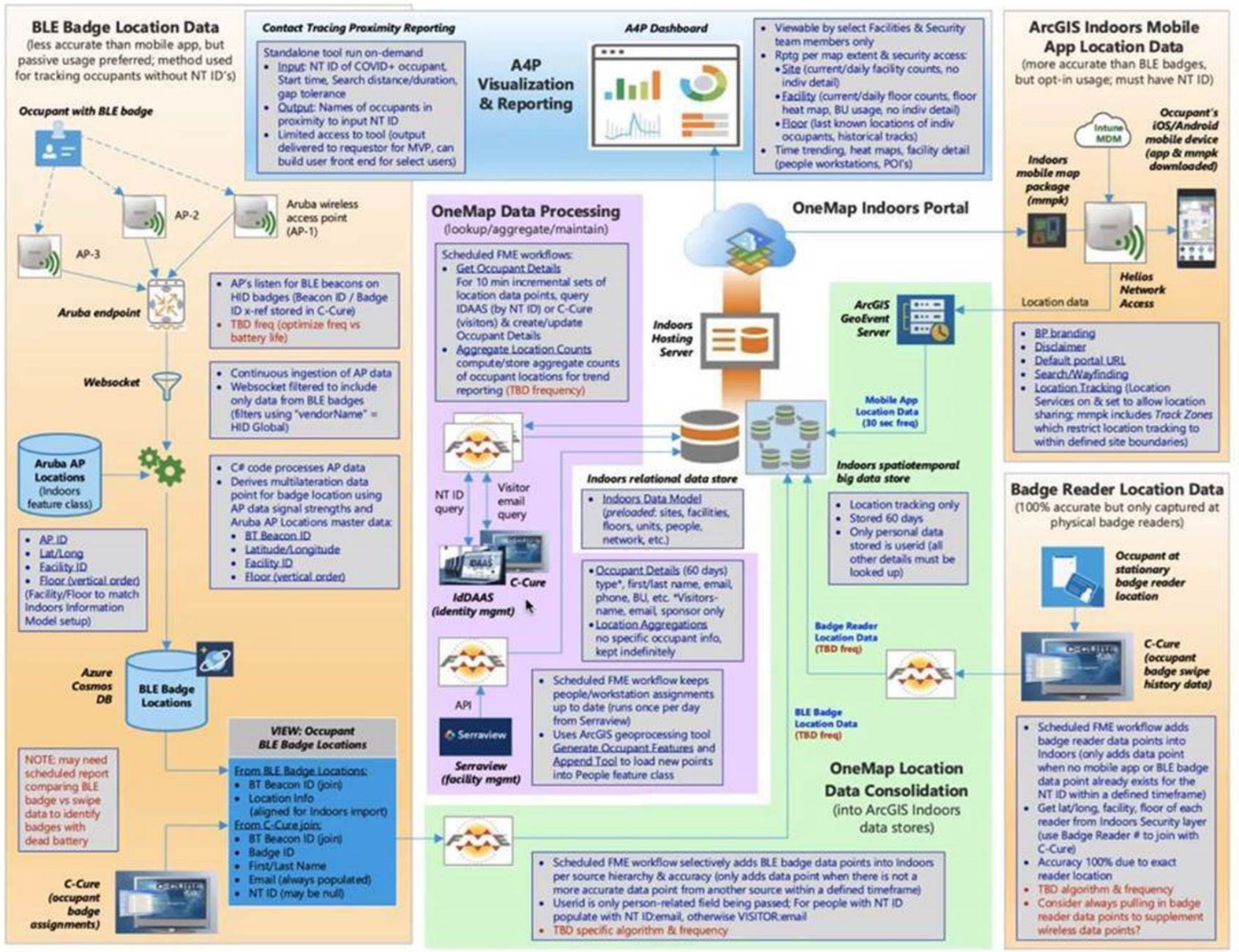
- ArcGIS Indoors
- ArcGIS Enterprise
  - Maps & Apps
  - Dashboards

Safe Software

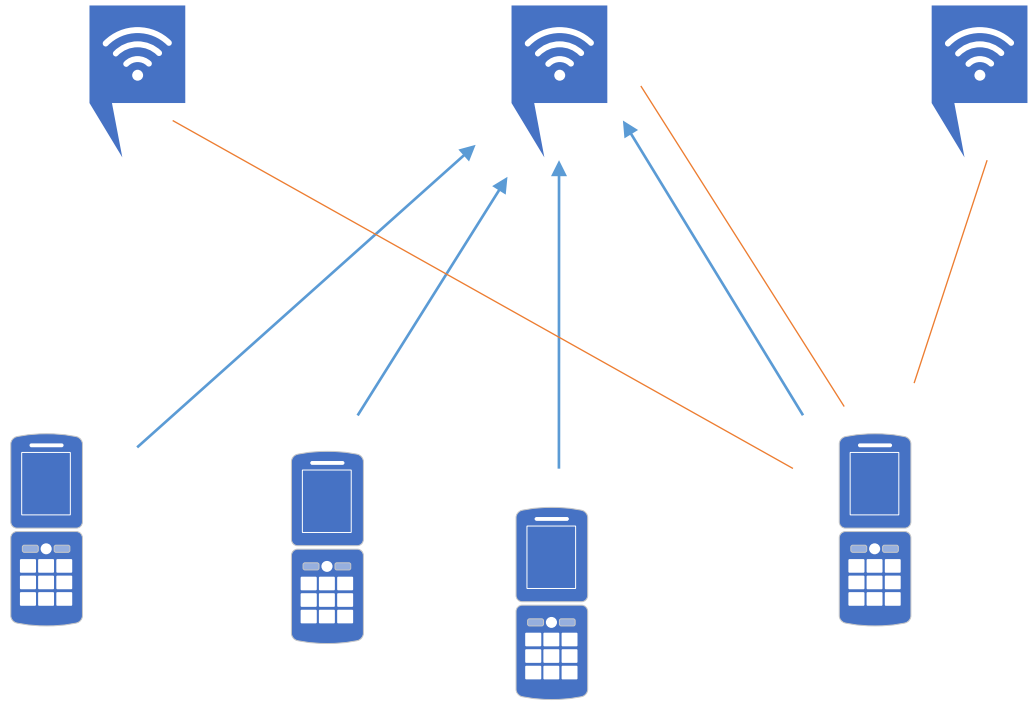
- FME
- FME Server

Passive Location Collection

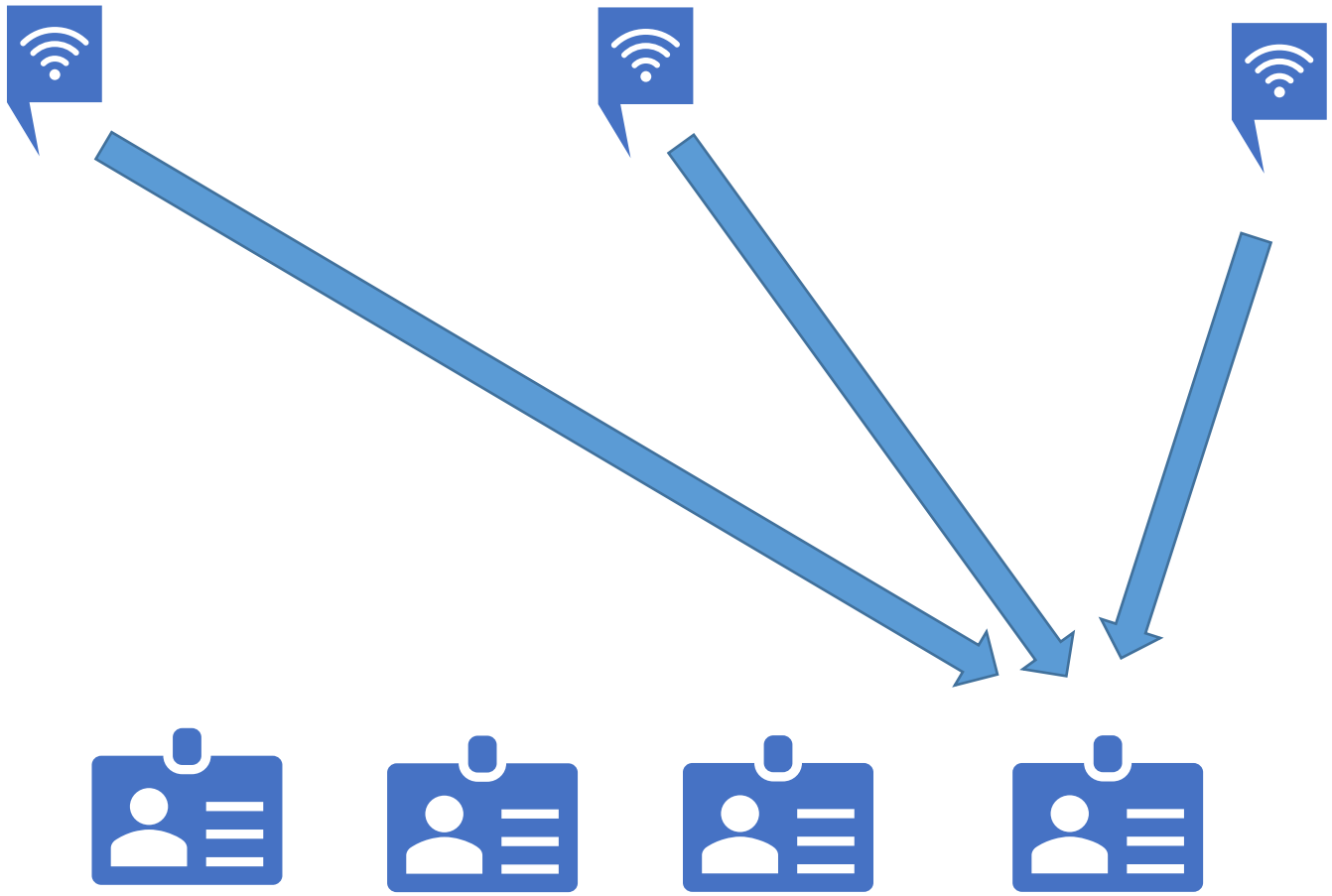
- Badge readers
- Badge swipes
- Cell phones



Scenario 1 – Client Responsible for Location



Scenario 2 – Cloud Responsible for Location



Business Impact

BP Employees

- BP could safely and responsibly integrate employees back into campus buildings while minimizing the risk of onsite infections.
- Facilities management has enhanced view of facility access and usage.
- Safety management has enhanced information to identify guest locations on campus in the event of an emergency

Takeaways

- Gathering the data for use case opened the door to address other safety use cases
- A balancing act: privacy & security
  - User-identifiable information was locked down
  - Individual location data points are retained for 30 days
- Badge readers / pings require energy
  - Battery life
- Lots of “moving parts”
  - Maintaining many integration points requires ongoing effort

Thank You!

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