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# How does industrial IoT connectivity for Azure Sphere work?

5 minutes

As we have seen in the previous section, there are three options for connectivity within the Azure Sphere, that is, the ethernet, Wi-Fi, or Cellular. There are advantages and disadvantages to these approaches, but they expand the connectivity options for the Azure Sphere in conjunction.

Let us summarize the problem statement for the Energy manager. The energy manager is tasked with protecting the company's operations from the power fluctuations arising from the energy suppliers. To achieve this goal, the energy management systems need to capture data from a diverse range of sensors in a secure manner. Once the data is captured, it can be used to plan and schedule systems, reduce costs, get the best price from the suppliers, protect equipment from energy surges, and improve sustainability. There are three classes of infrastructure within the enterprise:

- **The factory floor:** Here, the connectivity is a mix of cellular, Wi-Fi, and Ethernet
- **The warehouse:** The primary connectivity is based on Wi-Fi
- **The buildings/offices:** Here, the primary connectivity for the sensors is Wi-Fi or Ethernet

The availability of multiple connectivity scenarios helps in capturing as much data as possible from different sensors. When considered together, the energy manager could capture data from large swathes of the enterprise as possible.

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## Next unit: When to use Azure Sphere connectivity

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