Discussion Prompt:

Find one example of a business deployment of a network connected embedded system. Provide an example of a business deployment and what challenges and issues does it place for network administrators. Why do you think the embedded system deployed would be desirable to connect to the network?

**Find one example of a business deployment of a network connected embedded system.**

The first example that came to mind for me was smart electricity meters such as the Honeywell A4CI meter.

**Provide an example of a business deployment and what challenges and issues does it place for network administrators. Why do you think the embedded system deployed would be desirable to connect to the network?**

 These smart meters are becoming more commonly deployed by electric utility companies because they are easy to install and integrate with their industrial networks, they allow for things like remote service connect and disconnect, and they allow the utility companies to push over the air updates to all devices connected to their network.

While the benefits provided by these smart meters significantly streamline an electric utility company’s business model, having smart meters on-site at every address serviced and connected to a network transmitting data that eventually makes it to a semi-segregated industrial network presents new risk to an industry that has previously relied on total segregation as a means of security.

With the presence of these new embedded field devices on a business network that is very possibly connected to an industrial network, network administrators have to make sure that each device is locked down in terms of network security because they all have the potential to be physically accessed and many times have very little physical security preventing such access. Network administrators also have to ensure that the intermediate devices between each smart meter and the business network it is sending data to are properly secured; each point of ingress and egress for this network traffic is another possible weakness where a savvy attacker could do something like inject or intercept and manipulate data that is heading for the business network and potentially the industrial network.

Please follow the outlined guidelines of this discussion:

Please be sure to adhere to the posted guidelines on responses, for example be sure to include the number of the question you are responding to.

* Respond to the discussion prompt and to what someone else has posted.  This includes clarifying other peoples comments, asking questions for more information, or providing additional information
* Keep it professional:
  + This means watch your language and treat each other with respect.
* Assume best intentions:
  + If someone is adding additional information to your comment or answering your question, assume that they are doing just that and that it is not a personal attack against you.  The purpose of this is so that you can all help each other.

I will continue to periodically monitor the discussion as well.