Explanation of Password Storage in iCCU and iN2/iN3 Units
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This document will explain how the password is stored in the Polara Intelligent APS system. Specifically, it will explain the difference of how the password storage differs in iN2 units when connected to an iCCU and how the password is handled when the iN2 units have become disconnected from an iCCU or are connected to a PHCU3W unit (running in iN3 mode).

When the iN2 unit is connected to an iCCU unit and has good PLC communication, the iN2 unit will communicate with the iCCU to authenticate the password during login. If the user connects via BTLE to the iN2 unit, the iN2 unit will take the password authentication request and forward it directly to the iCCU without parsing the information further. The response from the iCCU will also be forwarded directly from the iCCU out to the BTLE connection to the application. Therefore, all iN2 units connected to the iCCU will have the same password. If the user changes the password on any of these units, the password change request will also be handled by the iCCU and all iN2 units will be able to authenticate using that changed password.

However, there are some scenarios where the iN2 unit will not use the password in the iCCU. The iN2 unit may become disconnected from the iCCU due to interference or connection issues of the PLC wires, or if the iCCU itself is damaged or offline. In this case, the iN2 will not have communication with the iCCU so it will revert to an internally stored password. This password is completely separate from that of the iCCU and is not changed when the iCCU password is changed.

A common scenario is that the iN2 unit is used in conjunction with an iCCU for the majority of the time, but may become disconnected from an iCCU. If a user attempts to connect to this iN2 unit while in this state, the iN2 unit will revert to its internally stored password. In this instance, the iN2 unit may never have had its password changed from factory default, therefore the unit would begin playing the "change password" sound and would require '1234' as the password. Note: When an iN2 unit becomes disconnected from an iCCU, the iN2 unit will flash its pilot LED in a rapid manner. If it starts up without an iCCU connection nor a PHCU3W connection (for iN3 mode), then the pilot LED will flash in a 2-pattern (two short blinks, every second).

It is also important to note the difference between the iCCU password used for logging into the unit and the iCCU WiFi password. The iCCU password is what is used to login either at the iN2 unit over BTLE or at the iCCU via WiFi or Ethernet. This is used to authenticate the user before providing access to settings and features and its factory default is '1234' and can (and should) be changed by the user. The iCCU WiFi password is used only to establish a wireless connection between the user's device and the iCCU's WiFi network prior to user authentication. This password is only used to create a secured WiFi connection and is set from the factory to 'DEFAULT1' and cannot be changed by the user. This password is entered in the WiFi Settings section of the user's device and is not used inside the Polara Field Service or Intelligent Config apps.