**Use Case:** Adding device to PEN

**Primary Actors:** User

**Goal in context:** To add user devices to the private environment network

**Preconditions:** User has account for PEN and has a device on a network that can reach PEN.

**Triggers:** User decides to add their device to pen.

**Scenario:**

User - logs into PEN GUI, Clicks add this device.

Device – Connects to sensors.

User – Verifies PEN web GUI has new device added.

**Exceptions:**

Device cannot connect, verify connection to PEN web GUI, try to add device again.

**Priority:** Essential.

**When Available:** First Increment.

**Frequency of Use:** Only once when connecting device to PEN.

**Channel to Actor:** Via Pen GUI.

**Secondary Actors:** Device to be added, Sensors, System Admin

**Cannels to Secondary Actor:**

Device - Connection to PEN

Sensors – Hardwired and radiofrequencies.

System Admin – Configures PEN for user to be added.

**Open Issues:**

Should there be an indication if a device is online or not?

Should there be a timeout of device on PEN if not used for a while?

**Use Case:** ad-hoc phone service.

**Primary Actor:** User

**Goal in context:** A User should be able to call another device in the PEN.

**Preconditions:** Both devices are actively connected to PEN.

**Triggers:** User decides they want to make a call to another user’s device.

**Scenario:**

User1 – See’s User2’s device actively on the network

User1 – Click the audio conference option in PEN GUI for this device.

User2 – Receives request for audio and selects “accept call.”

User1 – Communicates with user2 via audio, session is cancelled when either party ends call.

**Exceptions:**

User2 does not answer call, User1 sees response in PEN GUI saying User2 was not able to answer.

Call gets disconnected, verify both devices are available and re-establish call connection.

**Priority:** Feature chosen at will of user.

**When Available:** After both user devices are connected to PEN.

**Frequency of Use:** Multiple times a day.

**Channel to Actor:** PEN GUI displays call user device option over selected device.

**Secondary Actors:** Second User, Devices, Sensors.

**Cannels to Secondary Actor:**

Secondary User - logs in and connects second device to be called.

Devices - connects to PEN.

Sensors –Knows device is connected and routes information accordingly. (In this case phone traffic.)

**Open Issues:**

Should users have a call log of received and missed calls?

Should there be options to record audio?

Should a timer be set to record how long conversation was?