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# Tundra Test Notes (20151002)

## 1. Preparation

### 1. Required hardware

1. At least two BLE beacons (helpful if batteries can be removed)
2. At least two barcodes (almost any format is OK)
3. At least one Android devices. API 18 (4.3) or later
  1. Emulator will not work, requires radios and camera
4. If you have multiple Android devices, power down the alternate devices for now.
5. (Optional) Chromecast dongle and compatible video display

### 2. Android device preparation

1. Delete previous Tundra installation
2. Disable bluetooth radios (via Settings)
3. Rename WiFi AP
  1. Invoke 'Settings', touch 'WiFi', select 'Wi-Fi Direct' menu option
  2. Select 'Rename Device'
4. Install fresh Tundra APK
5. Select one device for initial testing, power off extra "Tundra" devices for now

## 2. Application Start

### 1. Validate start and page transition

1. Start application (by pressing Tundra icon)
2. Observe splash view (Tundra graphic)
3. Observe automatic transition through splash stub to LoginActivity

## 3. Application Login/Logout

### 1. Missing functionality

1. Not yet test password (tundra issue 82)
2. Not yet support "forgot your password" (tundra issue 81)

### 2. Validate Empty Login

1. Press "Authorize" without updating login form
  1. Observe "Missing Account Name" toast

### 3. Validate Bad Login

1. Update "User Name" w/a random character, press "Authorize"
  1. Observe "Sign In Failure" toast

### 4. Validate Successful Login

1. Update "User Name" w/"allan" and press "Authorize"
  1. Observe "Sign In Success" toast
    1. Note: user names enjoy a case insensitive evaluation
  2. Observe LoginActivity transition to MainActivity (jobs "Today")
2. Press "back" key to exit application

### 5. Validate Restart Behavior

1. Start application (by pressing Tundra icon)
2. Observe splash view (Tundra graphic)
3. Observe automatic transition to MainActivity w/a "Sign In Success" toast

## **6. Validate Logout Behavior**

1. View option menu by pressing three vertical dots (top right)
  1. Select “Sign Out”
2. Application should immediately exit
3. Restarting the application should return to LoginActivity
  1. See step 2.1 and 3.3

## **4. Navigation Drawer**

### **1. Three horizontal lines (top left)**

1. This icon always implies the navigation drawer is available
2. Pressing this icon causes the NavDrawer to expand
3. Close NavDrawer by dragging to left

### **2. Drag navigation drawer from left side**

1. Observe NavDrawer header:
  1. Solid circle to represent picture in the glorious future
  2. User email address of byteme@crank.com
2. Observe NavDrawer menu options:
  1. Today, Week, My Inventory, Chats, Setting, Help, Sign Out

### **3. Select option “Today”**

1. Navigation drawer retracts
2. Observe ToolBar
  1. Three horizontal bars top left.
  2. “Today” label
  3. “pin” icon navigates to map which illustrates job site (return via NavDrawer)
  4. “toolbox” icon navigates to inventory (return via left arrow icon on top left)
  5. “search” icon placeholder
3. Observe scrollable list of “jobs”
  1. Bogus blue icon which is placeholder in anticipation of real artwork
  2. Name/priority/state which are placeholders for simulated jobs

### **4. Select option “Week”**

1. Navigation drawer retracts
2. Observe ToolBar
  1. Three horizontal bars top left
  2. “Stub” label
  3. Search icon as placeholder
3. “Stub Fragment” as placeholder in body
4. Floating Action Button placeholder
5. Navigate away using three horizontal lines (top left)

### **5. Select option “My Inventory”**

1. Navigation drawer retracts
2. Observe ToolBar
  1. Three horizontal bars top left
  2. “Today’s Inventory” label
  3. Search icon as placeholder
  4. Floating “Plus” Button
3. Three tabs in body
  1. Parts

1. 2 items
  1. Short press on row navigates to detail
  2. Navigate from detail using left arrow (top left)
2. Tools
  1. 3 items
    1. Short press on row navigates to detail
    2. Pressing top left arrow returns
3. Vehicles
  1. Empty this week
4. Floating Action Button placeholder

## **6. Select option “Chats”**

1. Navigation drawer retracts
2. Observe ToolBar
  1. Three horizontal bars top left (for navigation bar)
  2. “Chats” label
  3. Search icon as placeholder
4. Two Chat conversations
  1. Big Lebowski
    1. Short press navigates to a “un-dude” like conversation
    2. Note two search icons and phone icon on tool bar
    3. Entering a message and pressing the FAB adds to conversation
    4. Navigation back (right arrow on toolbar) is broken, use Navigation Drawer to return to Chat
  2. Technicians
    1. Same as 5.2.4.1 w/different contrived conversation
3. Chat Body:
  1. Observe “Me” and “My Buddy” labels
  2. A recent time stamp, and a bubble stating “Good to hear from you”
  3. On the bottom, a “Send” button and a EditText for a message
  4. Entering a message causes it to appear in the body
4. Floating Action Button placeholder

## **7. Select option “Setting”**

1. Navigation drawer retracts
2. Observe ToolBar
  1. Three horizontal bars top left
  2. “Setting” label
  3. Search icon as placeholder
3. “Stub Fragment” as placeholder in body
4. Floating Action Button placeholder

## **8. Select option “Help”**

1. Navigation drawer retracts
2. Observe ToolBar
  1. Three horizontal bars top left
  2. “Help” label
  3. Search icon as placeholder
3. “Stub Fragment” as placeholder in body
4. Floating Action Button placeholder

## 5. Job Detail

1. Drag navigation drawer from left side
  1. Select “Today”, NavDrawer retracts
2. Select first “Job” (Inspect Diesel #1) w/a short press on a job row
  1. Observe Toolbar
    1. Three horizontal bars top left
    2. “Job” label
    3. Three icon placeholder
    4. This is a mockup of the job detail form.
    5. Pressing the middle icon navigates to task detail.
      1. Swipe between tasks
    2. Observe another gratuitous floating action button (placeholder)

## 6. — — — — End of 20151002 — — — —

## 7. Validate application w/empty database

### 1. Validate start and page transition

### 2. NavigationDrawer Test

1. Fresh application should start w/NavigationDrawer exposed
2. Close and reopen NavigationDrawer
3. Subsequent applications restarts should being w/NavigationDrawer closed
  1. Source: Google design guidelines

### 3. Empty Alert Test

1. If navigation drawer is not exposed, press three horizontal lines (top left)
2. Press “Alert” on NavigationDrawer
3. NavigationDrawer retracts
4. Display says “Alert” on ActionBar and “No Rows” in Fragment body

### 4. Empty Job Test

1. If navigation drawer is not exposed, press three horizontal lines (top left)
2. Press “Job” on NavigationDrawer
3. NavigationDrawer retracts
4. Display says “Jobs” on ActionBar and “No Rows” in Fragment body

### 5. Empty Custody Test

1. If navigation drawer is not exposed, press three horizontal lines (top left)
2. Press “Custody” on NavigationDrawer
3. NavigationDrawer retracts
4. Display says “Custody” on ActionBar and “No Rows” in Fragment body

### 6. Empty Inventory Test

1. If navigation drawer is not exposed, press three horizontal lines (top left)
2. Navigation Drawer expands
3. Press “Inventory”
4. Navigation Drawer retracts
5. Display says “Inventory” on ActionBar and “No Rows” in Fragment body

### 7. Geographic Map Test

1. If navigation drawer is not exposed, press three horizontal lines (top left)

2. Navigation Drawer expands
3. Press “Map”
4. Navigation Drawer retracts
5. Display says “Map” on ActionBar
6. If there is network connectivity, a map of North America appears otherwise you will be punished w/blank white display.

## **8. Empty Nearby Test**

1. If navigation drawer is not exposed, press three horizontal lines (top left)
2. Navigation Drawer expands
3. Press “Nearby”
4. Navigation Drawer retracts
5. Display says “Nearby” on ActionBar
6. Note “Rescan” button and “No Rows” in ListView
  1. There is a chance the display will soon refresh w/row items as they are discovered, but initially the display will say “No Rows” as promised.
  2. Note: this view displays detected WiFi P2P radios, depending upon your local environment you might be treated to reports of home entertainment devices, printers or other non GoFactory WiFi P2P sources.

## **9. Empty Person Test**

1. If navigation drawer is not exposed, press three horizontal lines (top left)
2. Navigation Drawer expands
3. Press “Person”
4. Navigation Drawer retracts
5. Display says “Person” on ActionBar and “No Rows” in Fragment body

## **10. Event Log Test**

1. If navigation drawer is not exposed, press three horizontal lines (top left)
2. Navigation Drawer expands
3. Press “Event Log”
4. Navigation Drawer retracts
5. Display says “Event Log” on ActionBar
6. ListView contains single entry “application start” w/recent time stamp

## **11. About View Test**

1. Press the three vertical dots (top right) for option menu.
2. Select “About”
3. Verify display contains “reasonable” values
  1. Installation time is recent
  2. Name = 20150918
4. Press “[www.go-factory.com](http://www.go-factory.com)” button and verify GoFactory web site
  1. Timeout unless network connectivity available
5. Back Key (once) returns to “About” page
6. Back Key (again) returns to original main page (probably “Event Log”)

## **12. Feedback View Test**

1. Press the three vertical dots (top right) for option menu
2. Select “Feedback”
3. Verify “feedback” display (text entry and “submit” button)
4. Pressing “Send Feedback” yields toast saying “FIXME”
5. Back Key (once) returns to original main page (probably “Event Log”)



### 13. Settings View Test

1. Press the three vertical dots (top right) for option menu
2. Select “Settings”
3. Verify “setting” display
4. Back Key (once) returns to original main page (probably “Event Log”)

### 14. Account View Test

1. Press the three vertical dots (top right) for option menu
2. Select “Account”
3. Verify “account” display
4. Back Key (once) returns to original main page (probably “Event Log”)

### 15. Profile View Test

1. Press the three vertical dots (top right) for option menu
2. Select “Profile”
3. Verify ActionBar displays “Profile”
4. Verify Last Name/First Name/Suffix all display “Unknown”
5. Certificate ListView displays “No Rows”
6. Back Key (once) returns to original main page (probably “Event Log”)

### 16. Exit Application

1. Press “back” one more time to exit application

## 8. Initialize demonstration database

### 1. Restart application to initialize database

1. When “Tundro” graphic appears, tap twice for configuration view (red background).
  1. If you miss the graphic, tap “back” key to exit application and start over.

### 2. Demonstration Database

1. There are different demonstration databases to simulate the interaction of team members. You must initialize the device for a particular team member (Allan, Bryan or Donal).
2. If you have multiple Android devices, initialize each device to a different team member.
3. Press (once) “initialize DB (xxx)” where xxx = fictitious team member
  1. Creates training Certificates (i.e. basic welding, basic diesel repair, etc)
  2. Creates Person (i.e. Allan, Bryan, Donal)
  3. Associates roles w/person (see Role Permissions table)
  4. Associates certificates w/person (see Certifications table)
  5. Adds Things to inventory
    1. 13 inventory items
    2. One item (generator 2) is in your custody
    3. Generator 2 has a bad BLE beacon, and Tundro will complain about it
  6. Assigns Custody of a Thing to you
4. “Tundro” graphic returns followed by “LogIn” stub
5. Below tables describe jobs, dependencies, etc

Role Permissions

Action	Allan	Bryan	Donal
Create/Edit Jobs	Yes	No	No

Action	Allan	Bryan	Donal
Transfer Jobs	Yes	Yes	Yes
Close Jobs	Yes	Yes	Yes
Create/Edit Things	Yes	No	No

#### Certifications

Certification	Allan	Bryan	Donal
Drivers License	Yes	Yes	Yes
Commerical License	No	Yes	Yes
Basic Welding	No	Yes	Yes
Advanced Welding	No	Yes	No
Basic Diesel Repair	No	Yes	Yes
Advanced Diesel Repair	No	Yes	No

#### Job Sites

Name	Note
Yard 1	Work facility w/overnight secure storage
Pump Shed 2	Remote work location
Generator Shed 1	Remote work location
Tool Shed 1	Building within yard1

#### Inventory

Kit	Parts	Tools
Diesel Inspection	Solvent, Rags	Flash Light, Wire Brush
Diesel Preventative Kit	Oil Filter, Oil, Fuel Filter	Fuel Line Bleeder
Diesel Electrical Repair Kit	Electric Spares Kit	Multimeter
Welding Repair	Abrasive pads, Rod	Grinder, Welder/GenSet
Truck 1 (Bryan)		
Truck 2 (Donal)		

## Jobs

Job	Inventory	Certificate
<b>Assign Jobs</b>	N/A	N/A
<b>Diesel Inspection</b>	Diesel Inspection	Basic Diesel Repair
<b>Diesel Preventative</b>	Diesel Preventative Kit	Basic Diesel Repair
<b>Diesel Electrical Repair</b>	Diesel Electrical Repair Kit	Advanced Diesel Repair
<b>Fence and Gate Repair</b>	Welding Repair	Basic Welding

### (Initial) Job Assignments

Job	Allan	Bryan	Donal
<b>Assign Jobs</b>	Yes	No	No
<b>Diesel Inspection</b>	No	No	Yes
<b>Diesel Preventative</b>	No	No	Yes
<b>Diesel Electrical Repair</b>	No	Yes	No
<b>Fence and Gate Repair</b>	No	No	Yes

## 9. Inventory/Custody Testing

### 1. Custody Transfer Test

1. Press three horizontal lines (top left) to expand Navigation Drawer
2. Press "Inventory"
3. Navigation Drawer retracts
4. Display says "Inventory" on ActionBar
5. There are 13 rows (13 "things" in inventory)
  1. 12 have red squares (indicating not in custody)
  2. 1 (generator 2) has blue square (indicating in custody)
6. Short press any row w/red square navigates to "View Thing" (a detail view).
  1. The details should reasonably support the selected row. Mule picture is a placeholder bonus.
  2. Return to Inventory using "back" key
7. Long press any row w/red square, option menu appears "Assert Custody"
  1. Press "Assert Custody"
8. Selected row should now have a blue box (indicates custody)
9. Press three horizontal lines (top left)
10. Navigation Drawer expands
11. Press "Custody"
12. Navigation Drawer retracts
13. Display says "Custody" on ActionBar
14. Fresh custody item should be displayed w/blue square.
15. Total of 2 custody items, the other being "Generator 2"

## **2. Edit Thing Cancel Test**

1. (now that you have custody, you can edit a thing)
2. Short press row w/blue square
3. "Edit Thing" form appears
4. Return to Custody list using "back" key (not press "Save")

## **3. Edit Thing Test**

1. (now that you have custody, you can edit a thing)
2. Short press row w/blue square
3. "Edit Thing" form appears
4. Update random field.
5. Press "save"
6. Note "success" toast, and automatic return to previous ListView
7. Short press of same row shows dialog w/update (press "back" when done)

## **4. Update Thing Photo**

1. (must have custody to update photo)
2. Short press row w/blue square
3. "Edit Thing" form appears
4. Press "Camera" button
5. CameraActivity appears w/three buttons.
6. Take picture, approve preview (usually a checkmark)
7. "View Thing" form appears w/updated image.
8. Press "back" key, select same row
9. "Edit Thing" form appears w/updated image.

## **5. (Optional) Add New "Thing" Cancel Test**

1. Note: only the "Allan" user has permissions to add a new Thing
2. Press the three vertical dots (top right) for option menu
3. Select "Add Thing"
4. "New Thing" dialog appears.
5. Press "back" key to remove form and return to previous view

## **6. (Optional) Add New "Thing" Test**

1. Note: only the "Allan" user has permissions to add a new Thing
2. Press the three vertical dots (top right) for option menu
3. Select "Add Thing"
4. "New Thing" form appears.
5. Update the "Name" field
6. Select a radio button option (i.e. tool, part, vehicle)
7. Press "save"
8. Note "update" toast and form disappears
9. Select "Custody" ListView which should contain your fresh item
  1. You have custody (blue square) since you created item.

# **10. Bluetooth Radio Testing**

## **1. Disabled Bluetooth Radio Test**

1. Section 1.2.2 mandated bluetooth radio disabled. Tundra will (very soon) discover this condition and generate an alarm. BLE is mandatory for Tundra and the application will complain until bluetooth radios are enabled.

1. If vibrator not occur, check “Sound & Notification” in Settings to ensure vibrator enabled.
2. The vibrator will generate two quick buzzes approximately every 30 seconds as it attempts to discover BLE beacons (and fails because radios are disabled).
3. Select “Alert” via the NavigationDrawer, there should be a single row which says “BleDisabled” - each time the vibrator buzzes, the counter should increment.
  1. Short press the “Alert” row for “Alert Detail”. Inspect “Alert Detail” to ensure it says reasonable thing (i.e. times look recent, etc). Press “OK” to dismiss.
4. Observe a white box in the NotificationManager.
  1. Drag down the NotificationManager window, there should be a box saying “Tundro Alert” “Tap to enable bluetooth”
  2. Touching the “Tundro Alert” box yields “Bluetooth permission request”
  3. Press “No” to dismiss without starting radios.
  4. Wait a few seconds for next vibrator alert (to verify that radios are still disabled).
  5. Drag down from NotificationManager to restore “Tundro Alert”
  6. Touching the “Tundro Alert” box yields “Bluetooth permission request”
  7. Press “Yes” to enable bluetooth.
  8. NOTE: Application might still invoke vibrator (once), because there is an additional problem. Then vibrator should be silent after the first alert.
5. Navigate to “Alert” page where there are now (or will shortly be) two rows.
6. Touch “BleDisabled” row for “Alert Detail”
  1. “Active” = false
  2. “Last Update” more recent than “Start Time”
  3. Press “OK” to dismiss

## 2. Missing BLE Beacon Test

1. There is one “Thing” in custody (Generator 2) which deliberately has a bad BLE beacon. Tundro will soon discover this problem now that the radios are enabled.
  1. For missing BLE beacon, the application will only invoke the vibrator once (first time). Application continues to poll for BLE beacons approximately every 30 seconds, but after the first alert merely logs missing beacons.
2. Navigate to “Alert” page where there are now two rows.
  1. The row w/the red square is an active alert.
    1. Name = Generator #2
    2. Alert = BleMissing
    3. Counter (should be increment approximately every 30 seconds)
3. You should see a white box in the NotificationManager.
  1. Drag down the NotificationManager window, there should be a box saying “Tundro Alert” - “Missing BLE Beacon”.
  2. Tapping on “Tundro Alert” navigates back to Alert ListView

## 3. Remove BLE Beacon Test

1. If a BLE Beacon has been damaged, the association between beacon and “Thing” can be deleted.
2. Navigate to “Inventory” or “Custody” (using three horizontal lines [top left])
3. Long press “Generator #2”
4. Select “Remove BLE”
5. Observe Toast “Beacon Deleted”
6. White box in Navigation Manager should disappear
  1. Dragging down Navigation window should not reveal any “Tundro Alert”

7. Vibrator remains silent
8. Visiting the "Alert" ListView should reveal two rows (both w/blue squares)

#### **4. Discovery Test**

1. (use case of zero known BLE beacons)
2. Press the three vertical dots (top right) for option menu
3. Select "Discover Thing BLE"
4. "Discover Thing BLE" fragment appears
5. "No Rows" because discovery only works w/known BLE beacons and there are none.

#### **5. Replace Beacon Test**

1. Long press on Inventory row of any custody item
2. Select "Replace BLE"
3. "Replace BLE" fragment appears w/populated beacon rows
4. Short press on beacon row to associate BLE beacon w/"thing"
5. Observe "success" Toast and return to previous view
6. Repeat test 5.4 to see selected item discovered by BLE beacon

#### **6. Electronic Leash Test**

1. Remove the battery from the BLE beacon known to the application
2. Within 30 seconds, the vibrator will be invoked to signal alert detection.
3. Drag down Notification window for "Tundro Alert" "Missing BLE Beacon"
4. Touch "Tundro Alert" for navigation to "Alert" ListView
  1. Counter should increment approximately every 30 seconds
  2. Vibrator should remain silent (only alerts first time)
5. Replace battery
6. Within 30 seconds, the Alert box row should turn blue
  1. Touching Alert row should display "Alert Detail"
    1. Active = false
    2. Press OK to dismiss
7. NotificationManager should clear alert

### **11. Barcode Testing**

#### **1. Replace Barcode to a Thing**

1. Long press on Inventory row of any custody item
2. Select "Replace Barcode"
3. Barcode view appears, place target barcode in center window
4. When barcode is detected, device will beep and barcode view will be removed

#### **2. Discover Thing via Barcode**

1. Press the three vertical dots (top right) for option menu
2. Press "Discover Thing Barcode"
3. Barcode view appears, place target barcode in center window
  1. Use the same barcode from test 6.1
4. When barcode is detected, device will beep and "View Thing" form appears
  1. Should display the same item from test 6.1
5. "Back" key to return

#### **3. Remove Barcode from a Thing**

1. Long press on fresh Barcode Thing
2. Press "Remove Barcode"

3. Observe success toast
4. Repeat step 6.2 except after beep (6.2.4), should display “Unknown Barcode” toast

## 12. Person/Certificate Testing

### 1. Profile Test

1. Press the three vertical dots (top right) for option menu.
2. Step 3.1.2 asked you to initialize a database for an individual
  1. **(Certificate) Team Member Allan**
    1. Select “Profile”, you see
      1. Last Name = McNicol
      2. First Name = Allan
      3. Suffix = blank
      4. Certificates = 1 (Drivers License)
  2. **(Certificate) Team Member Bryan**
    1. Select “Profile”, you see
      1. Last Name = Hughes
      2. First Name = Bryan
      3. Suffix = blank
      4. Certificates = 5 (Drivers License, Commercial Drivers License, Basic Welding, Basic Diesel Repair, Advanced Diesel Repair)
  3. **(Certificate) Team Member Donal**
    1. Select “Profile”, you see
      1. Last Name = Carrol
      2. First Name = Donal
      3. Suffix = blank
      4. Certificates = 4 (Drivers License, Commercial Drivers License, Basic Welding, Basic Diesel Repair)
3. Press “back” key to return

### 2. Person List

1. Press the three horizontal lines (top left) to expand Navigation Drawer
2. Press “Person”
3. Navigation Drawer retracts
4. Display says “Person” on ActionBar
5. There are three rows in the ListView (Donal, Bryan, Allan)
6. Short press on (any) row promotes “Person Detail”
  1. “Person Detail” contains name (same as row) and certificates
  2. Allan has 1 certificate, Bryan has 5, Donal has one and Donal has 4
7. Long press on (any) row promotes context menu w/“Chat” option
  1. Chat not yet implemented

## 13. Job/Task Testing

### 1. (Optional) Add New Job Test

1. Note: only the “Allan” user has permissions to add a new Job
2. Press three vertical dots (top right), select “Job Manager”
3. ActionBar says “Current Jobs” w/“No Rows” in ListView
4. Press three vertical dots (top right) and select “Add Job”
5. “New Job” fragment appears, update name. Leave State as “Unassigned”.
6. Press “Save” and note Toast announcing “Success”

7. Press three horizontal lines (top left) to expand Navigation Drawer
8. Note that navigation options have changed (and are all job related)
9. Select "All Jobs"
10. There are two rows, your freshly created row and "Inspect Diesel"

## **2. (Optional) Existing Job Test**

1. Continuing from 8.1 (you are already on the "All Jobs" ListFragment)
2. Short press "Inspect Diesel" job to reveal the "Job and Tasks" List
3. One row has blue square (this is a job)
4. Remaining seven rows have red squares (tasks)
5. Short press on job row permits editing (back key to return)
6. Long press on job row permits job transfer (not yet implemented)
7. Short press on task row permits update (back key to return)
8. Long press on task row has no options

## **3. (Optional) Job Assignment Test**

1. Note: only the "Allan" user has permission to assign a job
2. Press the three horizontal lines (top left) to expose Navigation Drawer
3. Select "unassigned jobs" (should be two rows)
4. Short press any row
5. Assign the job to a person and update the state to "Assigned"
6. Press "Save" and note "success" Toast
7. Press three horizontal lines (top left) to expose Navigation Drawer
8. Select "Assigned Jobs" and job should be included
  1. (And not visible if selecting "Unassigned Jobs")

# **14. WiFi Direct Test**

## **1. Preparation**

1. WiFi Direct testing requires multiple devices
2. All devices should be prepared as described in step 1.2

## **2. Nearby Test (Peer Discovery)**

1. On all devices
  1. Press the three horizontal lines (top left) for Navigation Drawer
  2. Select "Nearby"
  3. Navigation drawer retracts and ListView says "No Rows"
  4. Within a few seconds the display should update, each device should have a row corresponding to other devices. "Nearby" will never display the localhost, so the row population will be N-1 where N = total device population, i.e. two devices, each w/one row. Four devices will each display three rows.
  5. Each row contains 3 lines: Owner, Name, Address which have specific information related to the peer host.

## **3. Connect Test**

1. As recommended in step 3.1.2.1.1, it is helpful if each device is initialized for a different person.
2. On a (single) device, press a row to test connection w/remote machine.
3. The display will update and the row will now contain the device owner (name), indicating successful data transfer between the two machines (local and remote).

## **4. Job Transfer Test**

1. Not yet



## **5. Custody Transfer Test**

1. Not yet

# **15. Android Design Library Experiment**

## **1. Introduction**

1. The current fashion on Android is “Material Design”
2. “Material Design” uses different UI classes which Tundro has ignored (until now).
3. The 20150828 release features experimental UI classes supporting “Material Design”

## **2. There are now two application Icons for Tundro**

1. Icons are labeled “Tundro” icon and “RefurbActivity”
2. Select “RefurbActivity”
3. ListView of simulated jobs
  1. (Future) short press job row navigate to tasks
4. Note (inert) Floating Action Button (will expand to menu)
5. Press “GoFactory” Icon to expand NavDrawer
6. Note icons/divider on NavDrawer
7. NavDrawer navigates to stubs