Perf Log Lines In Setting Activities, Setting-4642(Investigation)

I did some investigation on Activity.reportFullyDrawn() API suggested by Shyam Prasad Murarka .

I used Activity.reportFullyDrawn() API to collect logs and I observed that fully_drawn_activity and launch_time_activity are showing the same results. So I am not sure why we need to use this API as its gives the same as launch_time_activity.

Log for reference -

- 03-11 17:49:46.748 608 2473 I am_activity_launch_time:
 [0,131172114,com.amazon.tv.settings.v2/.tv.network.NetworkActivity,228,228]
- 03-11 17:49:46.748 608 2473 I am_activity_fully_drawn_time:
 [0,131172114,com.amazon.tv.settings.v2/.tv.network.NetworkActivity,228,228]

I did 2 rounds of 10 iterations each and here are the results.

	А	В
1	Network Activity	
2	Cold Launch	Warm Launch
3	Average = 325.1	Average = 89.0
4	Average = 446.5 (43% higher)	Average = 157.3 (76% higher)

	Α	В
1	Display And Sounds Activity	
2	Cold Launch	Warm Launch
3	Average = 120.9	Average = 92.5
4	Average = 123.1 (1% higher)	Average = 98.0 (6% higher)

Based on my investigation. In cold launch in network activity 2nd average is 43% higher than 1st average and in case of warm launch 2nd average is 76% higher than 1st average. So we are not getting stabilized results. But in DisplayAndSoundsActivity we are getting stabilized results. So overall we are not getting stabilized results based on my investigation.

[pasting discussion with shyam]

[Shyam Prasad Murarka 14:43]

Hello Mukul.

For the following excerpt from email:

I used Activity.reportFullyDrawn() API to collect logs and I observed that fully_drawn_activity and launch_time_activity are showing the same results.

Where are you calling the API? Is it in Activity's onCreate()/onResume()? If you have a code pointer to Brazil, that would be great.

[Mukul Sharma 15:07]

Hi Shyam, Yes i did call it at the end in onCreate() function. Code pointer for reference -

https://code.amazon.com/packages/FireTvSettings/blobs/a69a316dd8eabbeded919cde2c1d0e[...]ava/com/amazon/tv/settings/v2/tv/network/NetworkActivity.java

[Shyam Prasad Murarka 17:32]

From Activity#reportFullyDrawn():

Report to the system that your app is now fully drawn ...

The Activity isn't fully drawn at the end of onCreate(). An app has to decide when the screen is fully drawn. In the case of NetworkActivity, it might be at the end of onResume() or when all the asynchronous operations have loaded the data (e.g., showing Connected for the current Wi-Fi). To validate whether the API is being called at the correct point, you can use the following approach. # Kill Settings app.

- 1. Browse to the Network card.
- 2. (Terminal 1) Start capturing event buffer logs. adb logcat -b events -v threadtime > event_buffer.log
- 3. (Terminal 2) Start recording a video. adb shell screenrecord --bugreport /scdard/video. mp4
- 4. Click on the Network card and wait for the screen to load completely.
- 5. (Terminal 1) Stop capturing logs by pressing CTRL+C.
- 6. (Terminal 2) Stop recording the video by pressing CTRL+C.
- 7. Pull the video. adb pull /sdcard/video. mp4
- 8. Play the video and pause at the point where the screen is fully loaded. Note the time at the top-left side of the video.
- $9. \ \ From \ the \ logs, \ note \ the \ time \ for \ am_activity_fully_drawn_time \ for \ Network Activity.$
- 10. The time noted at step 9 and 10 should be very close to each other.

[Investigation on above points]
NetworkActivity

At the end of onCreate() function.

	Video Time	LogTime
1	11:34:05.703	11:34:03.949

At the end of onResume() function.

	Video Time	LogTime
1	10:23:31.154	10:23:29.437

2. ApplicationsActivity

At the end of onCreate() function.

	Video Time	LogTime
1	10:30:38.661	10:30:37.323

At the end of onResume() function.

	Video Time	LogTime
1	11:34:18.467	11:34:16.756

3. DisplayAndSoundsActivity At the end of onCreate() function.

	Video Time	LogTime
1	10:30:33.020	10:30:31.691

At the end of onResume() function.

	Video Time	LogTime
1	11:34:11.897	11:34:10.529

$\rightarrow \text{Network Activity}$

COLD LAUNCH

S.NO	Desciption	fully_drawn_time
1	03-10 14:44:08.698 614 5291 I am_activity_fully_drawn_time: [0,19401697,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	251
2	03-10 15:45:32.593 614 20144 I am_activity_fully_drawn_time: [0,250159697,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	647
3	03-10 15:53:44.652 614 16424 I am_activity_fully_drawn_time: [0,200524129,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	108
4	03-10 17:10:27.739 614 624 I am_activity_fully_drawn_time: [0,221213095,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	100
5	03-10 16:10:17.858 614 3315 I am_activity_fully_drawn_time: [0,44327203,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	234
6	03-10 17:14:02.092 614 624 I am_activity_fully_drawn_time: [0,93018792,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	106
7	03-10 17:21:13.126 614 20144 I am_activity_fully_drawn_time: [0,47310595,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	626
8	03-10 17:26:52.925 614 4227 I am_activity_fully_drawn_time: [0,72883311,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	503
9	03-10 17:31:15.711 614 16795 I am_activity_fully_drawn_time: [0,108609708,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	146
10	03-10 17:35:45.982 614 2565 I am_activity_fully_drawn_time: [0,148248482,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	530
Average		325.1

COLD LAUNCH 2ND ATTEMPT

Note: Activity launch time and Activity fully drawn time has always same time as you can see in below table logs.

S.NO	Desciption	fully_drawn_time
1	03-11 17:49:46.748 608 2473 I am_activity_launch_time: [0,131172114,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	228
2	03-11 17:49:46.748 608 2473 I am_activity_fully_drawn_time: [0,131172114,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	228
3	03-11 17:52:53.838 608 5620 I am_activity_launch_time: [0,48936672,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	602
4	03-11 17:52:53.838 608 5620 I am_activity_fully_drawn_time: [0,48936672,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	602
5	03-11 17:54:00.172 608 5992 I am_activity_launch_time: [0,241659368,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	496
6	03-11 17:54:00.172 608 5992 I am_activity_fully_drawn_time: [0,241659368,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	496
7	03-11 17:55:09.686 608 5620 I am_activity_launch_time: [0,179576695,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	447
8	03-11 17:55:09.686 608 5620 I am_activity_fully_drawn_time: [0,179576695,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	447
9	03-11 17:56:05.979 608 2473 I am_activity_launch_time: [0,244275264,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	462
10	03-11 17:56:05.979 608 2473 I am_activity_fully_drawn_time: [0,244275264,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	462
11	03-11 17:57:09.650 608 6614 I am_activity_launch_time: [0,228710501,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	443
12	03-11 17:57:09.650 608 6614 I am_activity_fully_drawn_time: [0,228710501,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	443
13	03-11 17:57:59.304 608 5610 I am_activity_launch_time: [0,124208642,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	442
14	03-11 17:57:59.304 608 5610 I am_activity_fully_drawn_time: [0,124208642,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	442
15	03-11 17:58:48.029 608 618 I am_activity_launch_time: [0,21273631,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	446
16	03-11 17:58:48.029 608 618 I am_activity_fully_drawn_time: [0,21273631,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	446
17	03-11 17:59:32.415 608 6614 I am _activity _launch _time: [0,6822028,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	433
18	03-11 17:59:32.415 608 6614 I am_activity_fully_drawn_time: [0,6822028,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	433
19	03-11 18:00:19.642 608 3959 I am_activity_launch_time: [0,229030077,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	466
20	03-11 18:00:19.642 608 3959 I am_activity_fully_drawn_time: [0,229030077,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	466
Average		446.5

S.NO	Desciption	fully_drawn_time
	03-10 19:56:47.380 607 7847 I am_activity_fully_drawn_time: [0,154056099,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	261
2	2 03-10 20:04:41.734 610 3229 I am_activity_fully_drawn_time: [0,41056362,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	295
;	03-10 20:12:39.427 610 621 I am_activity_fully_drawn_time: [0,116144753,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	102
4	d3-11 00:59:48.990 609 620 I am_activity_fully_drawn_time: [0,29284175,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	305
Ę	03-11 01:05:28.583 609 1087 I am_activity_fully_drawn_time: [0,122818631,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	116
(03-11 01:09:42.374 609 1231 I am_activity_fully_drawn_time: [0,261910939,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	90
7	7 03-11 01:13:21.132 609 15335 I am_activity_fully_drawn_time: [0,63596178,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	79

8	03-11 01:16:53.447 609 4381 I am_activity_fully_drawn_time: [0,128462875,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	174
9	03-11 01:20:04.672 609 2735 I am_activity_fully_drawn_time: [0,23696376,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	92
10	03-11 01:23:11.287 609 1087 I am_activity_fully_drawn_time: [0,167751542,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	59
Average		157.3

WARM LAUNCH 2ND ATTEMPT

S.NO	Desciption	fully_drawn_time
1	03-11 18:08:24.974 608 963 I am_activity_fully_drawn_time: [0,1545436,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	71
2	03-11 18:09:14.317 608 1188 I am_activity_fully_drawn_time: [0,268433362,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	105
3	03-11 18:09:55.660 608 6900 I am_activity_fully_drawn_time: [0,143563221,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	88
4	03-11 18:10:32.223 608 1188 I am_activity_fully_drawn_time: [0,88896670,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	85
5	03-11 18:11:42.456 608 963 I am_activity_fully_drawn_time: [0,186557290,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	79
6	03-11 18:12:40.174 608 7049 I am_activity_fully_drawn_time: [0,5063423,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	89
7	03-11 18:15:50.394 624 911 I am_activity_fully_drawn_time: [0,31306565,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	132
8	03-11 18:16:41.344 624 634 I am_activity_fully_drawn_time: [0,43609006,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	95
9	03-11 18:17:19.575 624 997 I am_activity_fully_drawn_time: [0,60342059,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	72
10	03-11 18:18:05.934 624 1390 I am_activity_fully_drawn_time: [0,215645788,com.amazon.tv.settings.v2/.tv.network.NetworkActivity]	74
Average		89

ightarrow Display And Sounds Activity

S.NO	Desciption	fully_drawn_time
1	03-10 14:44:20.950 614 2823 I am_activity_fully_drawn_time: [0,222101921,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	105
2	03-10 15:46:20.016 614 20144 I am_activity_fully_drawn_time: [0,224351335,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	206
3	03-10 15:53:52.651 614 4433 I am_activity_fully_drawn_time: [0,255787608,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	110
4	03-10 16:10:26.094 614 8463 I am_activity_fully_drawn_time: [0,206721966,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	136
5	03-10 17:10:35.069 614 16795 I am_activity_fully_drawn_time: [0,174958865,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	122
6	03-10 17:14:12.484 614 3729 I am_activity_fully_drawn_time: [0,155134122,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	125
7	03-10 17:21:19.023 614 3315 I am_activity_fully_drawn_time: [0,168866668,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	121
8	03-10 17:27:04.138 614 2823 I am_activity_fully_drawn_time: [0,186819359,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	102
9	03-10 17:31:19.470 614 940 I am_activity_fully_drawn_time: [0,200231228,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	90
10	03-10 17:36:04.398 614 22126 I am_activity_fully_drawn_time: [0,170130450,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	114
Average		123.1

COLD LAUNCH 2ND ATTEMPT

S.NO	Desciption	fully_drawn_time
1	03-11 17:50:03.343 608 963 I am_activity_fully_drawn_time: [0,240531311,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	149
2	03-11 17:53:07.289 608 650 I am_activity_fully_drawn_time: [0,50821119,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	121
3	03-11 17:54:08.296 608 1116 I am_activity_fully_drawn_time: [0,84846040,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	165
4	03-11 17:55:18.669 608 6289 I am_activity_fully_drawn_time: [0,248617783,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	114
5	03-11 17:56:10.649 608 650 I am_activity_fully_drawn_time: [0,21384765,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	115
6	03-11 17:57:13.929 608 947 I am_activity_fully_drawn_time: [0,84161262,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	105
7	03-11 17:58:03.343 608 964 I am_activity_fully_drawn_time: [0,173607479,com.amazon.tv.settings.v2/.fv.display_sounds.DisplayAndSoundsActivity]	117
8	03-11 17:58:52.242 608 6900 I am_activity_fully_drawn_time: [0,220362752,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	107
9	03-11 17:59:36.357 608 964 I am_activity_fully_drawn_time: [0,199115993,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	114
10	03-11 18:00:23.792 608 7176 I am_activity_fully_drawn_time: [0,61364454,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	102
Average		120.9

WARM LAUNCH

S.NO	Desciption	fully_drawn_time
1	03-10 19:57:18.749 607 13115 I am_activity_fully_drawn_time: [0,82455488,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	107
2	03-10 20:05:00.826 610 5171 I am_activity_fully_drawn_time: [0,144598585,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	114
3	03-10 20:12:43.962 610 1127 I am_activity_fully_drawn_time: [0,225122458,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	110
4	03-11 00:59:53.368 609 620 I am_activity_fully_drawn_time: [0,83565718,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	110
5	03-11 01:05:34.906 609 5311 I am_activity_fully_drawn_time: [0,155111172,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	109
6	03-11 01:09:46.906 609 5311 I am_activity_fully_drawn_time: [0,4919137,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	87
7	03-11 01:13:30.277 609 1231 I am_activity_fully_drawn_time: [0,91112499,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	91
8	03-11 01:17:01.631 609 15335 I am_activity_fully_drawn_time: [0,114692577,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	74
9	03-11 01:20:08.683 609 1087 I am_activity_fully_drawn_time: [0,177877793,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	91
10	02 11 01:22:19 092 600 15225 Lam potivity fully drawn time:	87
Average		98

WARM LAUNCH 2ND ATTEMPT

S.NO	Desciption	fully_drawn_time
1	03-11 18:08:29.654 608 6900 I am_activity_fully_drawn_time: [0,248035871,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	110
2	03-11 18:09:19.112 608 963 I am_activity_fully_drawn_time: [0,228518359,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	103
3	03-11 18:10:00.278 608 6900 I am_activity_fully_drawn_time: [0,161389929,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	85
4	03-11 18:10:40.914 608 3615 I am_activity_fully_drawn_time: [0,81124962,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	95
5	03-11 18:11:48.561 608 3615 I am_activity_fully_drawn_time: [0,73566574,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	79
6	03-11 18:12:47.253 608 3615 I am_activity_fully_drawn_time: [0,87305075,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	84
7	03-11 18:15:55.602 624 1221 I am_activity_fully_drawn_time: [0,99979539,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	82
8	03-11 18:16:46.295 624 803 I am_activity_fully_drawn_time: [0,48394354,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	92
9	03-11 18:17:24.864 624 1221 I am_activity_fully_drawn_time: [0,99997151,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	114
10	03-11 18:18:10.756 624 1220 I am_activity_fully_drawn_time: [0,119628480,com.amazon.tv.settings.v2/.tv.display_sounds.DisplayAndSoundsActivity]	81
Average		92.5

$\rightarrow \textbf{Accessibility Activity}$

COLD LAUNCH

S.NO	Desciption	fully_drawn_time
1	03-10 14:45:03.179 614 2823 I am_activity_fully_drawn_time: [0,143450387,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	107
2	03-10 15:46:44.236 614 5044 I am_activity_fully_drawn_time: [0,121064349,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	104
3	03-10 15:54:52.875 614 5297 I am_activity_fully_drawn_time: [0,56263234,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	96
4	03-10 16:11:04.975 614 922 I am_activity_fully_drawn_time: [0,237336807,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	88
5	03-10 17:11:22.612 614 2823 I am_activity_fully_drawn_time: [0,64635169,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	80
6	03-10 17:15:02.555 614 20811 I am_activity_fully_drawn_time: [0,235621283,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	112
7	03-10 17:21:37.115 614 20144 I am_activity_fully_drawn_time: [0,163205833,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	103
	03-10 17:27:31.073 614 2823 I am_activity_fully_drawn_time: [0,128570090,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	90
9	03-10 17:31:50.962 614 16795 I am_activity_fully_drawn_time: [0,6505829,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	99
10	03-10 17:36:19.308 614 16506 I am_activity_fully_drawn_time: [0,248413361,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	91
Average		97

S.NO	Desciption	fully_drawn_time

Average		81.1
10	03-11 01:23:21.727 609 1231 I am_activity_fully_drawn_time: [0,103596598,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	62
9	03-11 01:20:12.435 609 1087 I am_activity_fully_drawn_time: [0,139458744,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	75
8	03-11 01:17:25.209 609 1087 I am_activity_fully_drawn_time: [0,195503320,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	52
7	03-11 01:13:35.064 609 1173 I am_activity_fully_drawn_time: [0,233362137,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	59
6	03-11 01:09:53.983 609 1173 I am_activity_fully_drawn_time: [0,43583543,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	83
5	03-11 01:05:49.045 609 3280 I am_activity_fully_drawn_time: [0,44184618,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	61
4	03-11 00:59:57.702 609 620 I am_activity_fully_drawn_time: [0,41661951,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	110
3	03-10 20:13:05.837 610 2155 I am_activity_fully_drawn_time: [0,194514141,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	83
2	03-10 20:05:18.948 610 1373 I am_activity_fully_drawn_time: [0,113330645,com.amazon.tv.settings.v2/.tv.accessibility.AccessibilityActivity]	108
1	03-10 19:57:55.175 607 7847 I am_activity_fully_drawn_time: [0,33138908,com.amazon.tv.settings.v2/.tv.accessibility.Accessibility.Activity]	118

$\rightarrow \text{My Account Activity}$

COLD LAUNCH

S.NO	Desciption	fully_drawn_time
1	03-10 14:47:50.722 614 8463 I am_activity_fully_drawn_time: [0,156216448,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	753
2	03-10 15:51:28.187 614 1106 I am_activity_fully_drawn_time: [0,145017535,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	935
3	03-10 15:53:37.275 614 1182 I am_activity_fully_drawn_time: [0,223776217,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	714
4	03-10 16:10:10.574 614 686 I am_activity_fully_drawn_time: [0,106582491,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	942
5	03-10 17:10:10.541 614 1273 I am_activity_fully_drawn_time: [0,253715196,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	154
6	03-10 17:13:54.909 614 2823 I am_activity_fully_drawn_time: [0,251541784,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	751
7	03-10 17:25:45.755 614 922 I am_activity_fully_drawn_time: [0,14272844,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	231
8	03-10 17:26:57.320 614 4227 I am_activity_fully_drawn_time: [0,260456389,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	289
9	03-10 17:31:10.918 614 16795 I am_activity_fully_drawn_time: [0,180527019,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	639
10	03-10 17:35:58.444 614 1273 I am_activity_fully_drawn_time: [0,78519375,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	305
Average		710.9

S.NO	Desciption	fully_drawn_time
	03-10 19:56:52.790 607 1163 I am_activity_fully_drawn_time: [0,216939499,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	797

2	03-10 20:04:46.887 610 620 I am_activity_fully_drawn_time: [0,76472483,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	862
3	03-10 20:12:57.320 610 1373 I am_activity_fully_drawn_time: [0,28820585,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	232
4	03-11 01:00:02.308 609 5176 I am_activity_fully_drawn_time: [0,180780749,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	751
5	03-11 01:05:41.544 609 1087 I am_activity_fully_drawn_time: [0,207871186,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	227
6	03-11 01:09:58.573 609 1231 I am_activity_fully_drawn_time: [0,80219845,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	221
7	03-11 01:13:39.428 609 1231 I am_activity_fully_drawn_time: [0,110820215,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	223
8	03-11 01:17:13.867 609 1231 I am_activity_fully_drawn_time: [0,7285061,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	227
9	03-11 01:20:16.320 609 1231 I am_activity_fully_drawn_time: [0,219816398,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	227
10	03-11 01:23:25.456 609 15335 I am_activity_fully_drawn_time: [0,129150985,com.amazon.tv.settings.v2/.tv.my_account.MyAccountActivity]	212
Average		397.9

$\rightarrow \textbf{Controllers And Bluetooth Activity}$

S.NO	Desciption	fully_drawn_time
1	03-10 14:48:09.902 614 8463 I am_activity_fully_drawn_time: [0,43870365,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	73
2	03-10 15:46:32.437 614 922 I am_activity_fully_drawn_time: [0,148656814,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	87
3	03-10 15:54:36.770 614 1182 I am_activity_fully_drawn_time: [0,202168089,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	58
4	03-10 16:10:40.698 614 625 I am_activity_fully_drawn_time: [0,100426726,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	63
5	03-10 17:10:51.356 614 1273 I am_activity_fully_drawn_time: [0,163441988,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	72
6	03-10 17:14:29.868 614 3729 I am_activity_fully_drawn_time: [0,203791089,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	84
7	03-10 17:21:29.795 614 3315 I am_activity_fully_drawn_time: [0,230820635,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	68
8	03-10 17:27:13.647 614 8267 I am_activity_fully_drawn_time: [0,4995788,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	66
9	03-10 17:31:31.034 614 940 I am_activity_fully_drawn_time: [0,257818411,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	56
10	03-10 17:36:14.881 614 1275 I am_activity_fully_drawn_time: [0,100608963,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	77
Average		70.4

S.NO	Desciption	fully_drawn_time
1	03-10 19:57:32.008 607 917 I am_activity_fully_drawn_time: 1 [0,85119709,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	
2	03-10 20:05:14.630 610 1373 lam_activity_fully_drawn_time: [0,186758802,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	72
3	03-11 01:00:47.453 609 5311 I am_activity_fully_drawn_time: [0,27229678,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	61
4	03-11 01:06:00.019 609 1173 I am_activity_fully_drawn_time: [0,58338354,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	50
5	03-11 01:10:05.161 609 1231 I am_activity_fully_drawn_time: [0,181817725,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	43
6	03-11 01:13:46.886 609 5311 I am_activity_fully_drawn_time: [0,203326642,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	47
7	03-11 01:17:09.384 609 5311 I am_activity_fully_drawn_time: [0,111980215,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	42
8	03-11 01:20:23.854 609 1173 I am_activity_fully_drawn_time: [0,84142837,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	44
9	03-11 01:23:36.113 609 768 I am_activity_fully_drawn_time: 9 [0,257029691,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	
10	03-11 01:27:19.083 609 5311 I am_activity_fully_drawn_time: [0,130021189,com.amazon.tv.settings.v2/.tv.controllers_bluetooth_devices.ControllersAndBluetoothActivity]	55
Average		54.5

$\rightarrow \text{Applications Activity}$

S.NO	Desciption	fully_drawn_time
1	03-10 14:48:33.042 614 1185 I am_activity_fully_drawn_time: [0,98990657,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	132
2	03-10 15:47:59.699 614 20144 I am_activity_fully_drawn_time: [0,240808537,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	288
3	03-10 15:54:00.618 614 3315 I am_activity_fully_drawn_time: [0,228729949,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	177
4	03-10 16:10:33.697 614 22126 I am_activity_fully_drawn_time: [0,5312859,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	93
5	03-10 17:10:42.591 614 940 I am_activity_fully_drawn_time: [0,230692274,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	210
6	03-10 17:14:55.458 614 3729 I am_activity_fully_drawn_time: [0,58534178,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	106
7	03-10 17:21:24.539 614 23955 I am_activity_fully_drawn_time: [0,243592993,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	127
8	03-10 17:27:09.431 614 16795 I am_activity_fully_drawn_time: [0,230781050,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	135
9	03-10 17:31:26.814 614 1275 I am_activity_fully_drawn_time: [0,209380785,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	185
10	03-10 17:36:09.991 614 1273 I am_activity_fully_drawn_time: [0,40360457,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	107
Average		266

WARM LAUNCH

S.NO	Desciption	fully_drawn_time
1	03-10 19:57:26.896 607 5182 I am_activity_fully_drawn_time: [0,242646254,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	171
2	03-10 20:05:07.610 610 1130 I am_activity_fully_drawn_time: [0,2256079,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	168
3	03-10 20:12:51.300 610 4736 I am_activity_fully_drawn_time: [0,267550133,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	161
4	03-11 01:00:10.481 609 4381 I am_activity_fully_drawn_time: [0,196926203,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	172
5	03-11 01:05:55.986 609 1231 I am_activity_fully_drawn_time: [0,57134544,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	105
6	03-11 01:10:09.699 609 15335 I am_activity_fully_drawn_time: [0,203684155,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	96
7	03-11 01:13:43.017 609 1173 I am_activity_fully_drawn_time: [0,170457680,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	91
8	03-11 01:17:21.541 609 15335 am_activity_fully_drawn_time: [0,200686589,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	99
9	03-11 01:20:20.226 609 1173 I am_activity_fully_drawn_time: [0,29662374,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	98
10	03-11 01:23:29.486 609 5311 I am_activity_fully_drawn_time: [0,21190465,com.amazon.tv.settings.v2/.tv.applications.ApplicationsActivity]	102
Average		126.4

$\rightarrow \textbf{Device Activity}$

S.NO	Desciption	fully_drawn_time
1	03-10 14:49:07.260 614 3315 I am_activity_fully_drawn_time: [0,212380356,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	180
2	03-10 15:46:55.596 614 1275 I am_activity_fully_drawn_time: [0,86119672,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	221
3	03-10 15:54:08.782 614 16424 I am_activity_fully_drawn_time: [0,1555556,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	188
4	03-10 16:10:48.715 614 625 I am_activity_fully_drawn_time: [0,167416629,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	176
5	03-10 17:11:06.907 614 940 I am_activity_fully_drawn_time: [0,242714009,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	157
6	03-10 17:14:39.184 614 2565 I am_activity_fully_drawn_time: [0,10662516,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	149
7	03-10 17:21:43.610 614 23955 I am_activity_fully_drawn_time: [0,162864788,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	196
8	03-10 17:27:18.274 614 2823 I am_activity_fully_drawn_time: [0,81731987,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	265
9	03-10 17:31:38.447 614 20925 I am_activity_fully_drawn_time: [0,140810014,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	198
10	03-10 17:36:23.642 614 2565 I am_activity_fully_drawn_time: [0,215169180,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	190
Average		192

S.NO	Desciption	fully_drawn_time
1	03-10 19:57:38.702 607 917 I am_activity_fully_drawn_time: [0,100827285,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	174
2	03-10 20:05:24.235 610 2155 I am_activity_fully_drawn_time: [0,54124173,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	143
3	03-10 20:13:12.764 610 1127 I am_activity_fully_drawn_time: [0,213187221,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	153
4	03-11 01:00:31.266 609 3280 I am_activity_fully_drawn_time: [0,141727328,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	195
5	03-11 01:06:03.987 609 5311 I am_activity_fully_drawn_time: [0,21855345,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	111
6	03-11 01:10:13.374 609 5311 I am_activity_fully_drawn_time: [0,189144476,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	105
7	03-11 01:13:50.841 609 15335 I am_activity_fully_drawn_time: [0,239990794,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	101
8	03-11 01:17:29.152 609 1173 I am_activity_fully_drawn_time: [0,106610575,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	78
9	03-11 01:20:27.763 609 2735 I am_activity_fully_drawn_time: [0,204016732,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	86
10	03-11 01:23:40.003 609 2735 I am_activity_fully_drawn_time: [0,32997230,com.amazon.tv.settings.v2/.tv.device.DeviceActivity]	123
Average		126.9

$\rightarrow \textbf{Factory Reset Activity}$

COLD LAUNCH

S.NO	Desciption	fully_drawn_time
1	03-10 15:33:52.684 614 922 I am_activity_fully_drawn_time: [0,143006966,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	106
2	03-10 15:47:04.796 614 1275 I am_activity_fully_drawn_time: [0,55653066,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	101
3	03-10 15:54:13.889 614 16424 I am_activity_fully_drawn_time: [0,144453462,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	91
4	03-10 16:10:53.067 614 22126 I am_activity_fully_drawn_time: [0,195367195,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	94
5	03-10 17:11:11.561 614 940 I am_activity_fully_drawn_time: [0,205729589,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	108
6	03-10 17:14:43.876 614 3729 I am_activity_fully_drawn_time: [0,150412006,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	93
7	03-10 17:21:52.082 614 20144 I am_activity_fully_drawn_time: [0,58028550,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	88
8	03-10 17:27:22.249 614 4227 I am_activity_fully_drawn_time: [0,222418478,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	89
9	03-10 17:31:42.372 614 3315 I am_activity_fully_drawn_time: [0,265416249,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	91
10	03-10 17:36:28.018 614 1275 I am_activity_fully_drawn_time: [0,3944142,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	87
Average		94.8

S.NO	Desciption	fully_drawn_time
------	------------	------------------

Average		77.5
10	03-11 01:23:43.544 609 768 I am_activity_fully_drawn_time: [0,24222160,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	72
9	03-11 01:20:31.423 609 1231 I am_activity_fully_drawn_time: [0,36523150,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	42
8	03-11 01:17:32.997 609 4381 I am_activity_fully_drawn_time: [0,53222217,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	49
7	03-11 01:13:54.566 609 1231 I am_activity_fully_drawn_time: [0,263286796,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	78
6	03-11 01:10:16.917 609 1173 I am_activity_fully_drawn_time: [0,230411214,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	55
5	03-11 01:06:07.926 609 1087 I am_activity_fully_drawn_time: [0,104067547,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	81
4	03-11 01:00:35.816 609 5311 I am_activity_fully_drawn_time: [0,184819698,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	102
3	03-10 20:13:16.939 610 1127 I am_activity_fully_drawn_time: [0,106487468,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	97
2	03-10 20:05:28.661 610 1373 I am_activity_fully_drawn_time: [0,99241321,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	108
1	03-10 19:57:42.675 607 5182 I am_activity_fully_drawn_time: [0,133364319,com.amazon.tv.settings.v2/.tv.FactoryResetActivity]	91

$\rightarrow \text{Hud Activity}$

COLD LAUNCH

S.NO	Desciption	fully_drawn_time
1	03-10 15:41:06.334 614 922 I am_activity_fully_drawn_time: [0,123945089,com.amazon.tv.settings.v2/.hud.HudActivity]	493
2	03-10 15:48:07.488 614 20144 I am_activity_fully_drawn_time: [0,160612584,com.amazon.tv.settings.v2/.hud.HudActivity]	435
3	03-10 15:55:33.548 614 1273 I am_activity_fully_drawn_time: [0,113940041,com.amazon.tv.settings.v2/.hud.HudActivity]	437
4	03-10 16:11:11.678 614 940 I am_activity_fully_drawn_time: [0,138507121,com.amazon.tv.settings.v2/.hud.HudActivity]	425
5	03-10 17:11:29.389 614 624 I am_activity_fully_drawn_time: [0,150146331,com.amazon.tv.settings.v2/.hud.HudActivity]	461
6	03-10 17:15:09.390 614 2823 I am_activity_fully_drawn_time: [0,43387638,com.amazon.tv.settings.v2/.hud.HudActivity]	417
7	03-10 17:22:02.459 614 2823 I am_activity_fully_drawn_time: [0,220248659,com.amazon.tv.settings.v2/.hud.HudActivity]	407
8	03-10 17:27:38.180 614 1273 I am_activity_fully_drawn_time: [0,183826364,com.amazon.tv.settings.v2/.hud.HudActivity]	402
9	03-10 17:31:57.699 614 16795 I am_activity_fully_drawn_time: [0,215281599,com.amazon.tv.settings.v2/.hud.HudActivity]	410
10	03-10 17:36:36.448 614 16506 I am_activity_fully_drawn_time: [0,43397115,com.amazon.tv.settings.v2/.hud.HudActivity]	410
Average		429.7

S.NO	Desciption	fully_drawn_time
1	03-10 19:58:02.295 607 1773 I am_activity_fully_drawn_time: [0,102272227,com.amazon.tv.settings.v2/.hud.HudActivity]	440
2	03-10 20:05:42.711 610 2155 I am_activity_fully_drawn_time: [0,157363071,com.amazon.tv.settings.v2/.hud.HudActivity]	436
3	03-10 20:13:29.030 610 1373 I am_activity_fully_drawn_time: [0,28419435,com.amazon.tv.settings.v2/.hud.HudActivity]	94
4	03-11 01:00:54.519 609 3280 I am_activity_fully_drawn_time: [0,22389536,com.amazon.tv.settings.v2/.hud.HudActivity]	431
5	03-11 01:06:16.303 609 1173 I am_activity_fully_drawn_time: [0,198543956,com.amazon.tv.settings.v2/.hud.HudActivity]	84
6	03-11 01:10:24.374 609 5311 I am_activity_fully_drawn_time: [0,143841531,com.amazon.tv.settings.v2/.hud.HudActivity]	86
7	03-11 01:14:01.798 609 1231 I am_activity_fully_drawn_time: [0,225421633,com.amazon.tv.settings.v2/.hud.HudActivity]	86
8	03-11 01:17:41.053 609 1087 I am_activity_fully_drawn_time: [0,99513841,com.amazon.tv.settings.v2/.hud.HudActivity]	91
9	03-11 01:20:39.158 609 4381 I am_activity_fully_drawn_time: [0,37451451,com.amazon.tv.settings.v2/.hud.HudActivity]	91
10	03-11 01:23:51.004 609 1173 I am_activity_fully_drawn_time: [0,85135861,com.amazon.tv.settings.v2/.hud.HudActivity]	92
Average		193.1