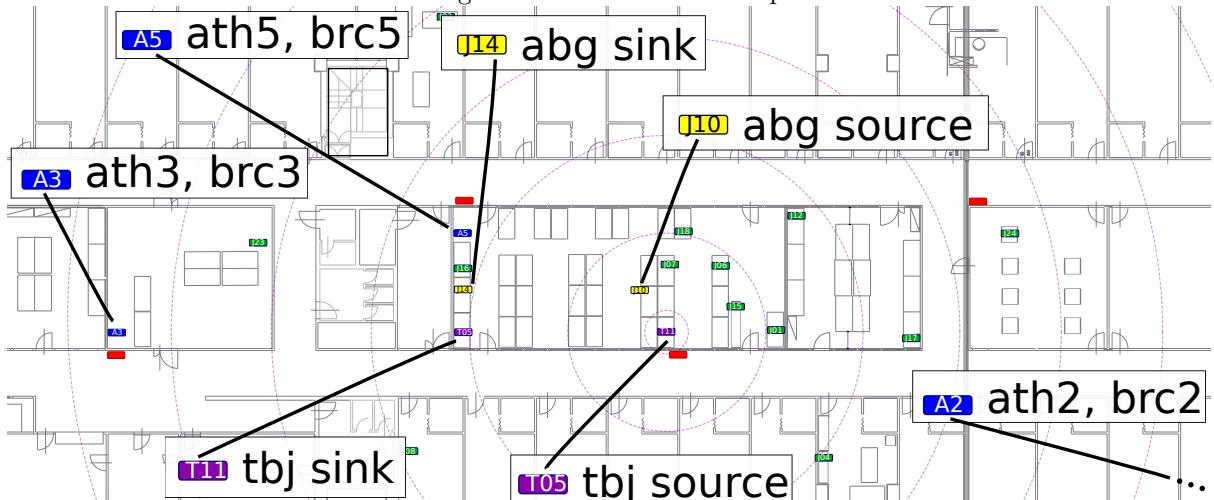


Jamming Measurements – Setup and Result Files

1 setup

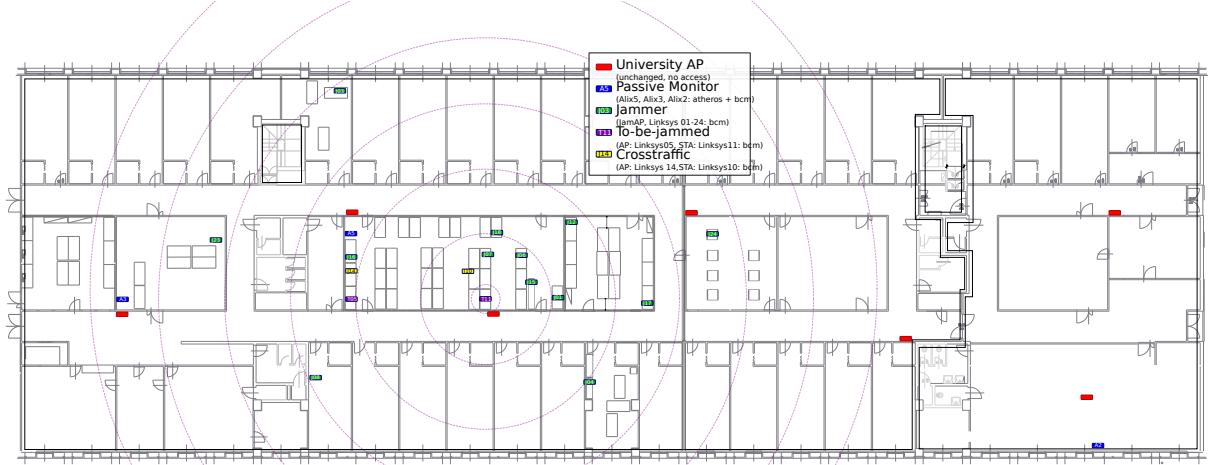
- 29 days: Nov 14 – Dec 13
- TBJ to-be-jammed traffic from STA:linksys11 (iperf client) to AP:linksys05 (iperf server)
- ABG artificial background traffic from STA:linksys10 (iperf client) to AP:linksys14 (iperf server)
- STA applies round-robin rate selection, no retransmits, 802.11g conform medium access
- channel 6, real-world traffic of legitimate university wifi users
- additional artificial traffic on randomly-selected adjacent channels
- Confidence intervals: t-distribution and 97.5% confidence.

Figure 1: cut-out of floor map



The to-be-jammed (tbj) STA sends to the to-be-jammed (AP). For this traffic the loss of the different receivers is as follows:

Figure 2: full floor map



2 measurement data

- folder “results-pcaps”
 - in folders with naming convention JCOUNT_EXPREP, e.g., “0_816” (for no jammers and 816-th repetition) or “7_541” (for five jammers and 541-th rep)
 - in each folder “capt_alix2.pcap” “capt_alix3.pcap” “capt_alix5.pcap”
- folder “results-withoutpcaps”
 - in folders with naming convention JCOUNT_EXPREP, e.g., “0_816” (for no jammers and 816-th repetition) or “7_541” (for five jammers and 541-th rep)
 - in each folder
 - alix2** broadcom chip’s statistics on to-be-jammed traffic in alix2
 - alix2.csv** broadcom chip’s statistics on to-be-jammed traffic in alix2 in csv (duplicate)
 - alix3** broadcom chip’s statistics on to-be-jammed traffic in alix3
 - alix3.csv** broadcom chip’s statistics on to-be-jammed traffic in alix3 in csv (duplicate)
 - alix5** broadcom chip’s statistics on to-be-jammed traffic in alix5
 - alix5.csv** broadcom chip’s statistics on to-be-jammed traffic in alix5 in csv (duplicate)
 - ap.csv** broadcom chip’s statistics on to-be-jammed traffic in AP (linksys05)
 - bgchan** the channel number with active abg traffic
 - capt_alix2.csv** atheros chip’s pcap headers as csv¹ from alix2
 - capt_alix3.csv** atheros chip’s pcap headers as csv from alix3
 - capt_alix5.csv** atheros chip’s pcap headers as csv from alix5
 - cur.run.list** jammer polled for activation in this run (superset of “active jammers” as some may have been unreachable → check with jammer’s stats)
 - iperf_AP.err** iperf error log from AP (linksys05)
 - iperf_AP.log** iperf log from AP (linksys05)
 - iperf_BG.err** iperf error log from linksys14
 - iperf_BG.log** iperf log from linksys14
 - iperf_BGSTA.err** iperf error log from linksys10
 - iperf_BGSTA.log** iperf log from linksys10

¹tshark -e frame.time.relative -e frame.len -e radiotap.datarate -e radiotap.dbm_antsignal -e radiotap.rxflags.badplcp -e wlan.fc.type -e wlan.fc.subtype -e wlan.fc.frag -e wlan.fc.retry -e wlan.fc.pwrmtg -e wlan.duration -e wlan.bssid -e wlan.sa -e wlan.da -e wlan.seq -e wlan.fcs_good -e llc.dsap.ig -e llc.ssap.cr -e llc.control.ftype -e llc.oui -e llc.type

iperf_STA.err iperf error log from STA (linksys11)
iperf_STA.log iperf log from STA (linksys11)
jammer_linksys06.cs active jammer processed csv with sent jamming packets stats (for each active jammer)
linksys01 stats of inactive jammer
linksys03 stats of inactive jammer
linksys04 stats of inactive jammer
linksys05 stats of inactive jammer
linksys06 stats of inactive jammer
linksys07 stats of inactive jammer
linksys08 stats of inactive jammer
linksys10 stats of inactive jammer
linksys11 stats of inactive jammer
linksys12 stats of inactive jammer
linksys14 stats of inactive jammer
linksys15 stats of inactive jammer
linksys16 stats of inactive jammer
linksys17 stats of inactive jammer
linksys18 stats of inactive jammer
linksys23 stats of inactive jammer
linksys24 stats of inactive jammer
runnumber run id which is increased by one for every experiment (additional to EXPREP for global ordering of experiments)
sta.csv STA (linksys11) sent packets statistics
time_end timestamp (seconds-precision) when experiment ended
time_start timestamp (seconds-precision) when experiment started