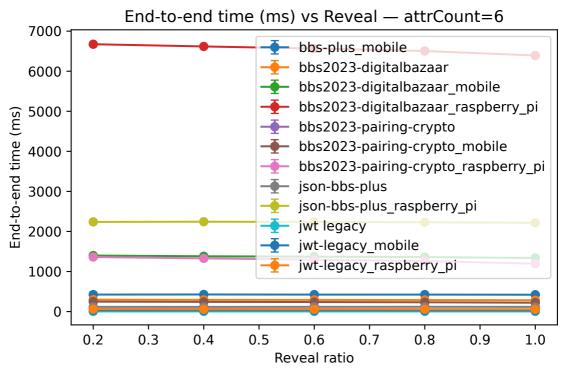
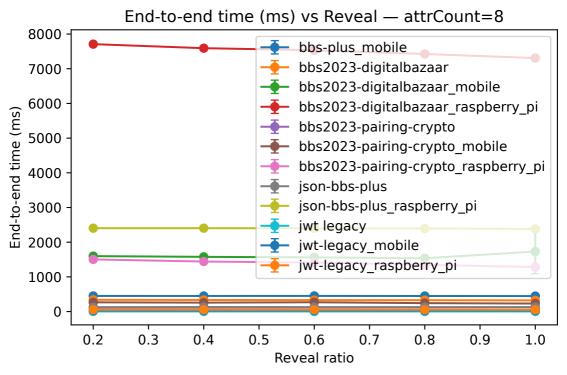
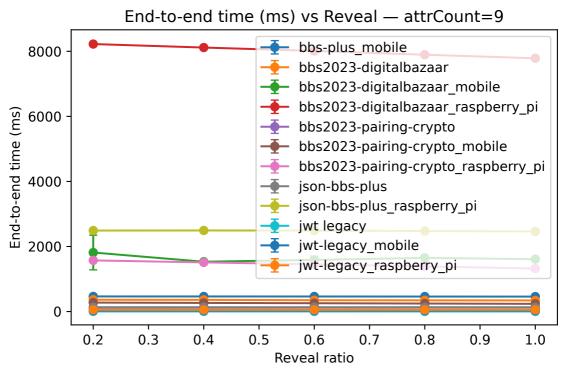
End-to-end time (ms) vs Reveal — attrCount=5 bbs-plus mobile 6000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile 5000 bbs2023-digitalbazaar raspberry pi time (ms) bbs2023-pairing-crypto 4000 bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 3000 ison-bbs-plus json-bbs-plus raspberry pi jwt legacy 2000 jwt-legacy mobile jwt-legacy raspberry pi 1000 0 0.2 0.3 0.4 0.5 0.6 0.8 0.9 1.0

Reveal ratio

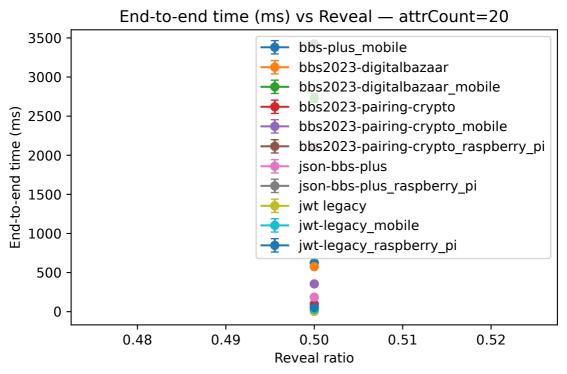


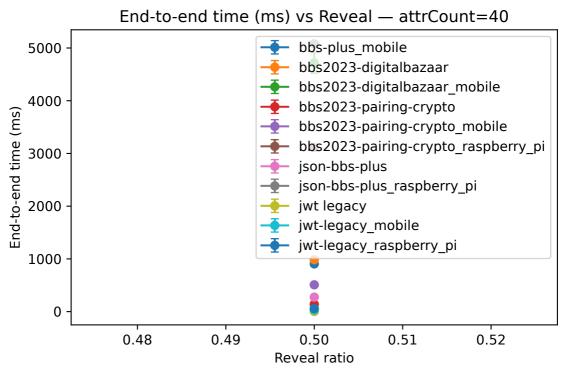
End-to-end time (ms) vs Reveal — attrCount=7 bbs-plus mobile 7000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile 6000 bbs2023-digitalbazaar raspberry pi 5000 bbs2023-pairing-crypto bbs2023-pairing-crypto mobile 4000 bbs2023-pairing-crypto raspberry pi End-to-end ison-bbs-plus 3000 json-bbs-plus raspberry pi jwt legacy 2000 jwt-legacy mobile jwt-legacy raspberry pi 1000 0 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 Reveal ratio

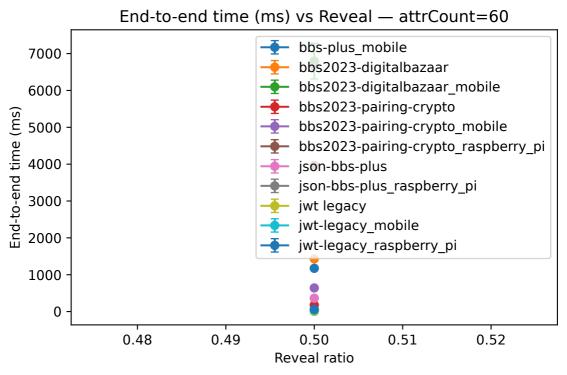


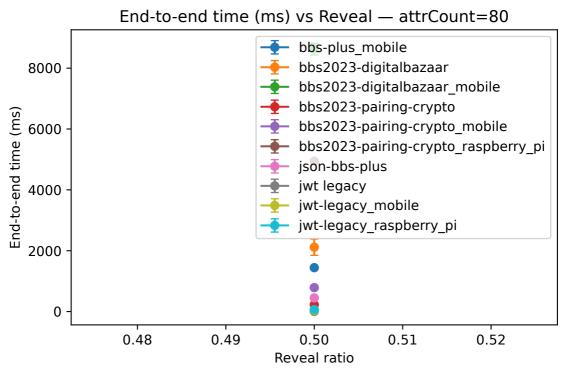


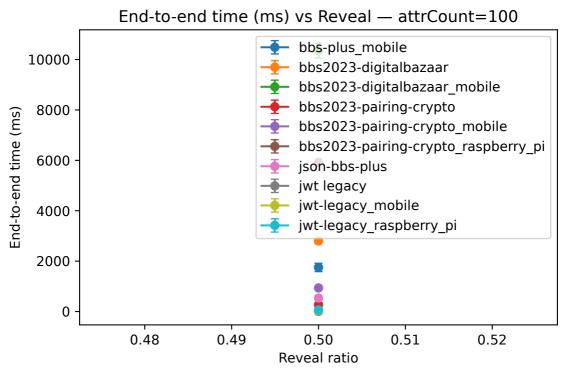
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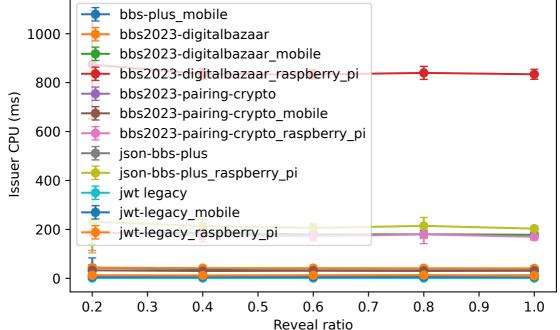


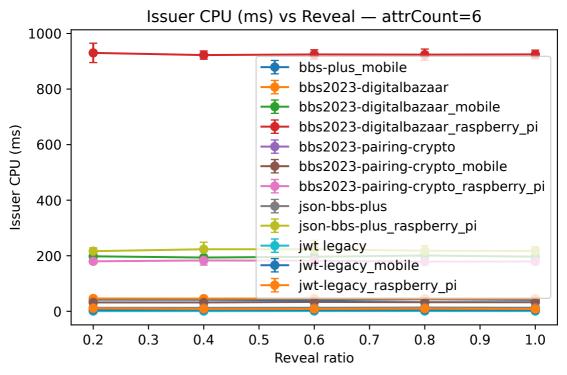


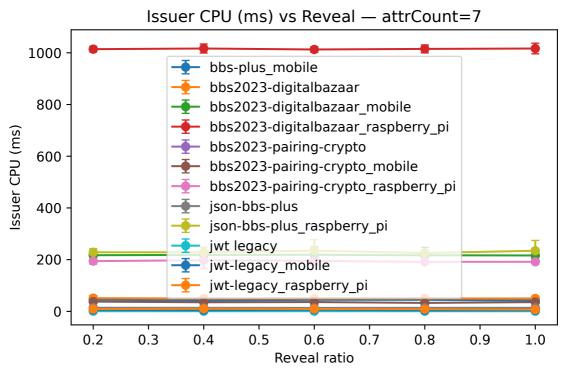


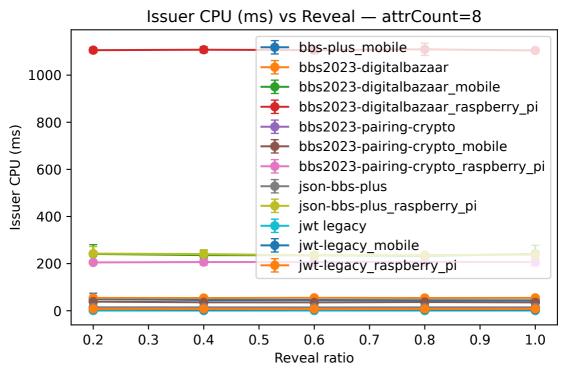


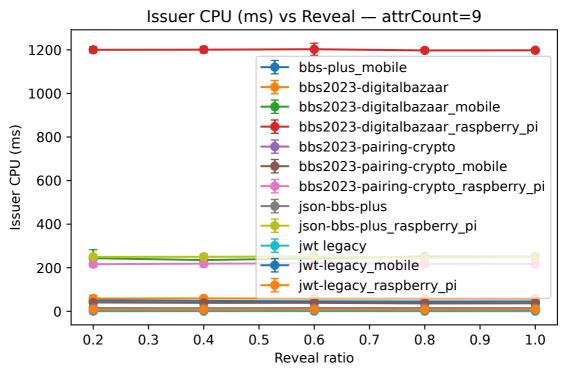
## Issuer CPU (ms) vs Reveal — attrCount=5

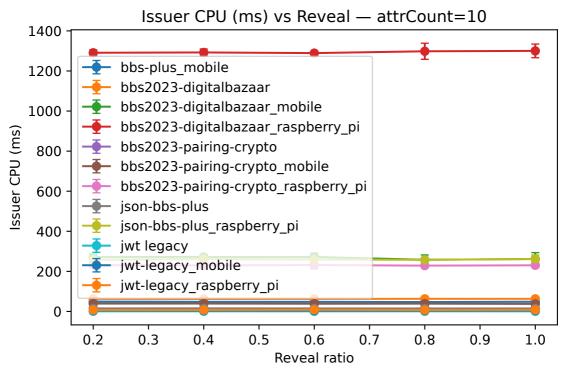


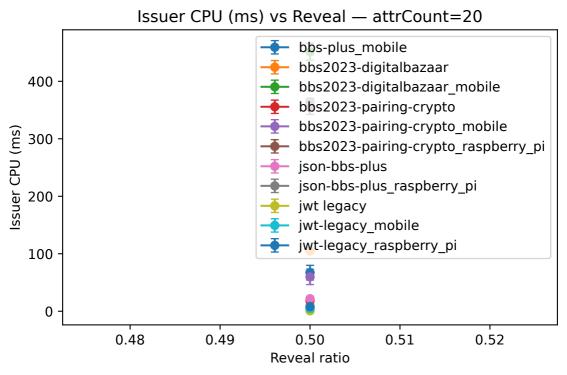


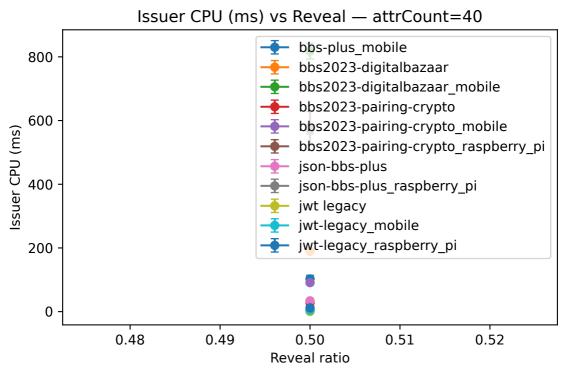


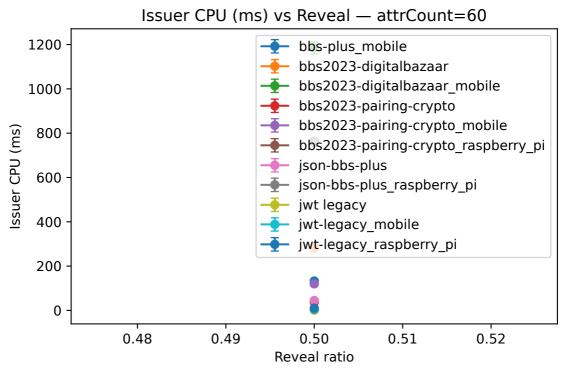


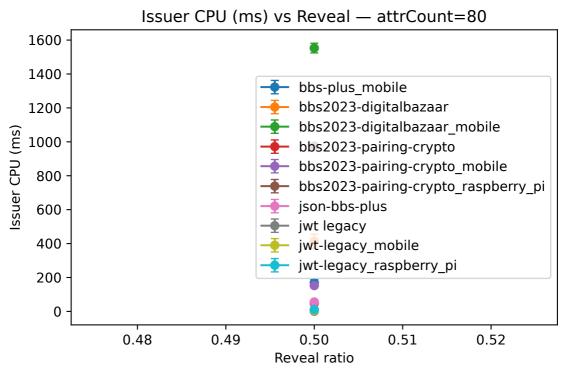


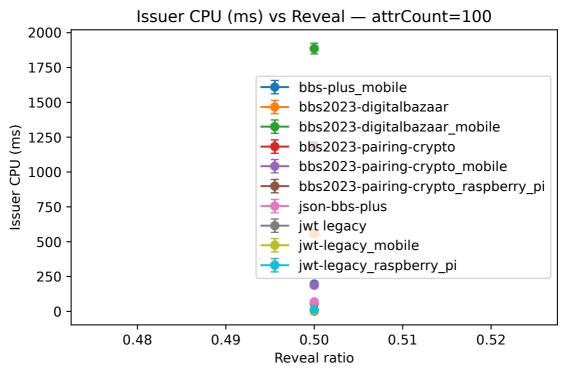


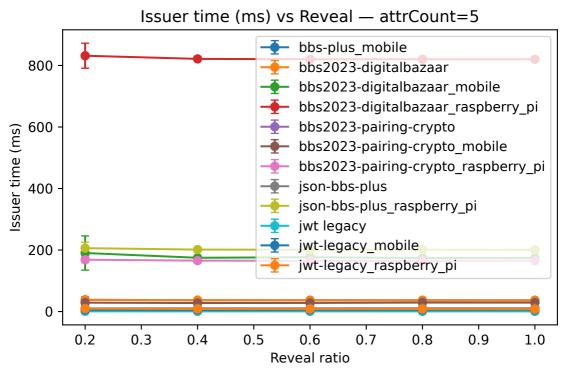


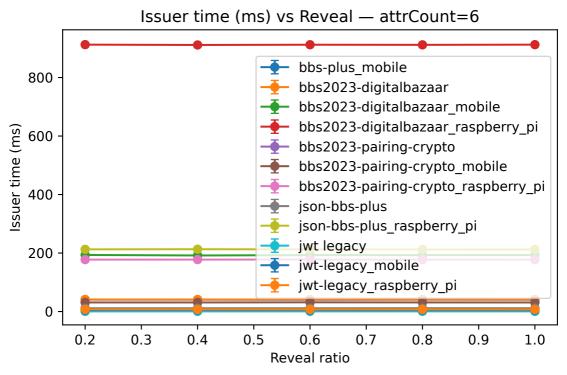


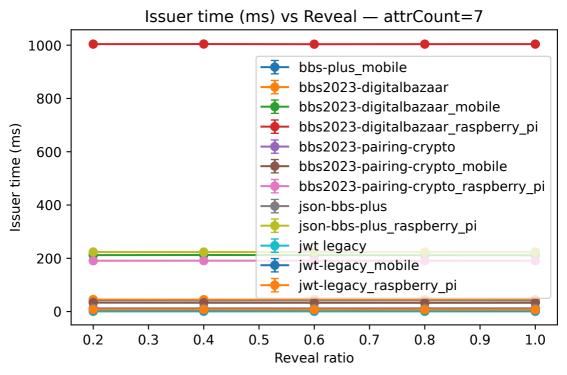


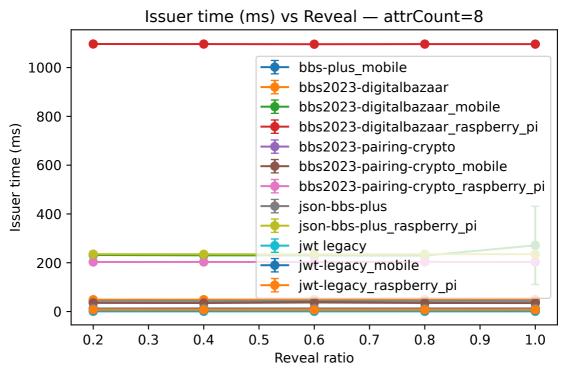


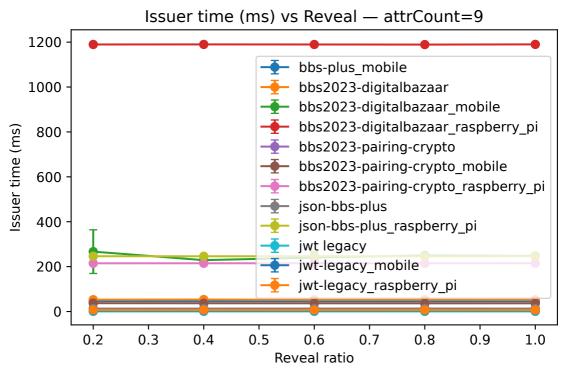


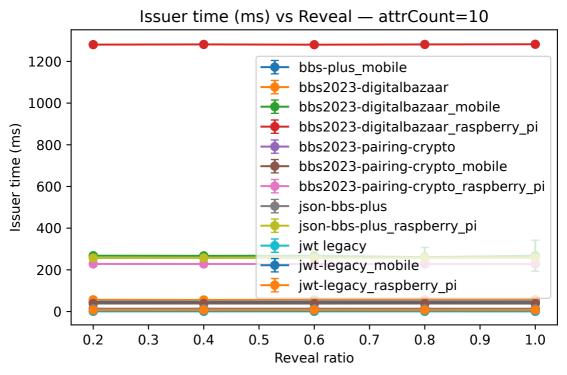


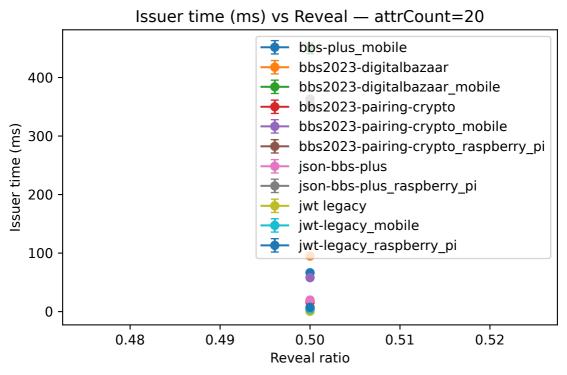


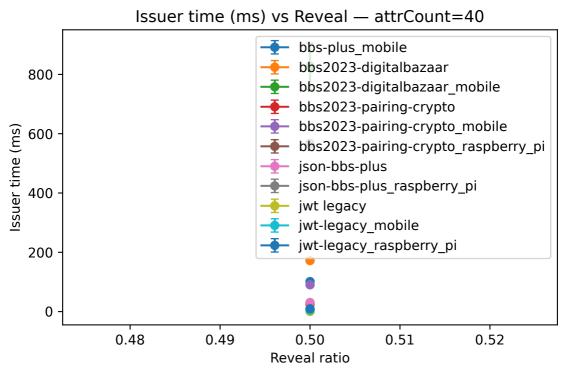


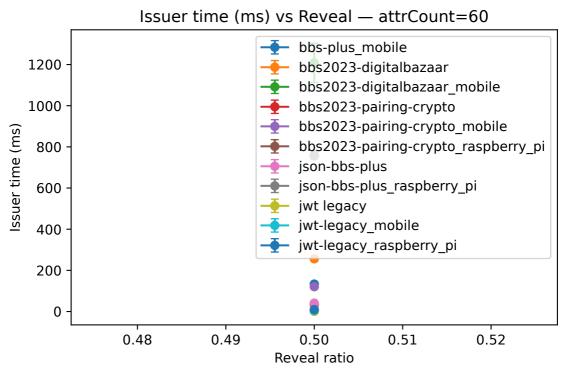


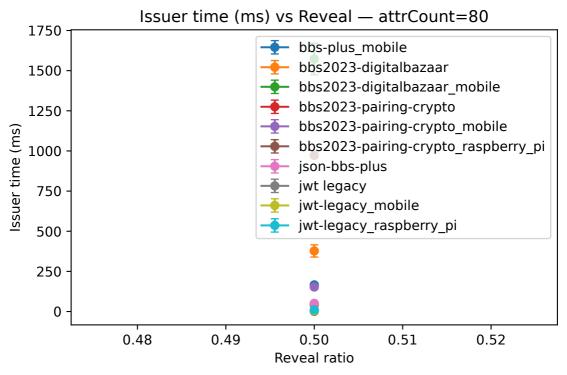


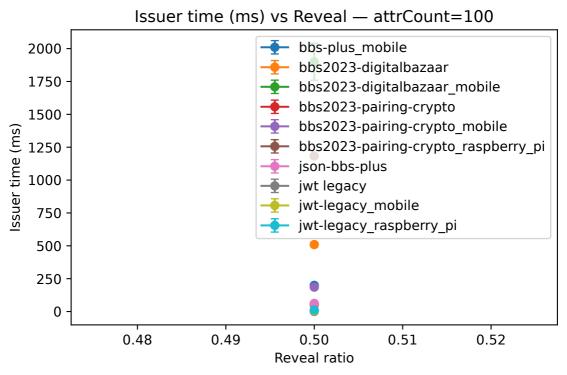




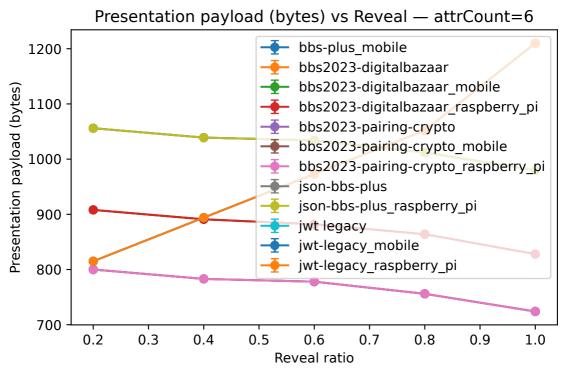




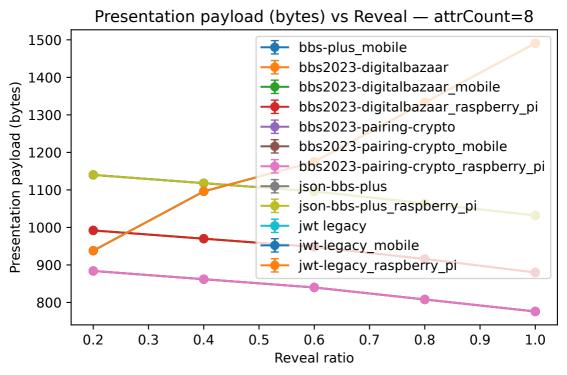


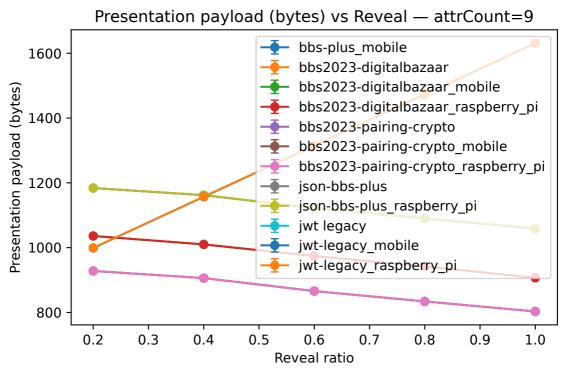


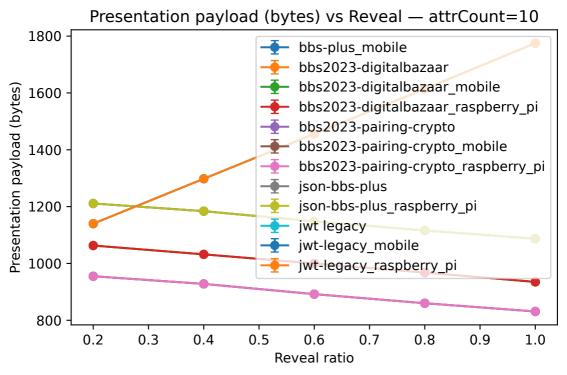
Presentation payload (bytes) vs Reveal — attrCount=5 bbs-plus mobile 1050 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile Presentation payload (bytes 1000 bbs2023-digitalbazaar raspberry pi bbs2023-pairing-crypto 950 bbs2023-pairing-crypto mobile 900 bbs2023-pairing-crypto raspberry pi ison-bbs-plus 850 json-bbs-plus raspberry pi jwt legacy 800 jwt-legacy mobile jwt-legacy raspberry pi 750 700 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 Reveal ratio

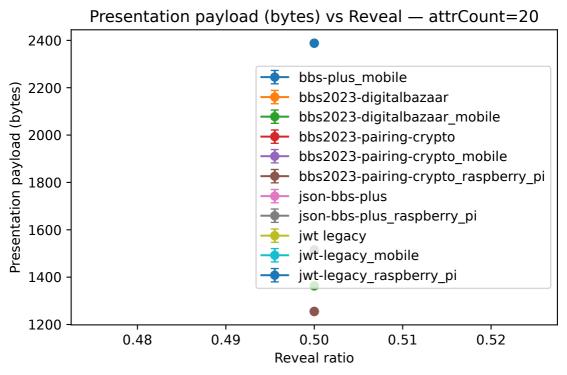


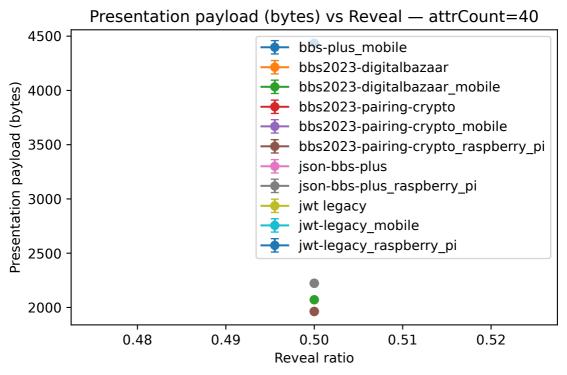
Presentation payload (bytes) vs Reveal — attrCount=7 bbs-plus mobile 1300 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile payload (bytes bbs2023-digitalbazaar raspberry pi 1200 bbs2023-pairing-crypto bbs2023-pairing-crypto mobile 1100 bbs2023-pairing-crypto raspberry pi ison-bbs-plus Presentation 1000 json-bbs-plus raspberry pi jwt legacy 900 jwt-legacy mobile jwt-legacy raspberry pi 800 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 Reveal ratio

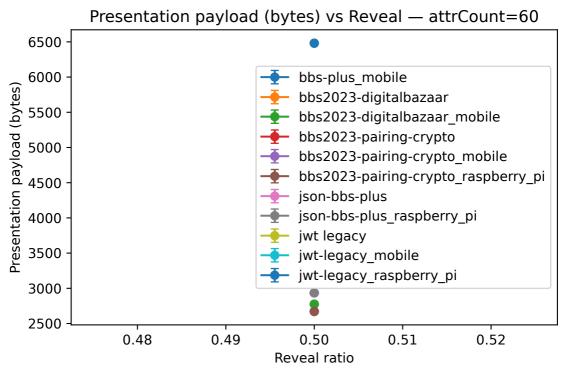


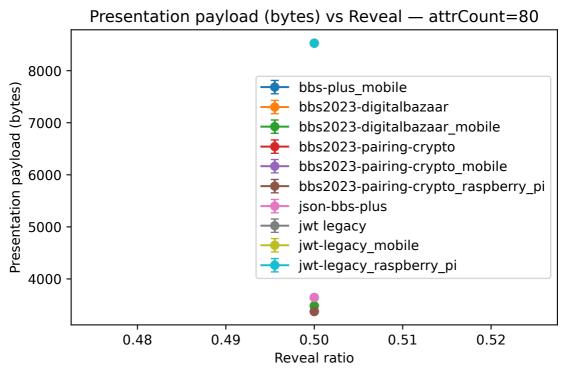


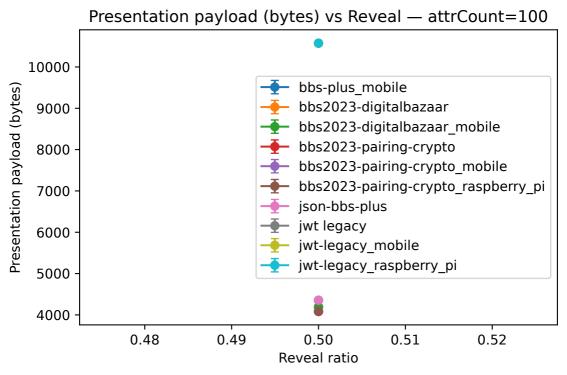


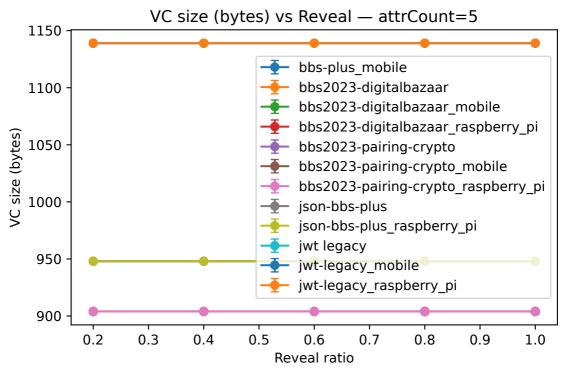


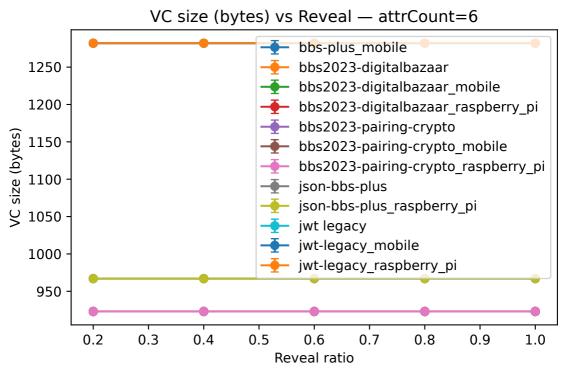


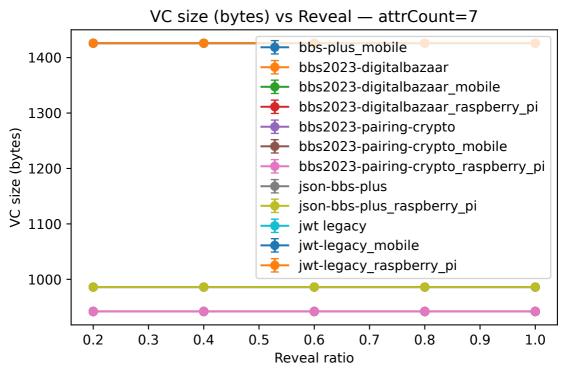


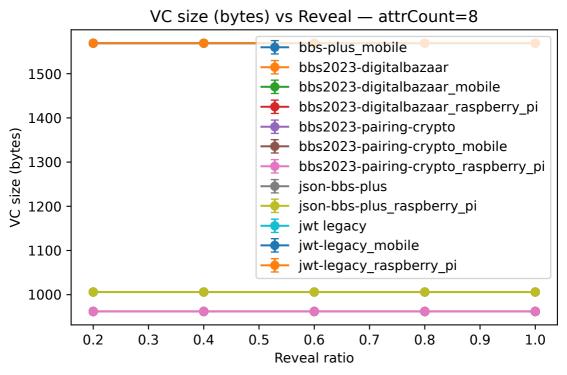


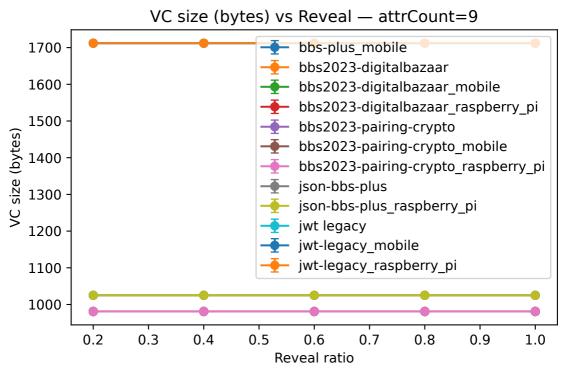


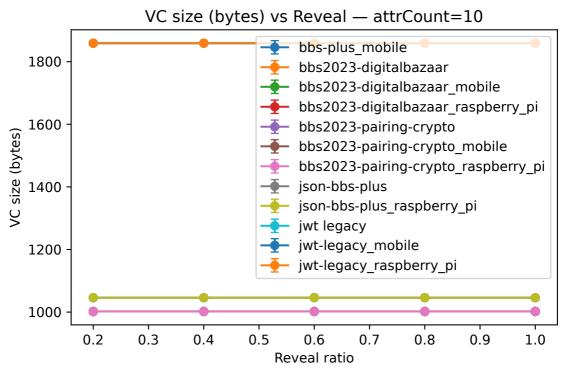


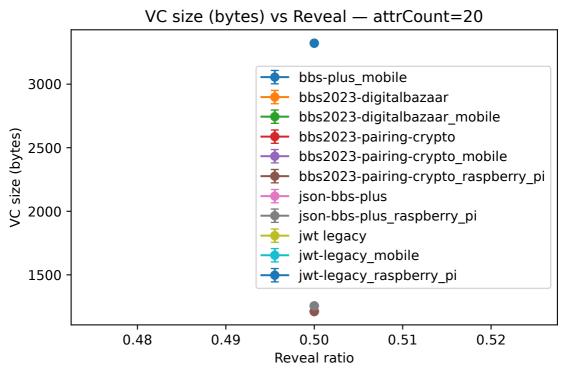


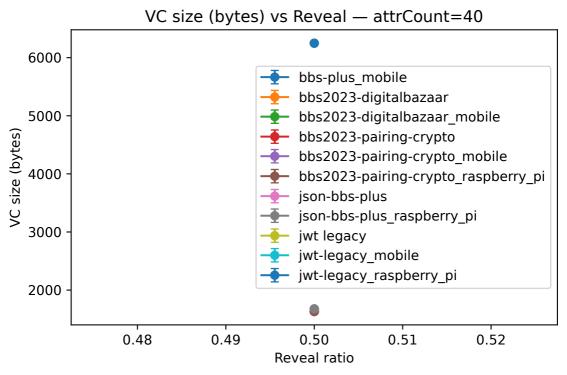


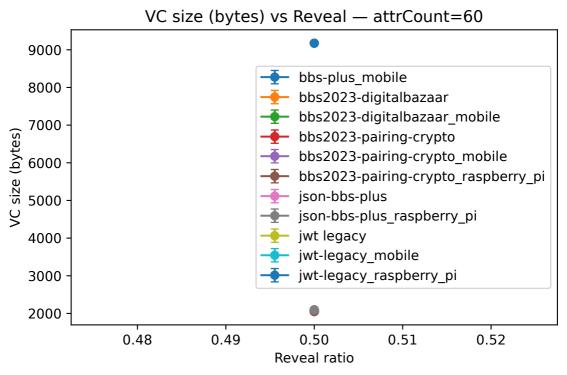


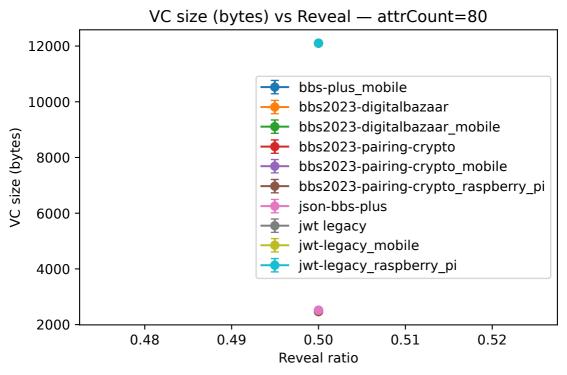


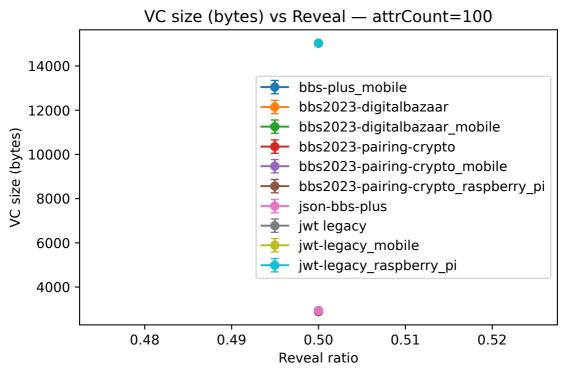




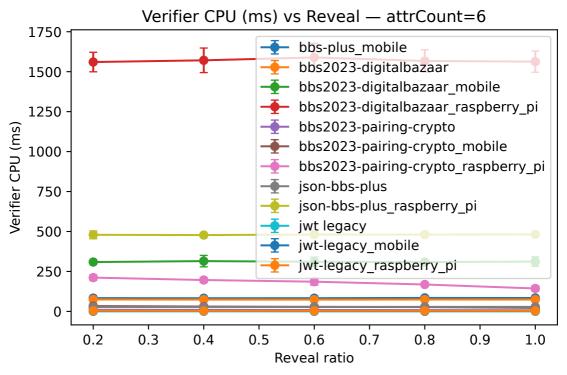


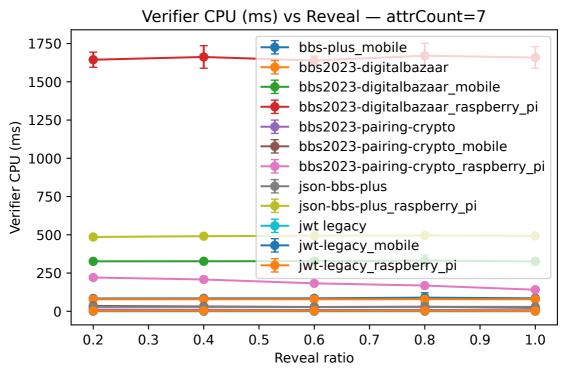




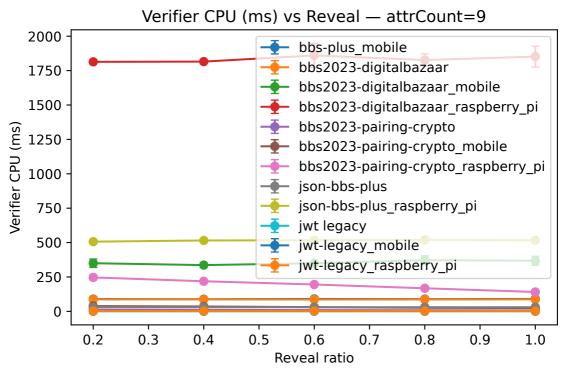


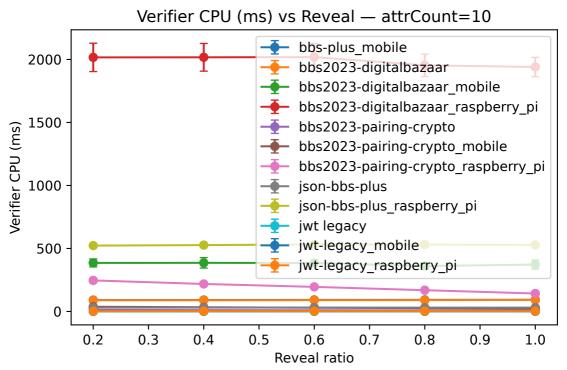
Verifier CPU (ms) vs Reveal — attrCount=5 1600 bbs-plus mobile bbs2023-digitalbazaar 1400 bbs2023-digitalbazaar mobile bbs2023-digitalbazaar raspberry pi 1200 bbs2023-pairing-crypto 1000 bbs2023-pairing-crypto mobile **Verifier CPU** bbs2023-pairing-crypto raspberry pi 800 ison-bbs-plus json-bbs-plus raspberry pi 600 jwt legacy 400 jwt-legacy mobile jwt-legacy raspberry pi 200 0 0.2 0.3 0.4 0.5 0.6 0.8 0.9 1.0 Reveal ratio

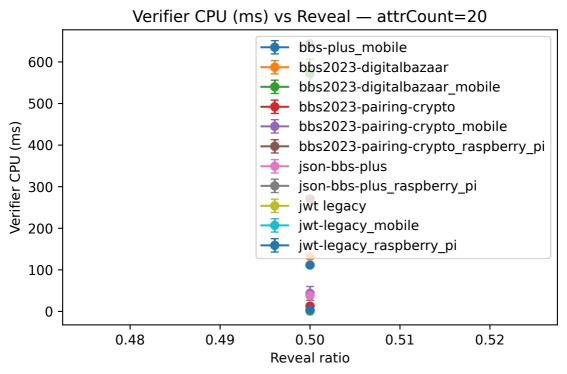


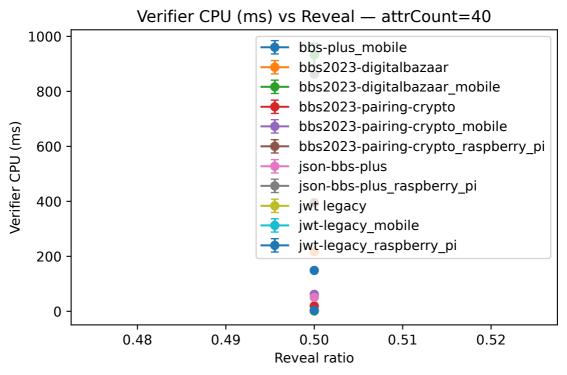


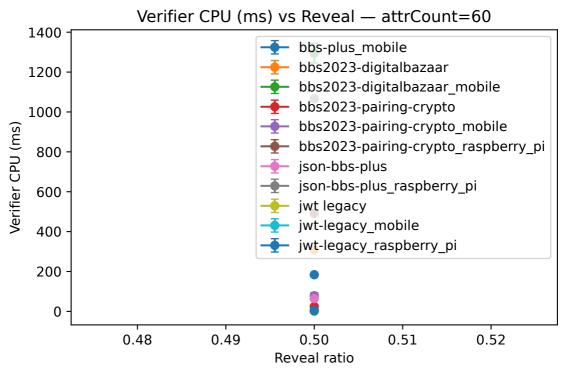
Verifier CPU (ms) vs Reveal — attrCount=8 bbs-plus mobile 1750 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile 1500 bbs2023-digitalbazaar raspberry pi bbs2023-pairing-crypto 1250 bbs2023-pairing-crypto mobile 1000 bbs2023-pairing-crypto raspberry pi ison-bbs-plus Verifier 750 json-bbs-plus raspberry pi jwt legacy 500 jwt-legacy mobile jwt-legacy raspberry pi 250 0 0.2 0.3 0.4 0.5 0.6 0.8 0.9 1.0 Reveal ratio

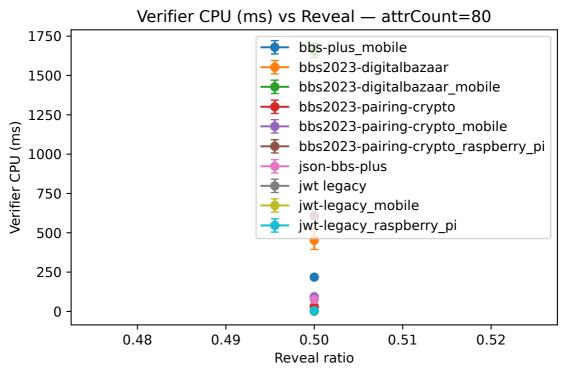


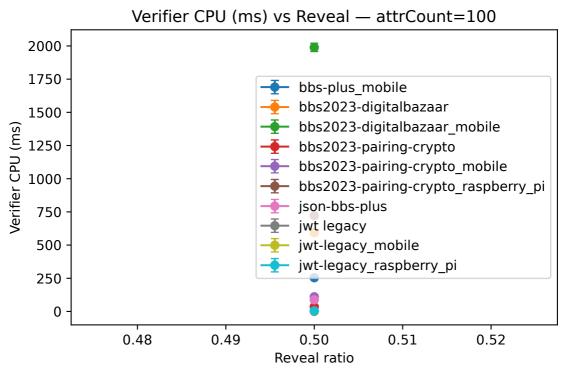


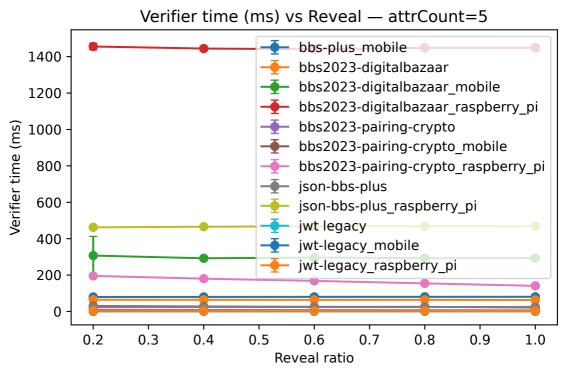


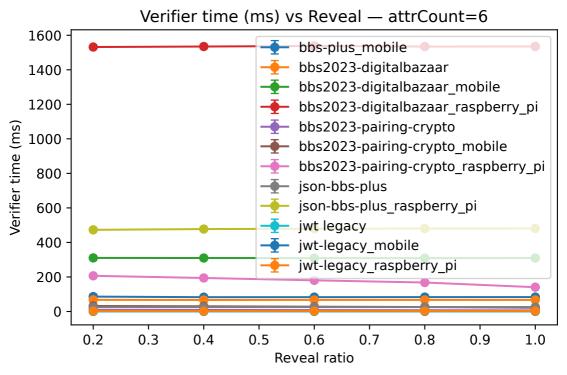


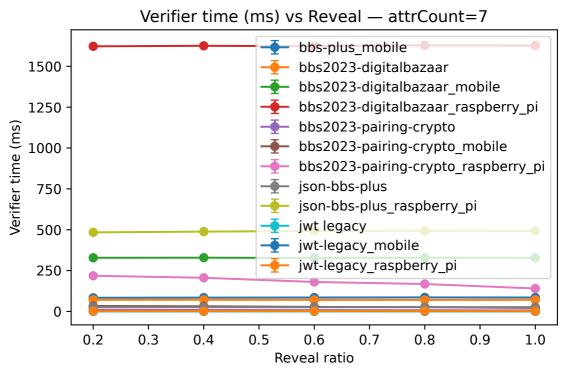


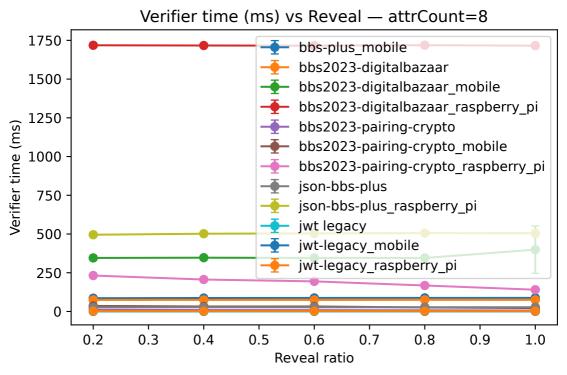


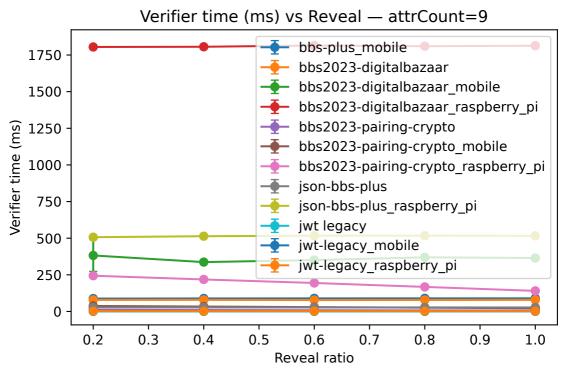


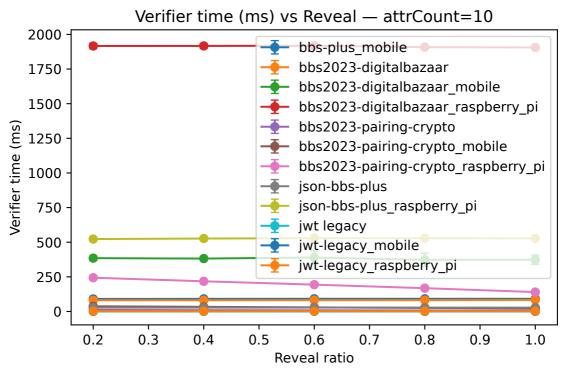


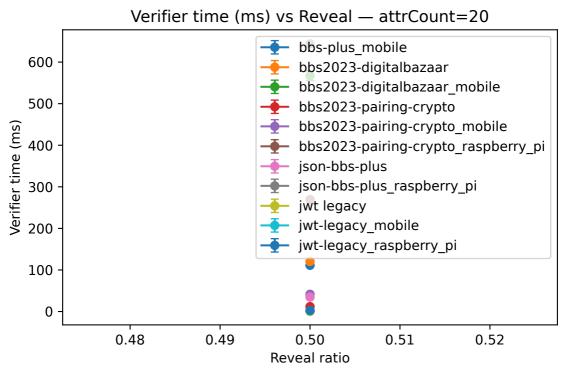


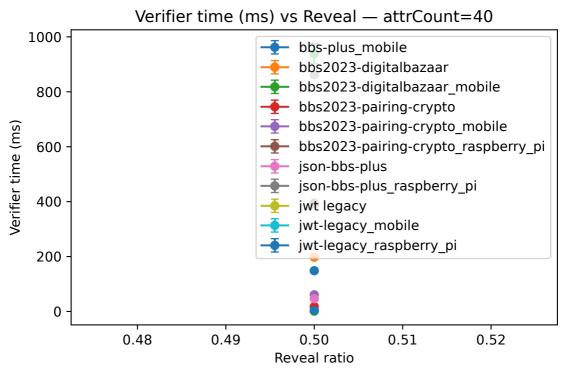


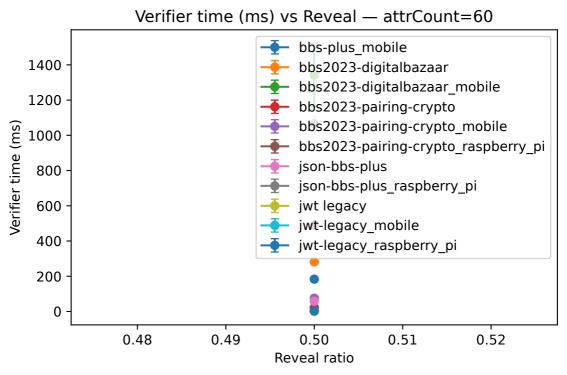


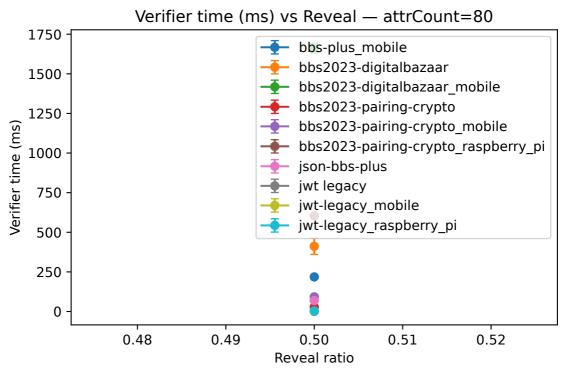


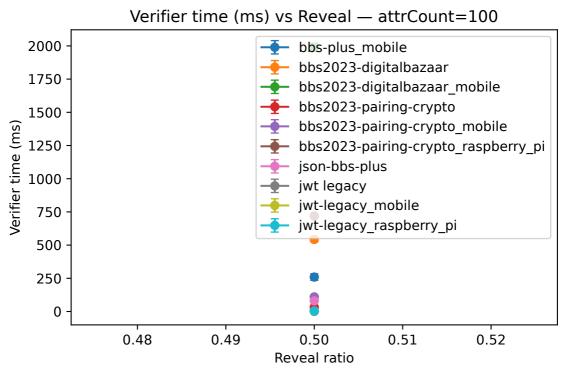








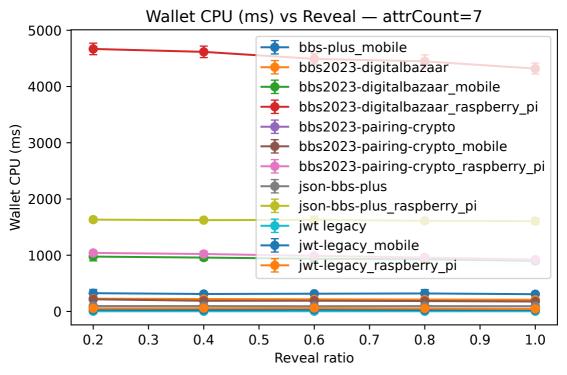




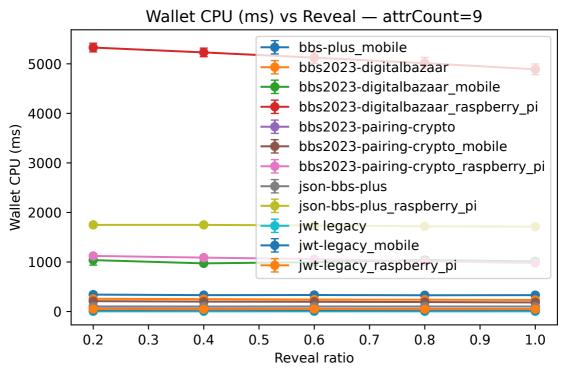
Wallet CPU (ms) vs Reveal — attrCount=5 bbs-plus mobile bbs2023-digitalbazaar 4000 bbs2023-digitalbazaar mobile bbs2023-digitalbazaar raspberry pi bbs2023-pairing-crypto 3000 bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi ison-bbs-plus 2000 json-bbs-plus raspberry pi jwt legacy jwt-legacy mobile 1000 jwt-legacy raspberry pi 0 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

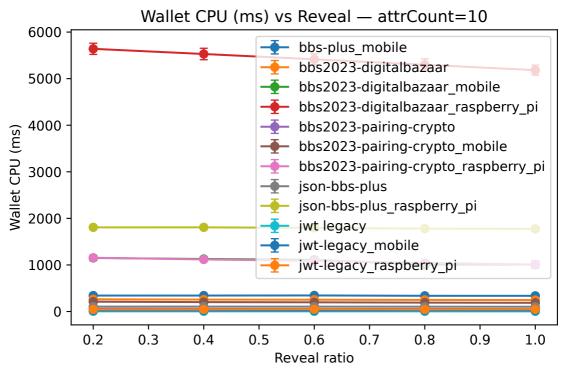
Reveal ratio

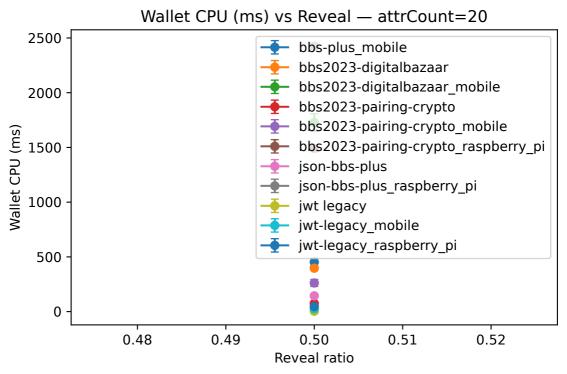
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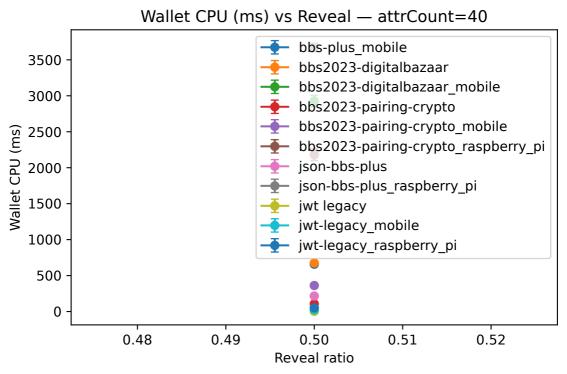


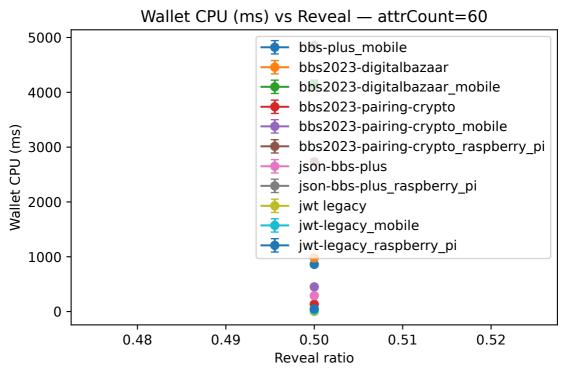
Wallet CPU (ms) vs Reveal — attrCount=8 bbs-plus mobile 5000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile 4000 bbs2023-digitalbazaar raspberry pi bbs2023-pairing-crypto bbs2023-pairing-crypto mobile 3000 bbs2023-pairing-crypto raspberry pi ison-bbs-plus 2000 json-bbs-plus raspberry pi jwt legacy jwt-legacy mobile 1000 jwt-legacy raspberry pi 0 0.2 0.3 0.4 0.5 0.6 0.8 0.9 1.0 Reveal ratio

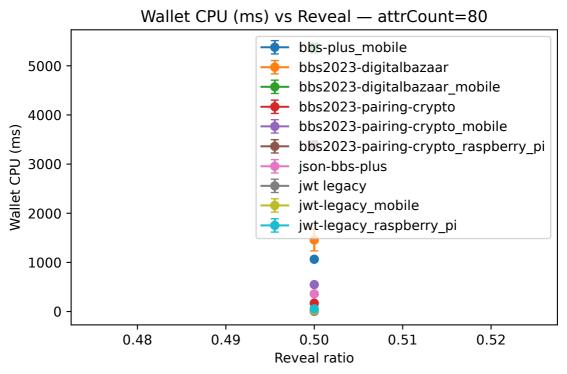


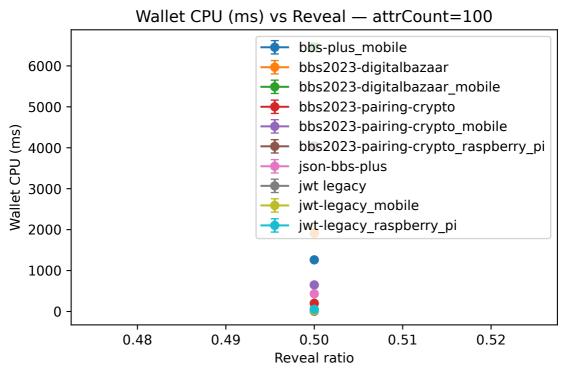




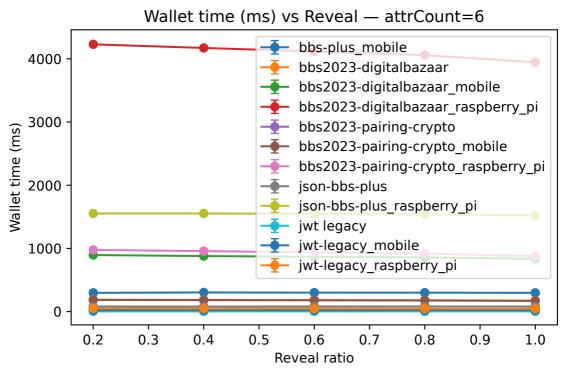


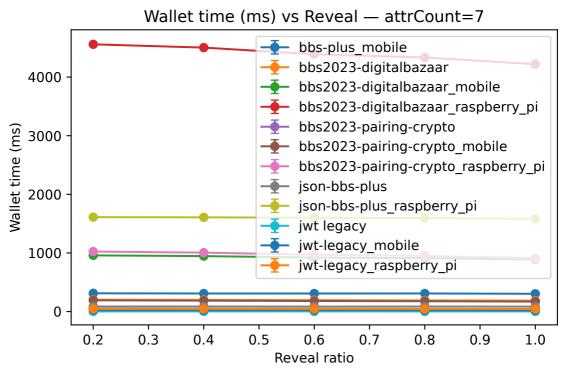


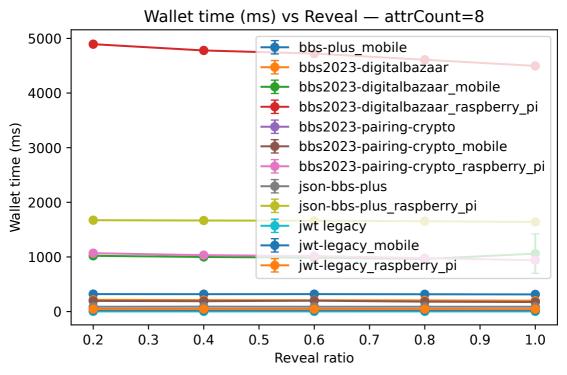


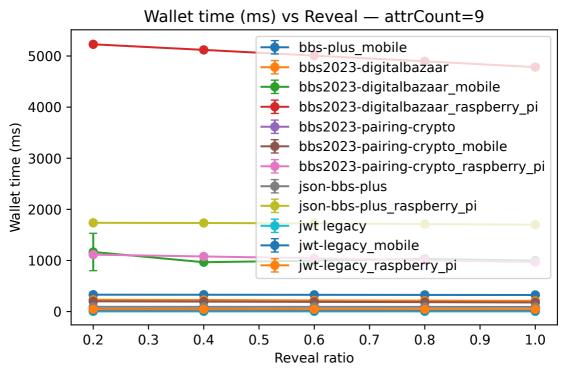


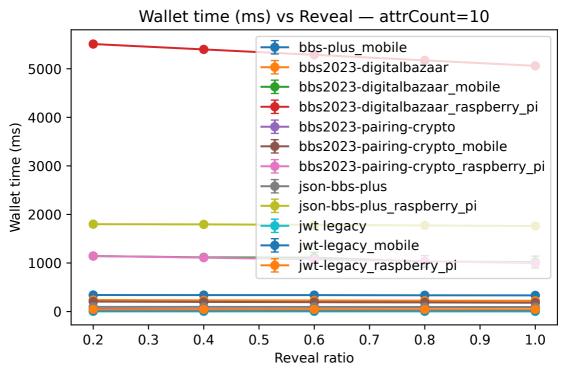
Wallet time (ms) vs Reveal — attrCount=5 bbs-plus mobile 4000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile bbs2023-digitalbazaar raspberry pi 3000 bbs2023-pairing-crypto time (ms) bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 2000 ison-bbs-plus Wallet json-bbs-plus raspberry pi jwt legacy jwt-legacy mobile 1000 jwt-legacy raspberry pi 0 0.2 0.3 0.4 0.6 0.8 0.9 1.0 Reveal ratio

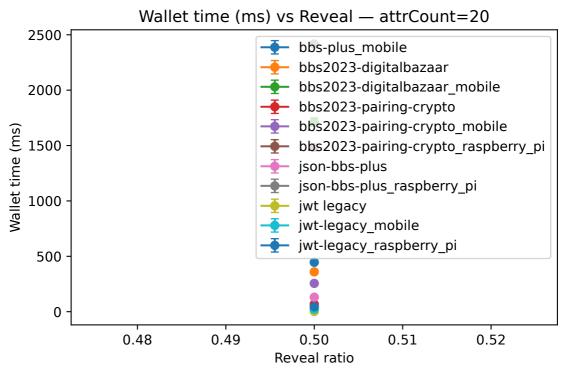


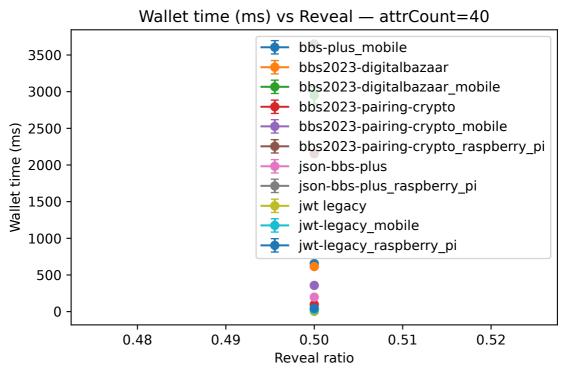


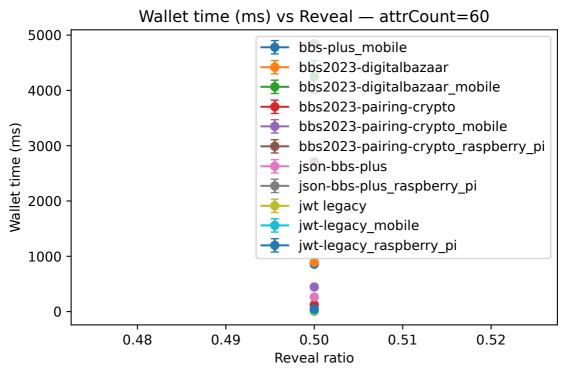


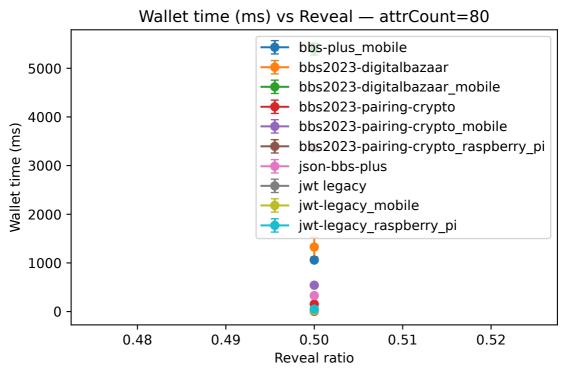


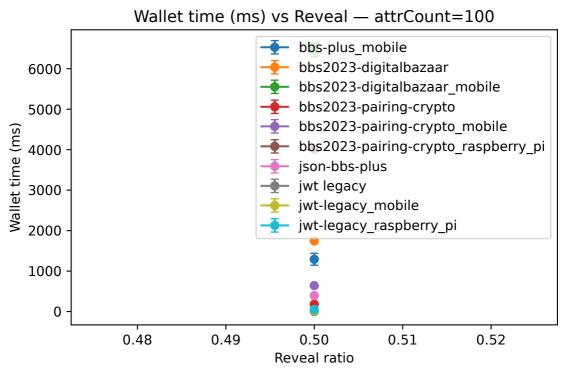






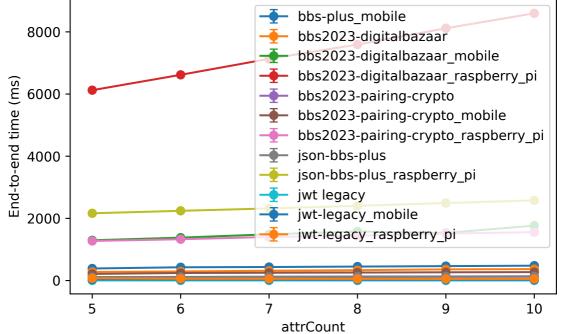






End-to-end time (ms) vs AttrCount — reveal=0.20 bbs-plus mobile 8000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile bbs2023-digitalbazaar raspberry pi 6000 bbs2023-pairing-crypto bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi ison-bbs-plus 4000 json-bbs-plus raspberry pi jwt legacy jwt-legacy mobile 2000 jwt-legacy raspberry pi 0

End-to-end time (ms) vs AttrCount — reveal=0.40



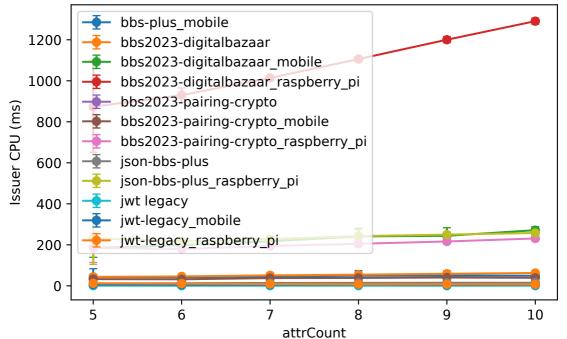
End-to-end time (ms) vs AttrCount — reveal=0.50 bbs-plus mobile 10000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile bbs2023-pairing-crypto 8000 time (ms) bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 6000 ison-bbs-plus End-to-end json-bbs-plus raspberry pi jwt legacy 4000 jwt-legacy mobile jwt-legacy raspberry pi 2000 0 20 30 40 50 60 70 80 90 100

End-to-end time (ms) vs AttrCount — reveal=0.60 bbs-plus mobile 8000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile bbs2023-digitalbazaar raspberry pi time (ms) 6000 bbs2023-pairing-crypto bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 4000 ison-bbs-plus json-bbs-plus raspberry pi jwt legacy jwt-legacy mobile 2000 jwt-legacy raspberry pi 0

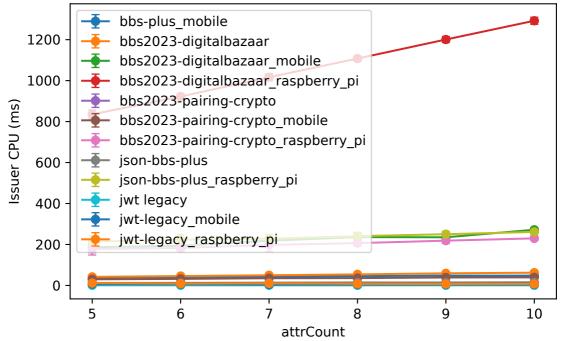
End-to-end time (ms) vs AttrCount — reveal=0.80 bbs-plus mobile 8000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile bbs2023-digitalbazaar raspberry pi time (ms) 6000 bbs2023-pairing-crypto bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 4000 ison-bbs-plus json-bbs-plus raspberry pi jwt legacy jwt-legacy mobile 2000 jwt-legacy raspberry pi 0

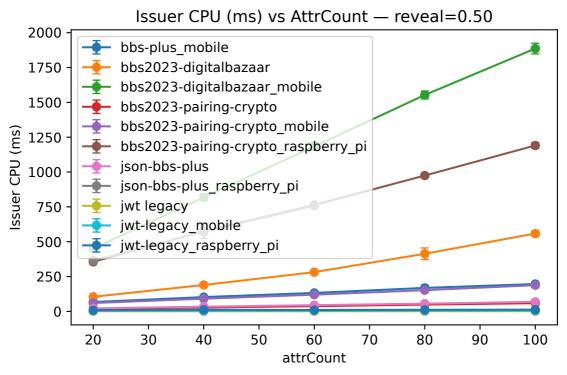
End-to-end time (ms) vs AttrCount — reveal=1.00 bbs-plus mobile 8000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile bbs2023-digitalbazaar raspberry pi time (ms) 6000 bbs2023-pairing-crypto bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 4000 ison-bbs-plus json-bbs-plus raspberry pi jwt legacy jwt-legacy mobile 2000 jwt-legacy raspberry pi 0

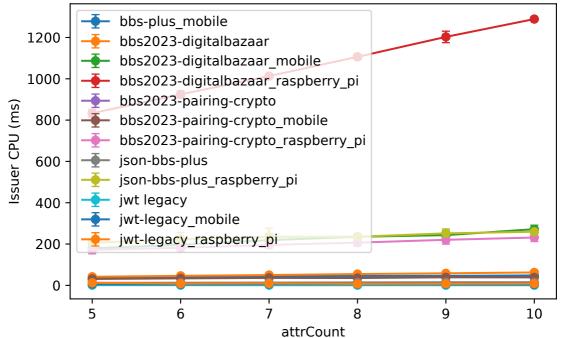
Issuer CPU (ms) vs AttrCount — reveal=0.20

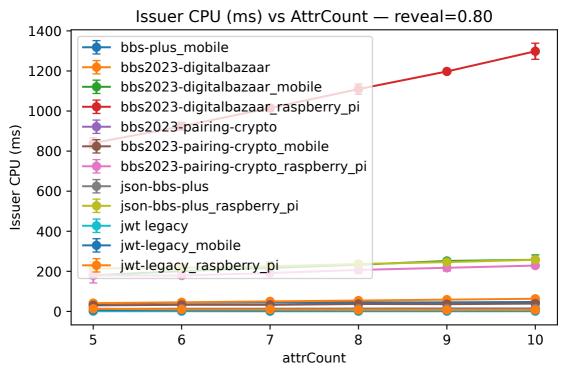


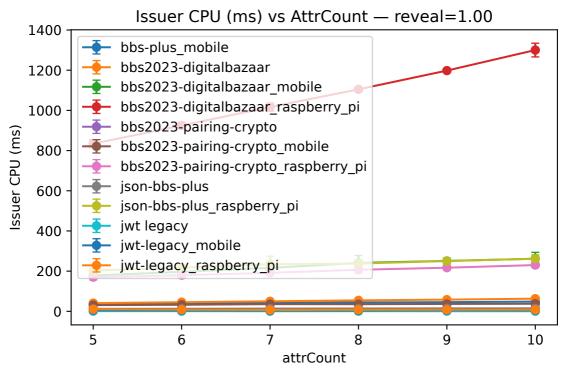
Issuer CPU (ms) vs AttrCount — reveal=0.40

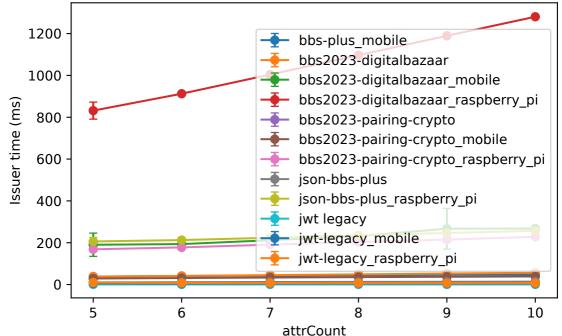


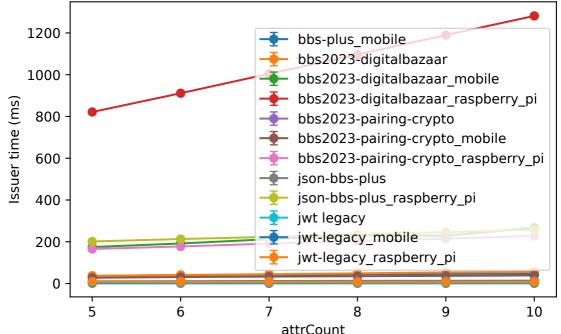


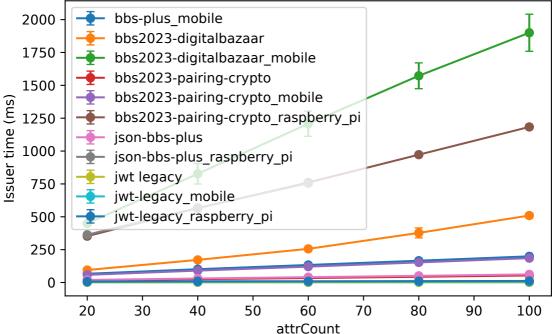


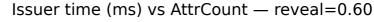


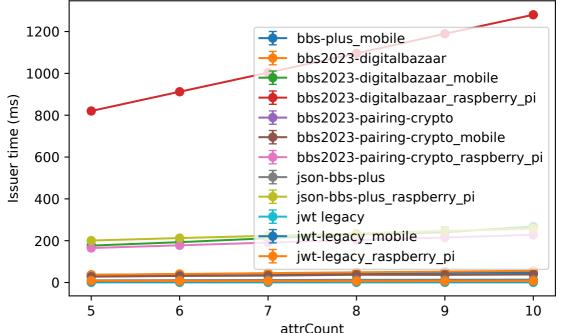


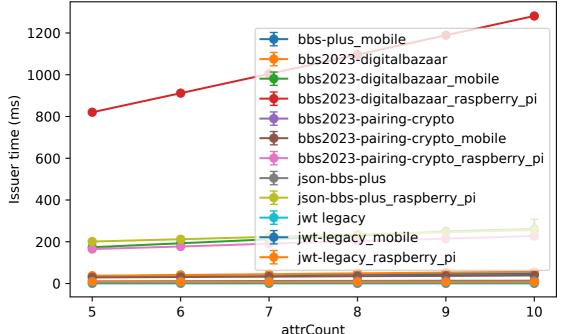


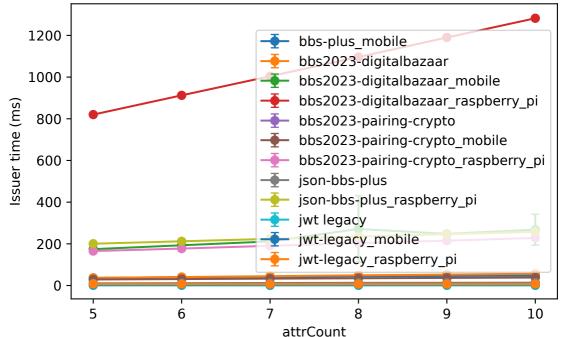












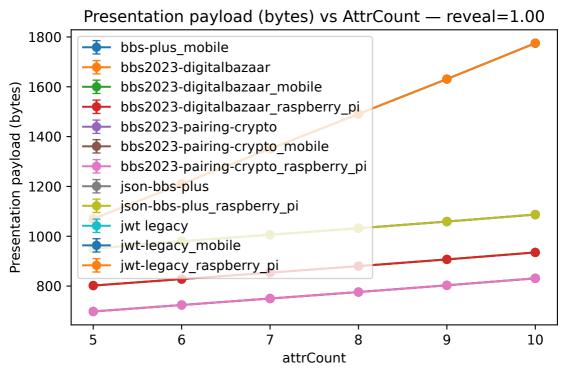
Presentation payload (bytes) vs AttrCount — reveal=0.20 bbs-plus mobile 1200 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile bbs2023-digitalbazaar raspberry pi 1100 bbs2023-pairing-crypto bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 1000 ison-bbs-plus Presentation json-bbs-plus raspberry pi 900 jwt legacy wt-legacy mobile jwt-legacy raspberry pi 800 10 attrCount

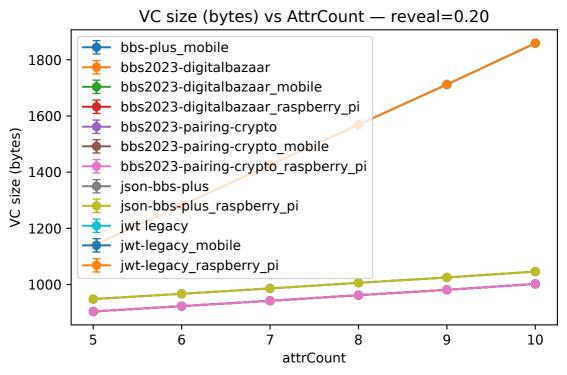
Presentation payload (bytes) vs AttrCount — reveal=0.40 1300 bbs-plus mobile bbs2023-digitalbazaar bbs2023-digitalbazaar mobile 1200 bbs2023-digitalbazaar raspberry pi bbs2023-pairing-crypto Presentation payload 1100 bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi ison-bbs-plus 1000 json-bbs-plus raspberry pi jwt legacy 900 jwt-legacy mobile jwt-legacy raspberry pi 800 10 attrCount

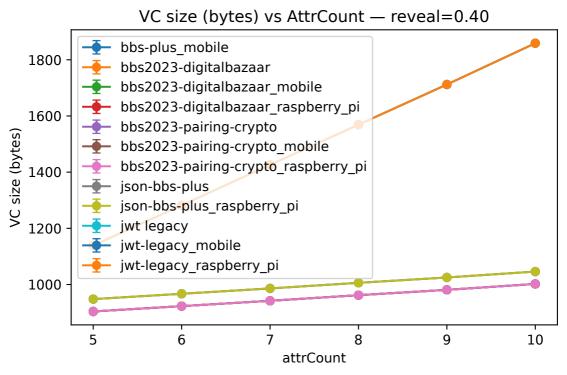
Presentation payload (bytes) vs AttrCount — reveal=0.50 bbs-plus mobile 10000 bbs2023-digitalbazaar bbs2023-digitalbazaar\_mobile bbs2023-pairing-crypto 8000 bbs2023-pairing-crypto mobile Presentation payload bbs2023-pairing-crypto raspberry pi ison-bbs-plus 6000 json-bbs-plus raspberry pi jwt legacy jwt-legacy mobile 4000 jwt-legacy raspberry pi 2000 20 30 40 50 60 70 80 90 100 attrCount

Presentation payload (bytes) vs AttrCount — reveal=0.60 bbs-plus mobile 1400 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile 1300 bbs2023-digitalbazaar raspberry pi bbs2023-pairing-crypto 1200 bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 1100 ison-bbs-plus Presentation json-bbs-plus raspberry pi 1000 jwt legacy jwt-legacy mobile 900 jwt-legacy raspberry pi 800 700 10 attrCount

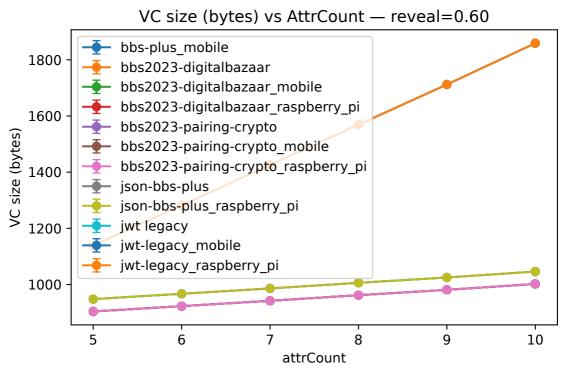
Presentation payload (bytes) vs AttrCount — reveal=0.80 1600 bbs-plus mobile bbs2023-digitalbazaar bbs2023-digitalbazaar mobile 1400 bbs2023-digitalbazaar raspberry pi bbs2023-pairing-crypto payload bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 1200 ison-bbs-plus json-bbs-plus raspberry pi 1000 iwt legacy jwt-legacy mobile jwt-legacy raspberry pi 800 10 attrCount

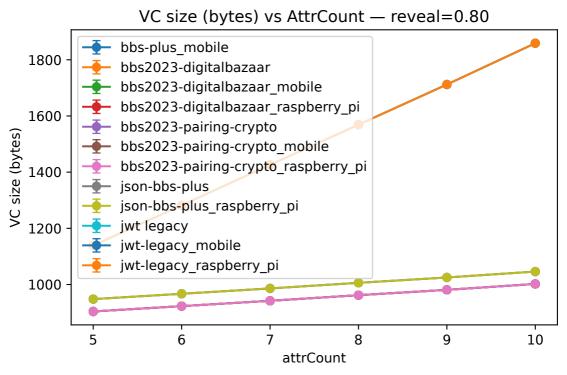


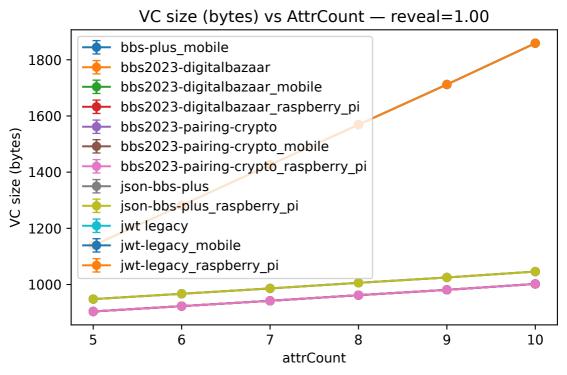


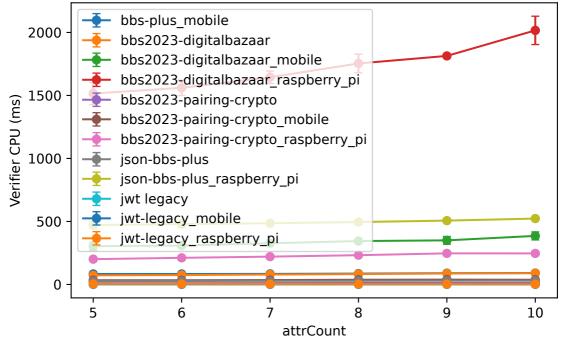


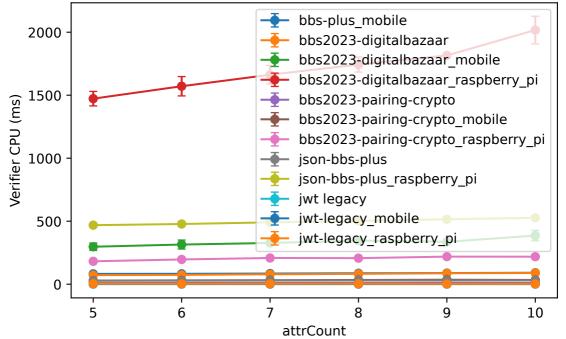
VC size (bytes) vs AttrCount — reveal=0.50 bbs-plus mobile 14000 bbs2023-digitalbazaar bbs2023-digitalbazaar mobile 12000 bbs2023-pairing-crypto bbs2023-pairing-crypto mobile size (bytes) 10000 bbs2023-pairing-crypto raspberry pi ison-bbs-plus 8000 json-bbs-plus raspberry pi jwt legacy 6000 jwt-legacy mobile jwt-legacy raspberry pi 4000 2000 20 30 40 50 60 70 80 90 100 attrCount

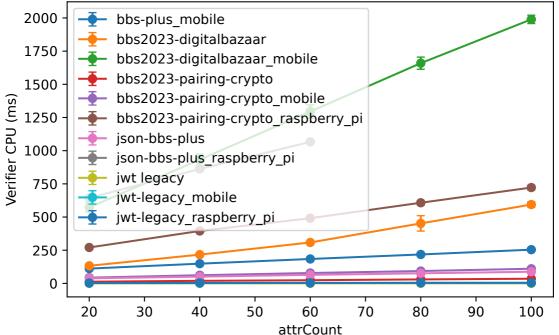


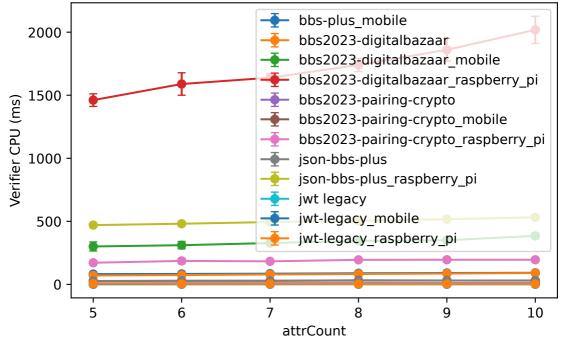


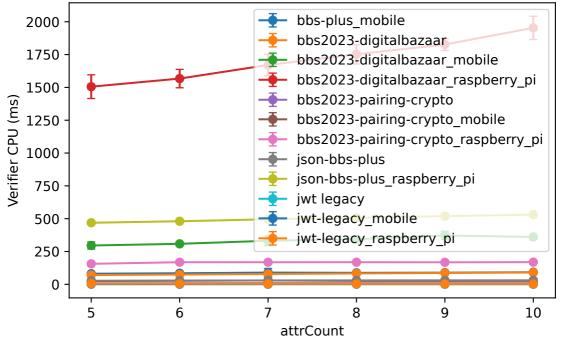


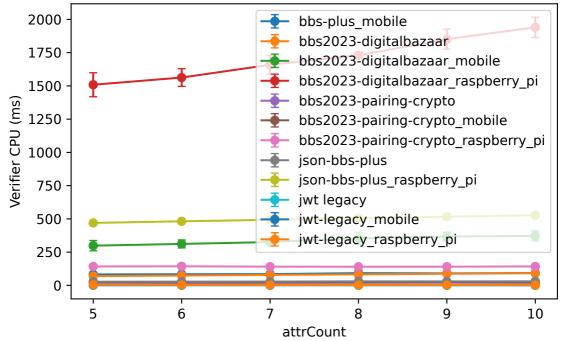


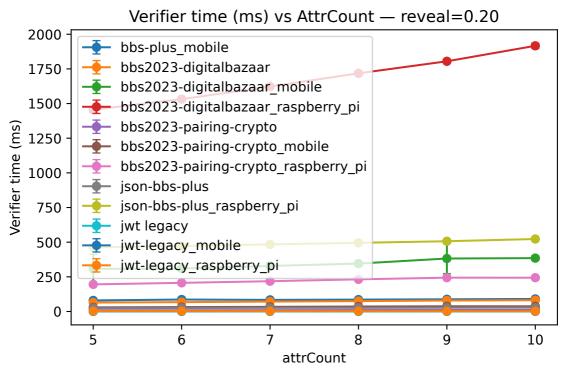












Verifier time (ms) vs AttrCount — reveal=0.40 2000 bbs-plus mobile bbs2023-digitalbazaar 1750 bbs2023-digitalbazaar mobile 1500 bbs2023-digitalbazaar raspberry pi bbs2023-pairing-crypto 1250 bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 1000 ison-bbs-plus json-bbs-plus raspberry pi 750 jwt legacy 500 jwt-legacy mobile jwt-legacy raspberry pi 250 0 10 attrCount

Verifier time (ms) vs AttrCount — reveal=0.50 2000 bbs-plus mobile bbs2023-digitalbazaar 1750 bbs2023-digitalbazaar mobile bbs2023-pairing-crypto 1500 bbs2023-pairing-crypto mobile 1250 bbs2023-pairing-crypto raspberry pi Verifier time ison-bbs-plus 1000 json-bbs-plus\_raspberry pi jwt legacy 750 jwt-legacy mobile 500 jwt-legacy raspberry pi 250 0 -20 30 40 50 60 70 80 90 100 attrCount

Verifier time (ms) vs AttrCount — reveal=0.60 2000 bbs-plus mobile bbs2023-digitalbazaar 1750 bbs2023-digitalbazaar mobile 1500 bbs2023-digitalbazaar raspberry pi bbs2023-pairing-crypto 1250 bbs2023-pairing-crypto mobile bbs2023-pairing-crypto raspberry pi 1000 ison-bbs-plus json-bbs-plus raspberry pi 750 jwt legacy 500 jwt-legacy mobile jwt-legacy raspberry pi 250 0 10

attrCount

