

Composite Attesters (a taxonomy)

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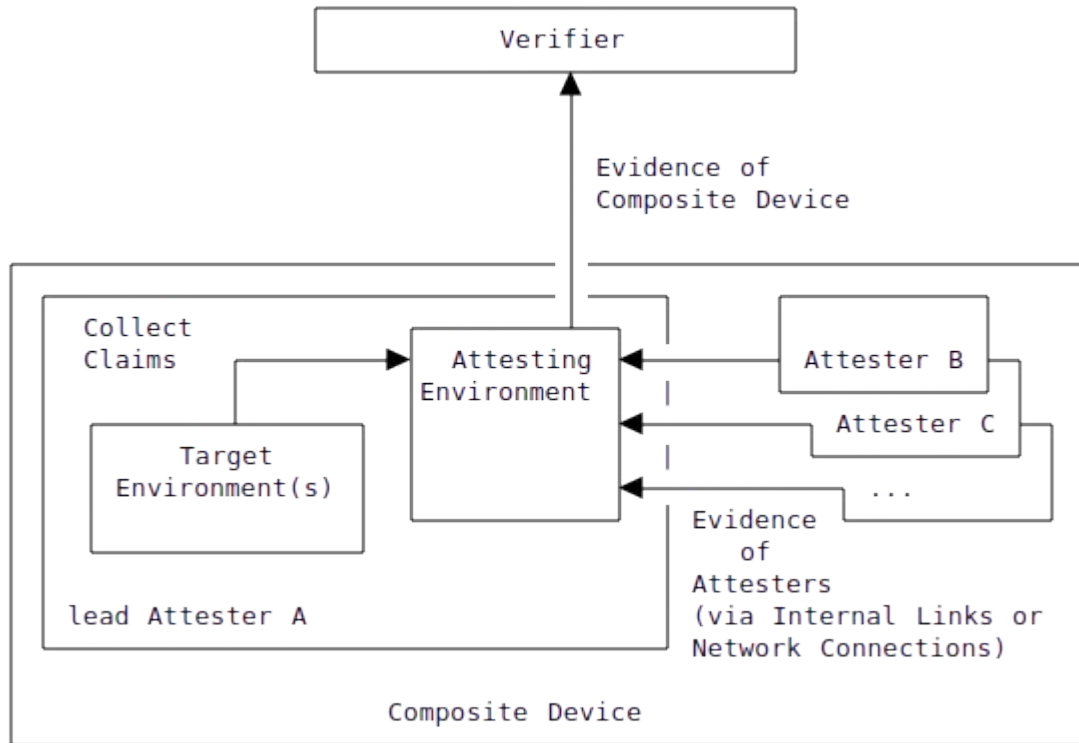


Purpose of this document

RFC9334 section 3.3, Figure 4 defined Composite Attester.

This diagram is accurate, but does not capture the emergent variety of different ways to compose things. This has led to difficulty in communicating.

This document establishes a list of terms and a mapping to real-world industry situations.



Seven Classes ... so far

- We are not strongly attached to the word “class”
- The classes are numbered/lettered, with bigger numbers being more complex, but there is also not a strong attachment
- Quite likely that there are new, unique classes that are missing
- There is some overlap between some classes, but also some subtle distinctions
- All classes are pluggable, and any level could be composed of composites
 - Some turtles, but there is some bottom turtle
- Class 0 Composite Attester
- Class 1 Composite Attester
- Class 2 Composite/Hybrid Attester
- Class 3B Composite Background-Check Attester
- Class 3P Composite Passport-Model Attester
- Class 4 Dual Composite Attester
- Class 5 Mixed Composite Attester

Next slides have diagrams for each of these.

Will stop for very short clarification questions.

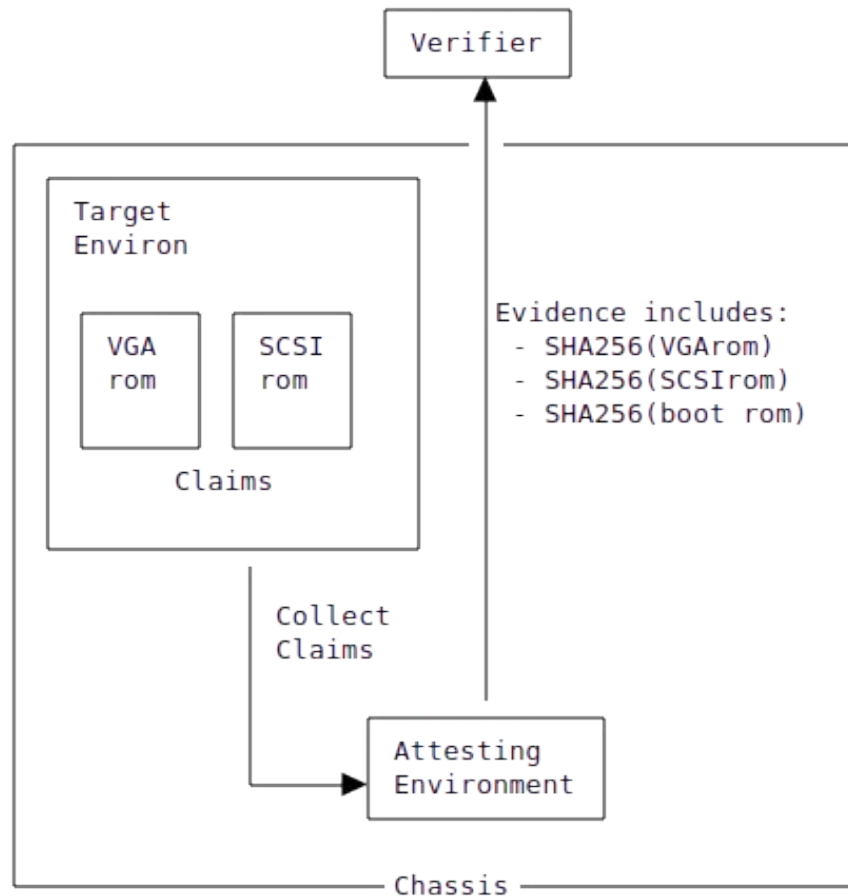
Save discussion for Slide 11/12.



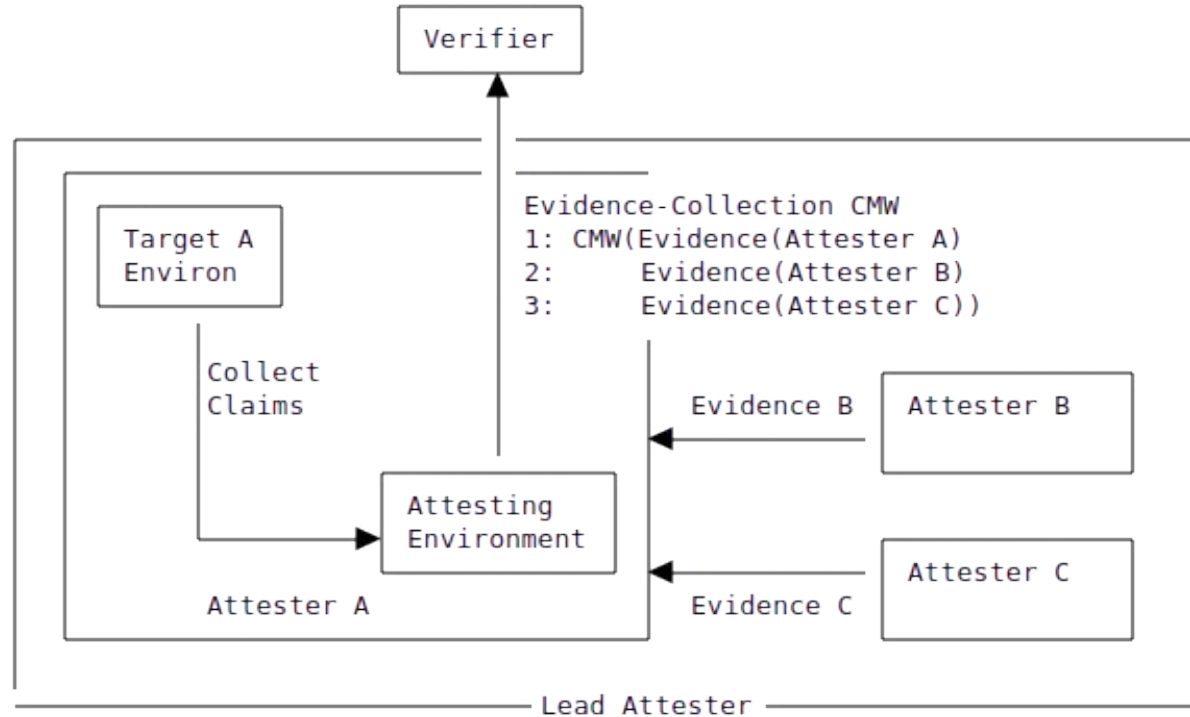
Class 0 Composite Attester

Many components, but not really a composite at all.

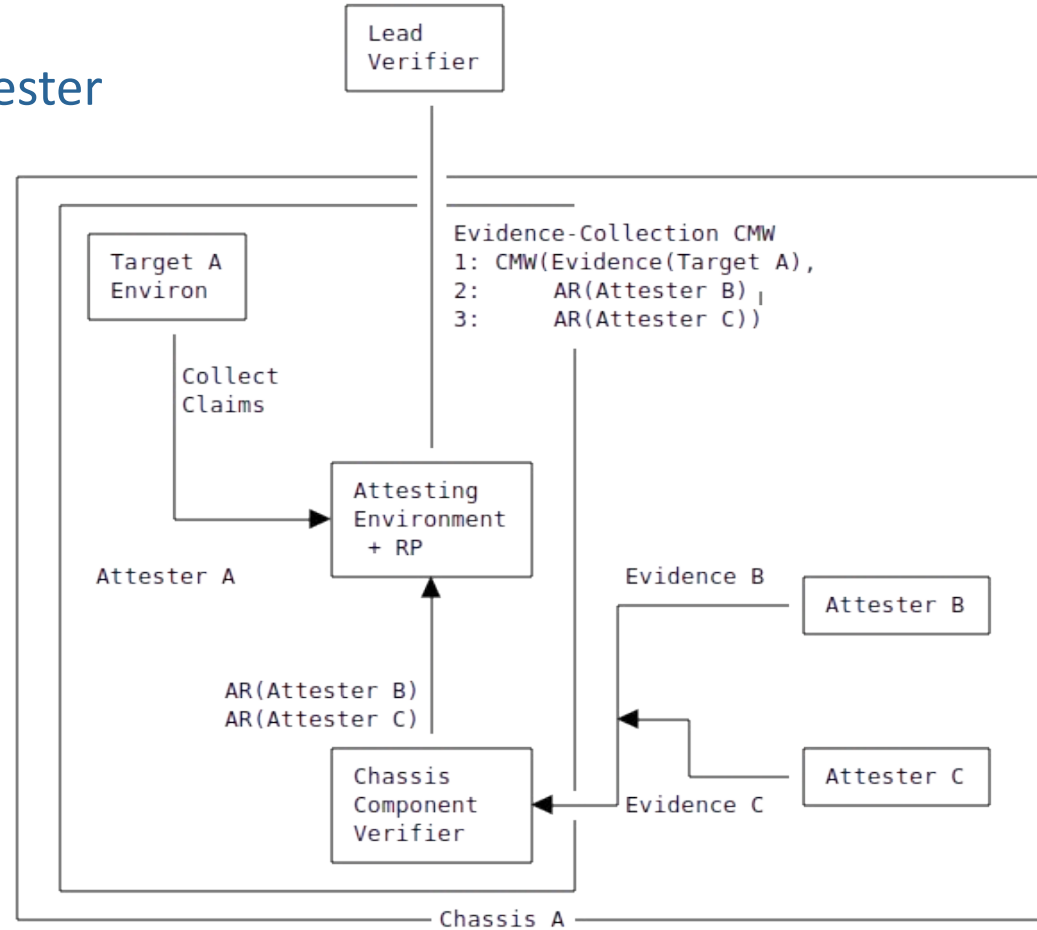
Think 286/386 ISA/MCA, PCI-33: plug peripherals have ROMs that change the behaviour of CPU. But do **not** have roots of trust. Swapping a Cirrus Logic SVGA for a Trident SVGA would change PCRs, so treat it as a composite to simplify combinatorics.



Class 1 Composite Attester

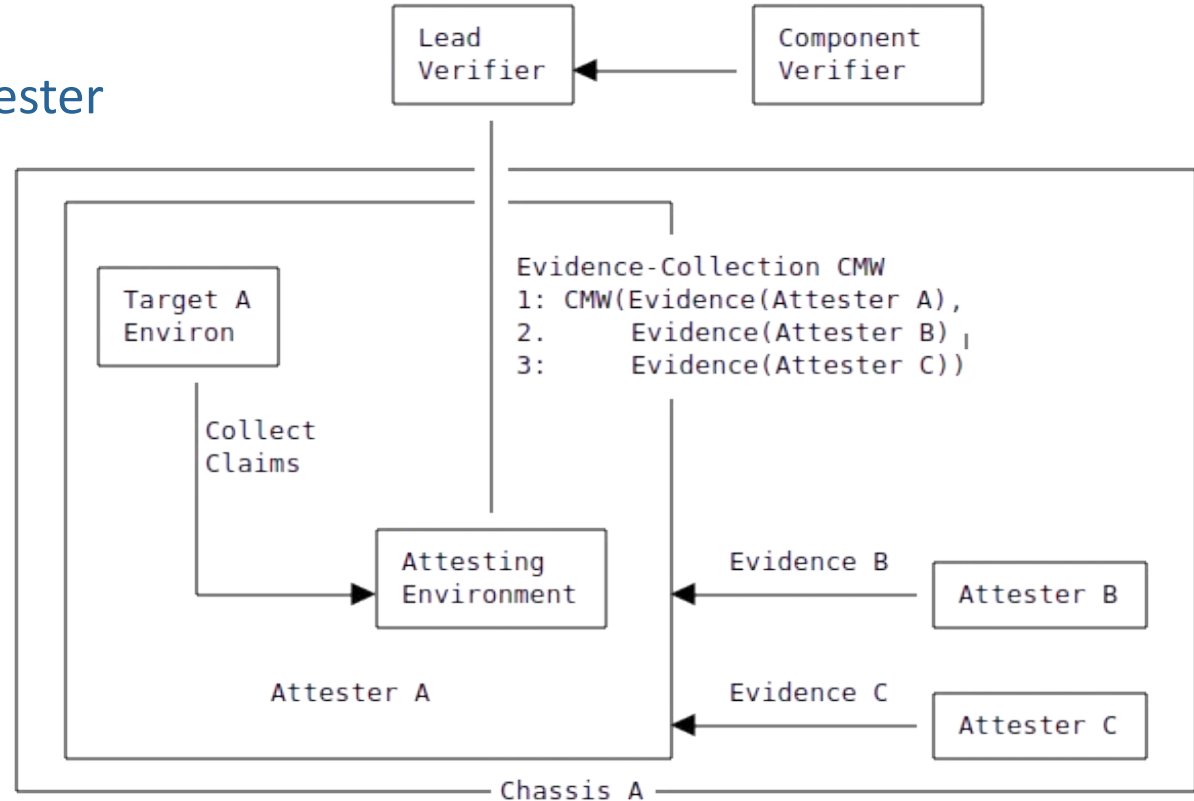


Class 2 Composite/Hybrid Attester



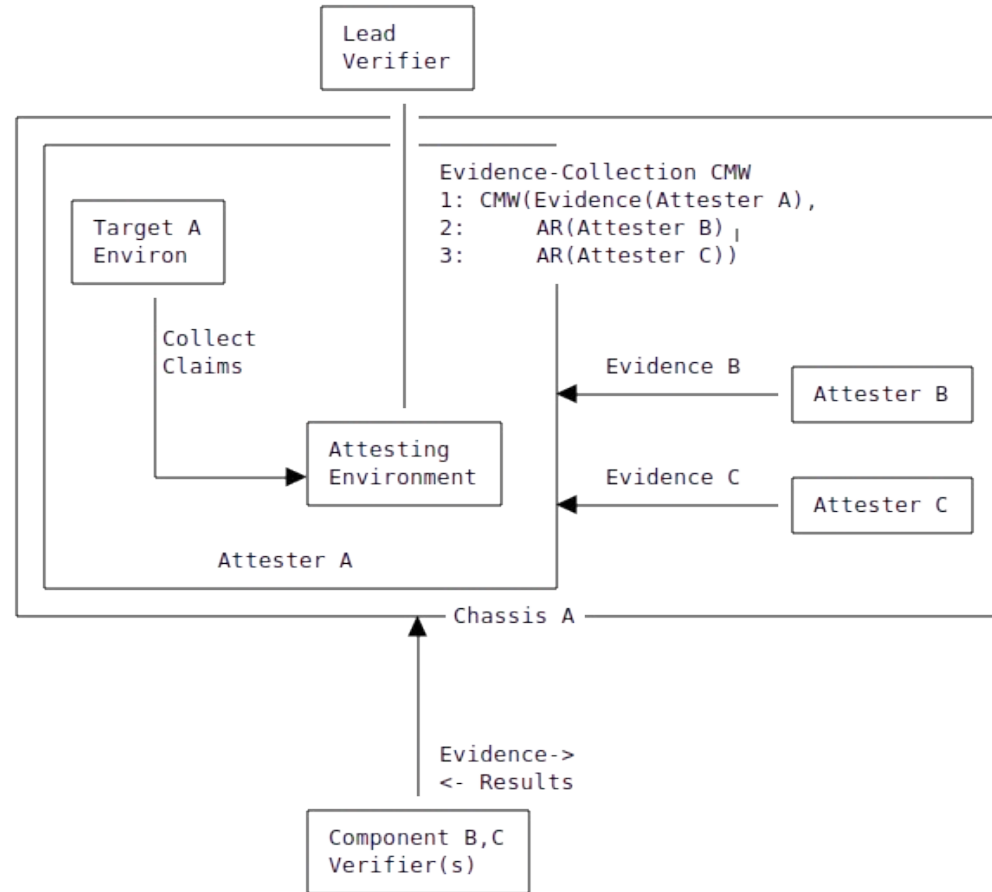
Class 3B Composite

Background-Check Attester

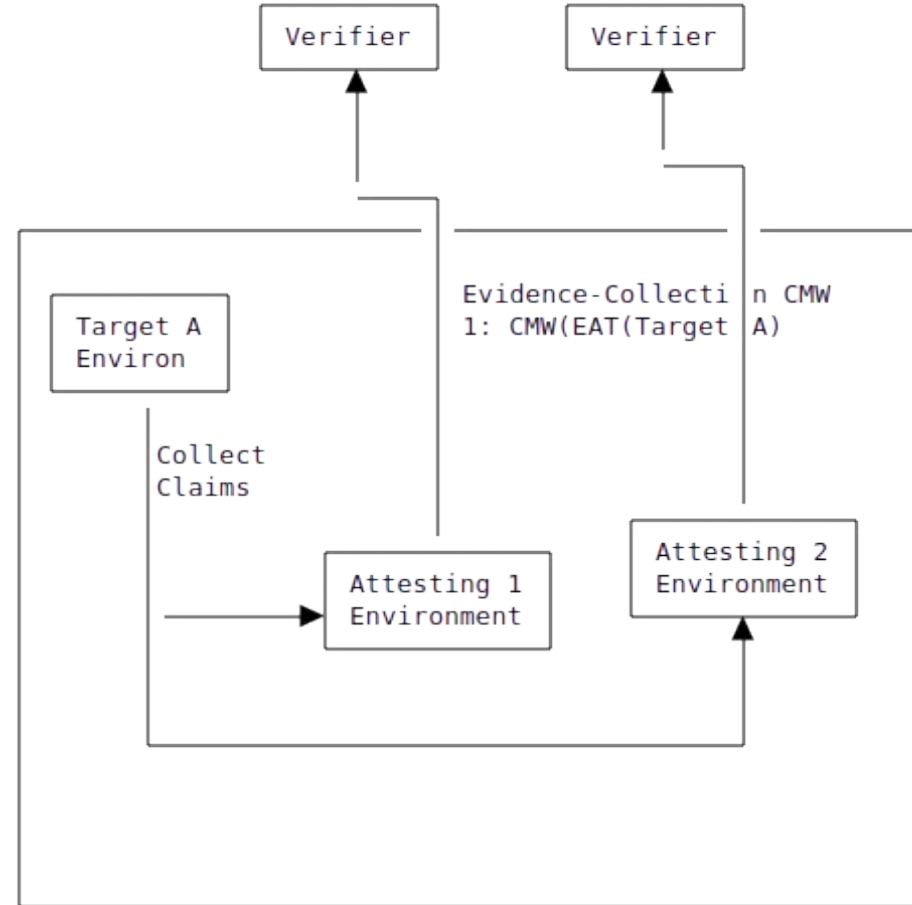


Class 3P Composite

Passport-Model Attester



Class 4 Dual Composite Attester

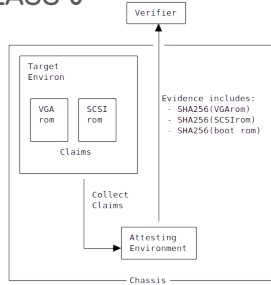


Class 5 Mixed Composite Attester

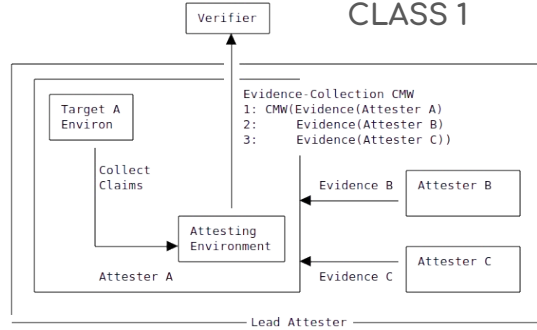
No Diagram Yet

All Composites -- MIC Time

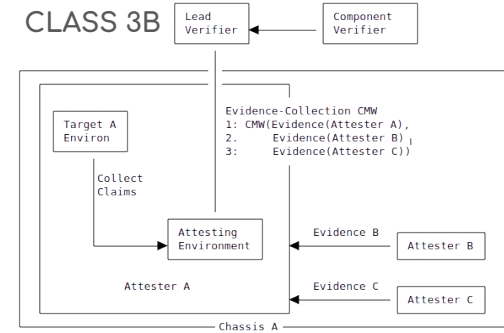
CLASS 0



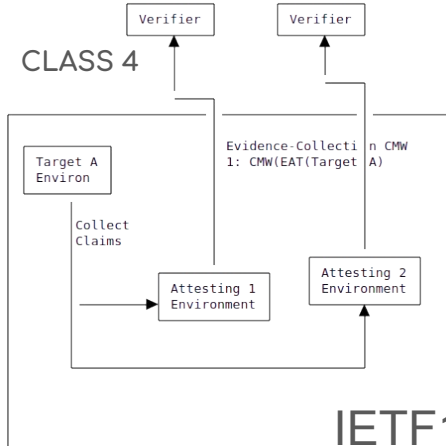
CLASS 1



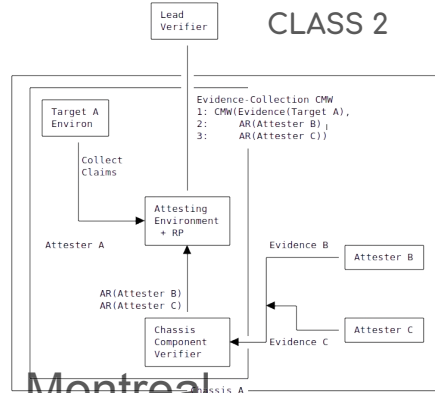
CLASS 3B



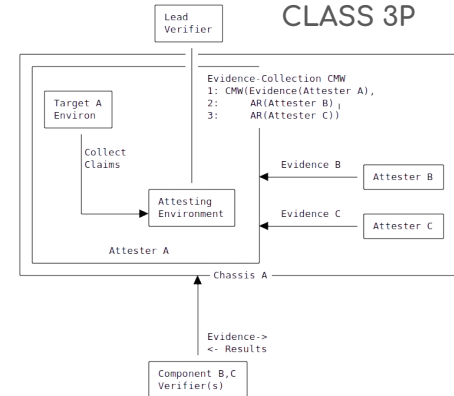
CLASS 4



CLASS 2



CLASS 3P



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All Composites -- by Attesting Environment/Verifier Arc

