



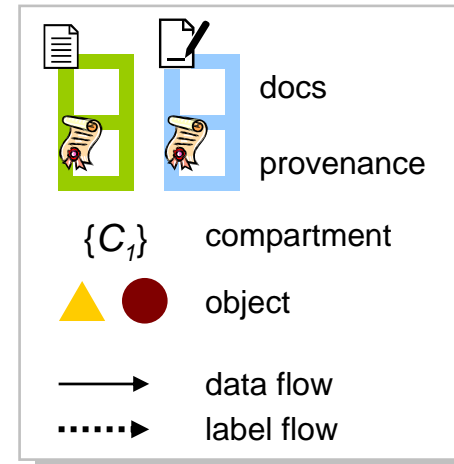
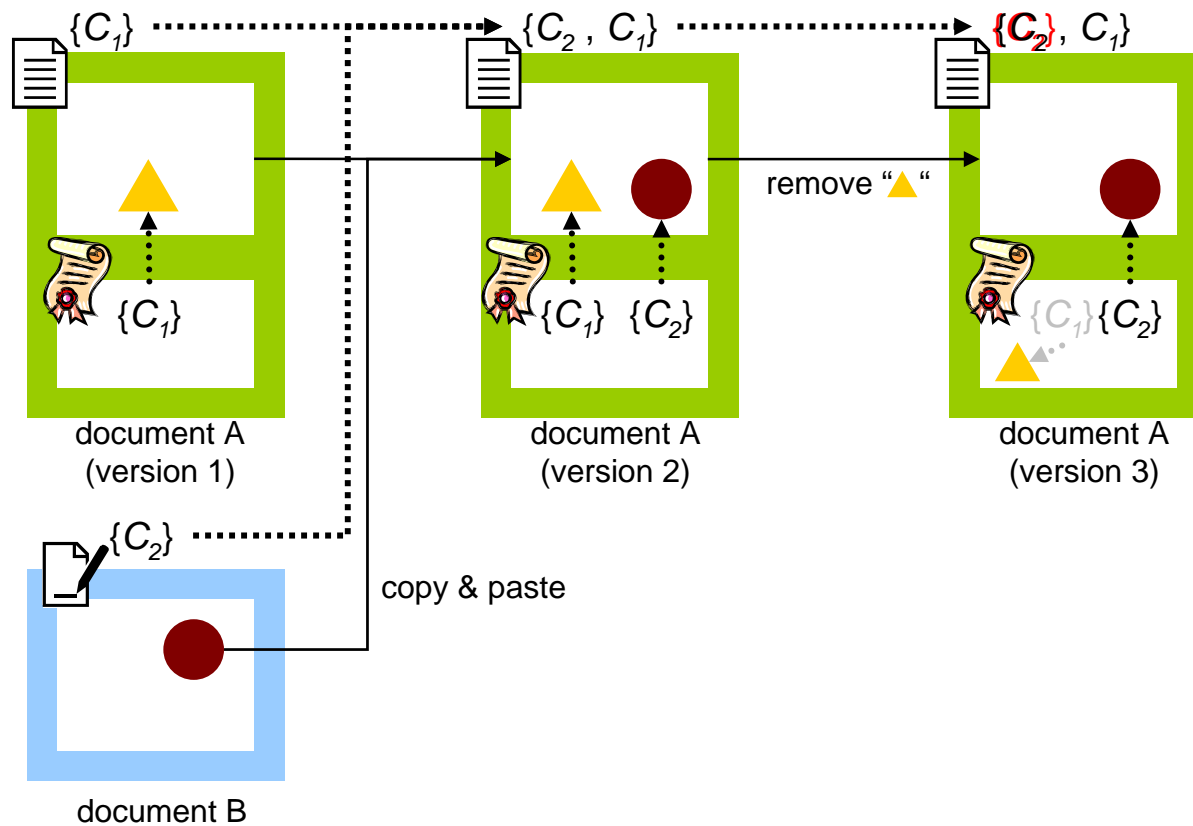
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# Semantic Fine-grained Data Provenance Tracking

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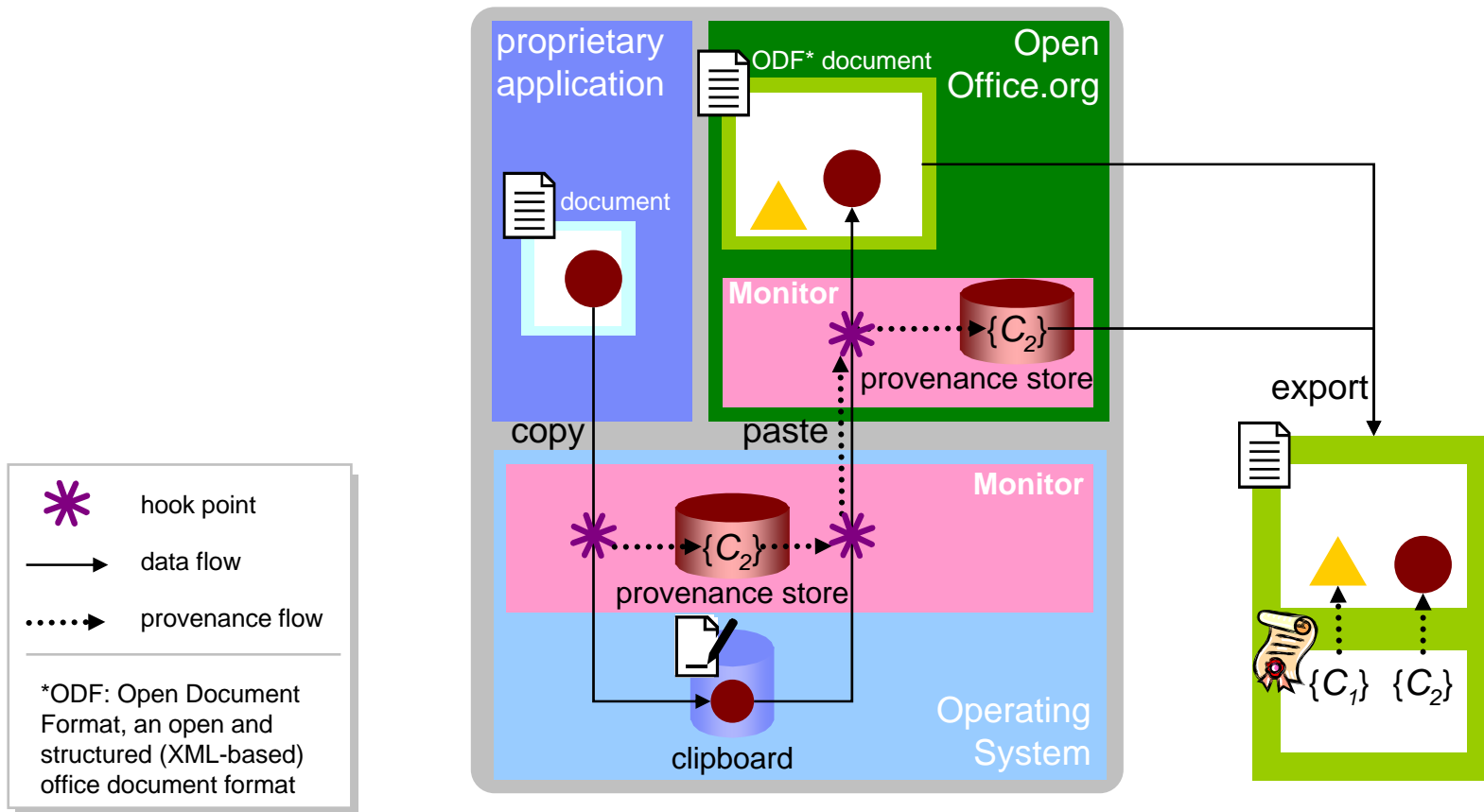
# Fine-grained Sticky Provenance for Enterprise Documents

- Label to objects, and labels to their containers (files) according to the object labels
- Track provenance (modifiers, changes, etc.) of contents
- Attach provenance to the container itself (sticky provenance)



## Provenance monitors in multiple layers

- Use multiple provenance monitors
  - fine and wide provenance can be tracked
  - provenance monitors run collaboratively



thank you