

## Pulp - Pulp3\_Plugin\_Brainstorming - # 7

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Content Unit Creator - Downloads and creates objects

- Process content units in slices to limit the number of in-memory objects
- Determine which content units are already present in Pulp
- For immediate download policy, determine which artifacts in a slice are already present in Pulp.
- For immediate download policy, download all artifacts for each content unit.
- For immediate download policy, save new Content, Content Artifacts, Deferred Artifacts, and Artifacts to the db after downloading all artifacts.
- For deferred download policy, save new Content, Content Artifacts, and Deferred Artifacts to the database.
- Handle race conditions for db around writes to the database.
- Transactional support around unit creation to ensure always creating a complete content unit or none

open questions: should this associate each unit as its made?

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Content Unit Downloader - Parallelized downloads, but it emits a content unit only when all files are downloaded

- manages the async loop for you
  - abstracts the collecting of downloads for a given content unit
  - driven by a simple loop
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Concurrent Downloader - Downloads any number of artifacts in parallel

- provides digest and size validation
  - yields a file that is written to a temp area and all digests which were computed during download
  - you provide the async loop
  - constrains the number of connections
  - share resources such as sessions, connection pools and auth tokens
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Synchronous Downloader - download a single file synchronously

- blocking call so one download at a time
  - provides digest and size validation
  - yields a file that is written to a temp area and all digests which were computed during download
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