

Soil and Pharo

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Sources/Changes

- Every compiled method has a pointer to `.sources/.changes`
- Stored in the last 5 bytecodes
- Every entry is an offset in the files

Need: Not in Image

- .sources is 40MB
- Would be a large chunk of the image
 - (But: Perm Space changes the picture)

Need: History

- Having a per-accept history is nice
 - Does not depend on commits to git

Need: Transaction Log

- Pharo crashes and you have to save the image or store the code in git
- All accepted methods / class comments / class definitions are in the .changes
- Replay is possible

Current problems

- Can not be shared by images, but can not be locked either
- Not thread safe
- Very simple caching
- **SLOW!**

Soil

- Has transaction log
- Supports accessing old versions
- We could just store a Soil Object Pointer per CompiledMethod
- Thread safe

Epicea

- Higher level Code Change model
- Stored in text files
- Slow !

Indexing

- We do not use indexing
 - Senders
 - Implementors
 - Full text search

Resources

- We store some data as Base64 Encoded strings
- Even as method comments (!!)
- abuse the .sources/changes an object store...

Why not ...?

- store the whole history of the code ?
 - e.g find deprecation transforming methods
- store at the AST granularity?

Demos next ESUG!