

Versioned Polymorphism - A Brief Introduction

In Versioned Polymorphism (VP) all code and data elements have a specified version range assigned to them at compile and/or run time, thereby affording them intrinsic polymorphic properties and behaviors when coupled with version-aware runtimes. This deterministic versioning mechanism allows the shape and meaning of the data may be morphed - versioned polymorphism.

<u>Versioned Polymorphic Buffers (vpbuf)</u> is an MIT-licensed open-source project that prototypes this approach as a data interchange tool to persist structured data across languages, platforms, and networks. It is intended to assist in the construction of RMI/RPC, file formats, and other buffered data services that change over time. While this makes it similar to other tools (Thrift, Ion, Protocol Buffers, etc) it approaches the problem in an uncommon way, with versioning. Class-based polymorphism is also supported by the tool, to the extent supported by the underlying language and platform.

Please take a look - https://github.com/markraley/versioned-polymorphic-buffers - I am keenly interested in collaborating on non-profit and commercial applications. C++, python, and javascript are currently implemented.