

# Hierarchy Software Development Framework (h-dp-fwk) Project

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Hierarchy Software Development Framework provides a lightweight tool for building portable modular applications for performing automated data analysis tasks in a batch mode.

The history of design and development activities devoted to the project has begun in March 2005 and from the very beginning it was targeting the case of building experimental data processing applications for the CMD-3 experiment which was being commissioned at Budker Institute of Nuclear Physics (BINP, Novosibirsk, Russia). Its design addresses the generic case of modular data processing application operating within the well defined distributed computing environment.

The main features of the Framework are modularity, built-in message and data exchange mechanisms, XInclude and XML schema enabled XML configuration management tools, dedicated log management tools, internal debugging tools, both dynamic and static module chains support, internal DSO version and consistency checking, well defined API for developing specialized frameworks. It is supported on Scientific Linux 4 and 5 and planned to be ported to other platforms as well.

The project is provided with the comprehensive set of technical documentation and users' guides. The licensing schema for the source code, binaries and documentation implies that the product is free for non-commercial use.

Although the development phase is not over and many features are to be implemented yet the project is considered ready for public use and creating applications in various fields including development of events reconstruction software for small and moderate scale HEP experiments.

## Summary

Hierarchy Software Development Framework provides a lightweight tool for building portable modular applications for performing automated data analysis tasks in a batch mode. The main features of the Framework are modularity, built-in message and data exchange mechanisms, XInclude and XML schema enabled XML configuration management tools, dedicated log management tools, internal debugging tools, both dynamic and static module chains support, internal DSO version and consistency checking, well defined API for developing specialized frameworks. The project is considered ready for public use and creating applications in various fields including development of events reconstruction software for small and moderate scale HEP experiments.

## Presentation type (oral | poster)

oral

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