

# Main

Da Vinci Machine Project Wiki

The [Da Vinci Machine Project](#) is a set of modifications of the JVM to support implementations of non-Java languages at a quality level (performance, compactness) near that of Java. The project is a part of the [OpenJDK](#). Developers can write notes here.

In order to be able to edit pages in this wiki, please read the [blog post](#) explaining how to become an editor.

## Intentions and non-intentions

This wiki contains:

- Instructions and advice on [downloading and building](#) this project's code.
- Notes about the ongoing design and development of the various [subprojects](#).
- A place to document likely future work.
- Quick links to similar information in other places on the web.
  - <http://openjdk.java.net/projects/mlvm/> (Da Vinci Machine Project home)
  - <http://wikis.oracle.com/display/HotSpotInternals/Home> (HotSpot internals)

Look for non-technical content on the static project pages: <http://openjdk.java.net/projects/mlvm>

## Relation to JDK 7

As of 10/2010, JDK 7 includes method handles and invokedynamic, but not language support for invokedynamic.

- Released builds of this technology can be [found here](#).
- The source repositories are [with the rest of JDK7](#).  
For example some of the JDK code is [here](#) and some of the JVM code is [here](#).
- An advance copy of the javadoc (derived from the mlvm patch queue) is [posted here](#).
- [Here's an example](#) of how to run a warm-and-breathing test for method handles in JDK 7.

## Contents

- [Building](#)
  - [BootClassPath](#)
  - [Building on Windows](#)
- [JDK7TestExample](#)
- [MetaobjectProtocol](#)
  - [DynamicJava](#)
  - [Nomenclature](#)
- [PatchRepository](#)
- [Presentations](#) — Condensed notes on the Da Vinci Machine Project.
  - [PyCon 2009 VM Summit](#)
- [SubProjects](#)
  - [AnonymousClasses](#)
  - [CoroutineJSR](#)
  - [FastInterfaces](#)
  - [HotSwap](#)
  - [ImmediateWrappers](#)
  - [InterfaceInjection](#)
  - [InvokeDynamic](#)
  - [JavaLanguageSupport](#)
    - [InterfaceDynamic](#)
    - [ProjectCoinProposal](#)
    - [TemplatedConstructorExpressions](#)
  - [MethodHandles](#)
  - [NewArrays](#)
  - [StackContinuations](#)
    - [Coroutines](#)
    - [On-demand implementation](#)
  - [TailCalls](#)
    - [TailCalls GLS1998](#)
  - [TupleSignatures](#)

## Interesting tasks to do

- Document the process of pulling and building on various platforms.
  - [Building on Windows](#)
- List relevant RFEs and subprojects. Link or enumerate architectural issues.
- Extract links and info. from messages and blog postings, especially via [hotspot-dev@openjdk](mailto:hotspot-dev@openjdk).

## Who writes this wiki?

- We are using the [Community Write pattern](#).
- There is no public write access, except for leaving page comments. You must be registered and logged in to leave comments.
- Please do add page comments when a page should answer your question but doesn't. (That means, potentially on any page.)
- The most effective page comments will include links to relevant email discussion threads, e.g., on the [OpenJDK mlvm-dev list](#).
- Any member of the [OpenJDK Hotspot Group](#) or a related group should feel free to contribute.
- Committers, contributors, and users of the Da Vinci Machine Project code base are welcome to contribute.
- Write permissions are not automatic until and unless the DBs (Sun wiki vs. OpenJDK) get on speaking terms. If you think you should have write permission and don't ask jrose