

# LW1 Value Types Command-line Options

This page describes the command line for the experimental Java compiler, the Java launcher and HotSpot JVM for the support of L-World Value Types in the Valhalla project.

## L-World Value Types flags:

	Flag	Description
<b>hotspot</b>		
<b>REQUIRED</b>	<b>-XX:EnableValhalla</b>	Boolean value, default value is `false` If true enable support for L-World value types.
	-XX:ValueArrayFlatten	Boolean value, default value is `true` Flatten arrays of values, if possible
	-XX:ValueArrayElemMaxFlatSize	Integer value, default is -1 Max size for flattening an array of values, < 0 means no limit
	-XX:ValueArrayElemMaxFlatOps	Integer value, default is 4 Max number of embedded object references in value type to flatten in an array, < 0 means no limit
	-XX:BigValueTypeThreshold	size_t value in bytes, default is 4 * BytesPerLong Max value type size for interpreter buffering of local variable table entries
	-XX:ValueArrayAtomicAccess	Boolean value, default value is `false` Enable atomic access to values in an array, by treating value types as references.
	-XX:+PrintEliminateAllocations	Non-product builds: Print out when allocations are eliminated
	-XX:+PrintEscapeAnalysis	Non-product builds: Print results of escape analysis (e.g. if you believe boxing was not eliminated)
<b>java</b>		
<b>javac</b>		
	-XDallowGenericsOverValues	Allow generic parameters/bounds/witnesses. Default false
	-XDallowFlattenabilityModifiers	Allow source level field flattenability modifiers __Flattenable, _NotFlattened
	-XDallowValueBasedClasses	Leniency mode for value-based-class migration
	-XDallowEmptyValues	allow value classes with no instance fields (hotspot will currently disallow)