

# MavenId

## Gump and Maven IDs

### About the ID structures

Here, I will refer to an artifact as a single buildable entity - eg, a JAR.

In Maven, there are two identifiers for each artifact:

- group ID - this is a globally unique identifier for your product (eg velocity, gump or maven)
- artifact ID - this is an identifier unique within your group ID, for each artifact (eg velocity, velocity-utils)

In Gump, there are also two identifiers for each artifact:

- project ID - this is a globally unique identifier for the SCM checkout and build to execute
- JAR ID - for each artifact built by the project

There is also a module name, however this is not taken into consideration when identifying the artifact.

### Known Issues

There are two issues at present in matching these concepts:

1. the project ID naturally maps to artifact ID in maven, as Maven only generates one artifact per build descriptor. This is a mismatch losing the information in group ID from Maven and JAR ID from Gump 2. when artifact and project map one-to-one, they sometimes differ as they were created independently in Gump and Maven.

To solve (2), the potential solutions are just to rename the projects in Maven, or rename them in Gump. It makes sense to do this in gump as most of the metadata is centralised in gumps CVS, and the gump project will see projects and be able to assist projects to update. Neither is possible in Maven: users would need to be educated to update their project descriptors. This is still a problem that will be taken on later as part of the [ASF repository](#) project.

To solve (1), one of the following can be done:

- A policy in gump where project matches the definition of group ID. Maven projects would have to run a multiproject build, and each JAR listed with a JAR ID that matches artifact ID. While this requires no code changes, the problems with this are:
  - incompatible with some Maven builds
  - incompatible with existing gump descriptors
  - if a single JAR build fails, the whole project fails, potentially causing less of gump to execute
- Code changes to gump to match the Maven ID scheme. The only one of the above problems present in this solution is that gump descriptors will possibly need updating.

### Implementing the Changes in Gump

If this is done, this is a potential solution.

1. Change module to match the group ID definition, and project to match the artifact ID definition. 2. When a build generates multiple JARs, each will be allocated a new artifact ID, rather than a JAR ID. 3. dependencies will then depend on just an artifact Id.

### Mapping List

This section lists the known incompatibilities between Maven and Gump IDs, and can be used as a resource to map them within your own project. See the [Maven Gump Plugin](#) documentation for more information.

If you know of any other incompatibilities, please add them to this list.

Maven			Gump
Group ID	Artifact ID	Project ID	Jar ID
avalon-framework	avalon-framework	avalon-framework-api	
axis	axis	ws-axis	axis
bouncycastle	bcprov-jdk14	bcprov	
jaf	activation	jaf	
javamail	mail	javamail	
jaxrpc	jaxrpc-api	ws-axis	axis-jaxrpc
jetty	jetty	jetty4	
jstl	jstl	jakarta-taglibs-standard	
log4j	log4j	logging-log4j	

logkit	logkit	avalong-logkit	logkit
msv	isorelax	iso-relax	
msv	relaxngDatatype	relaxng	
obj	obj	db-obj	
oro	oro	jakarta-oro	
regexp	regexp	jakarta-regexp	
saaj	saaj-api	ws-axis	axis-saaj
servletapi	servletapi	jakarta-servletapi-5-servlet	
swt	swt	eclipse	swt
velocity	velocity	jakarta-velocity	
xerces	xerces	xml-xerces	
...	...	...	...