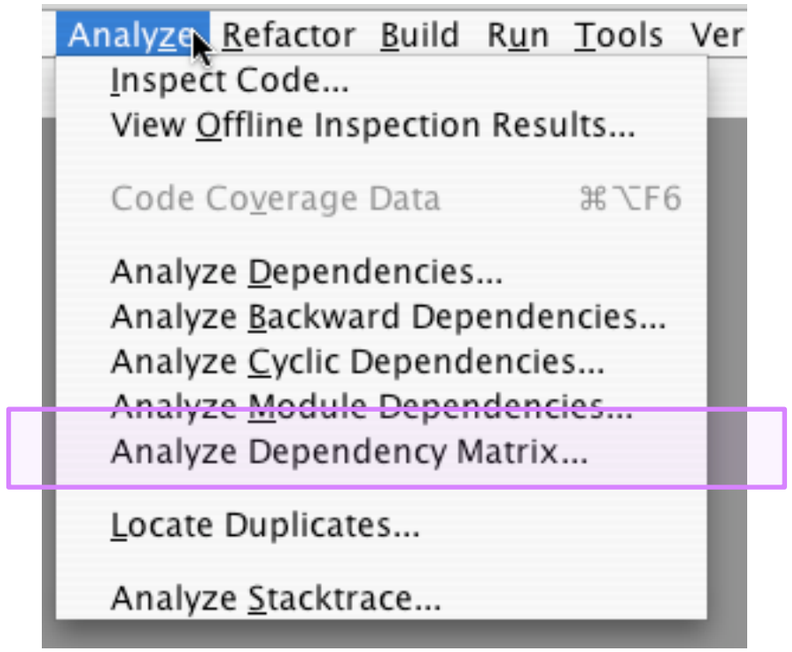
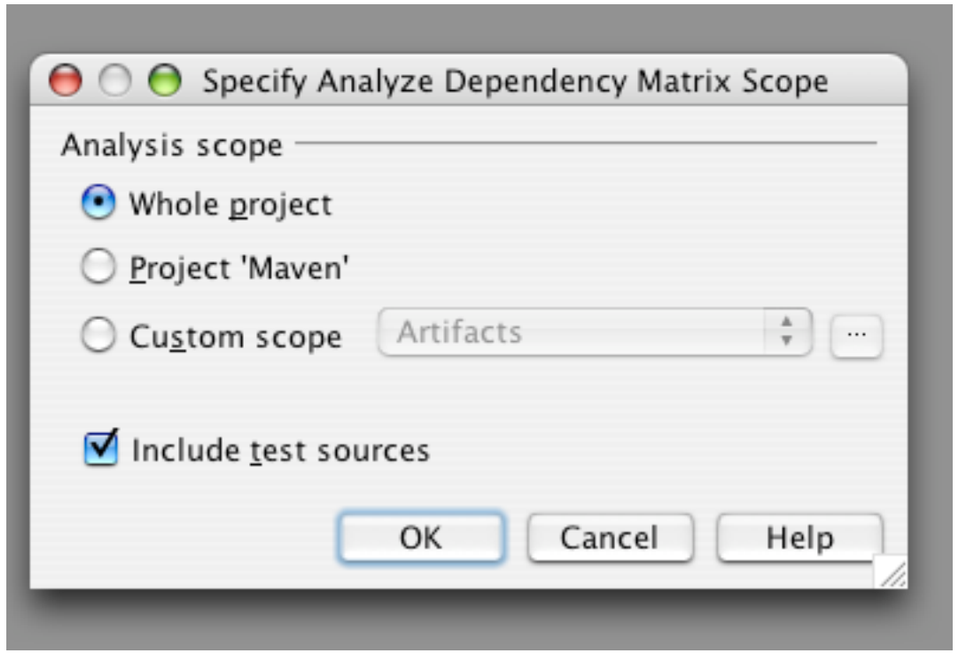
Invoking DSM





Row Headers

Program structure. Everything is collapsed now – showing modules

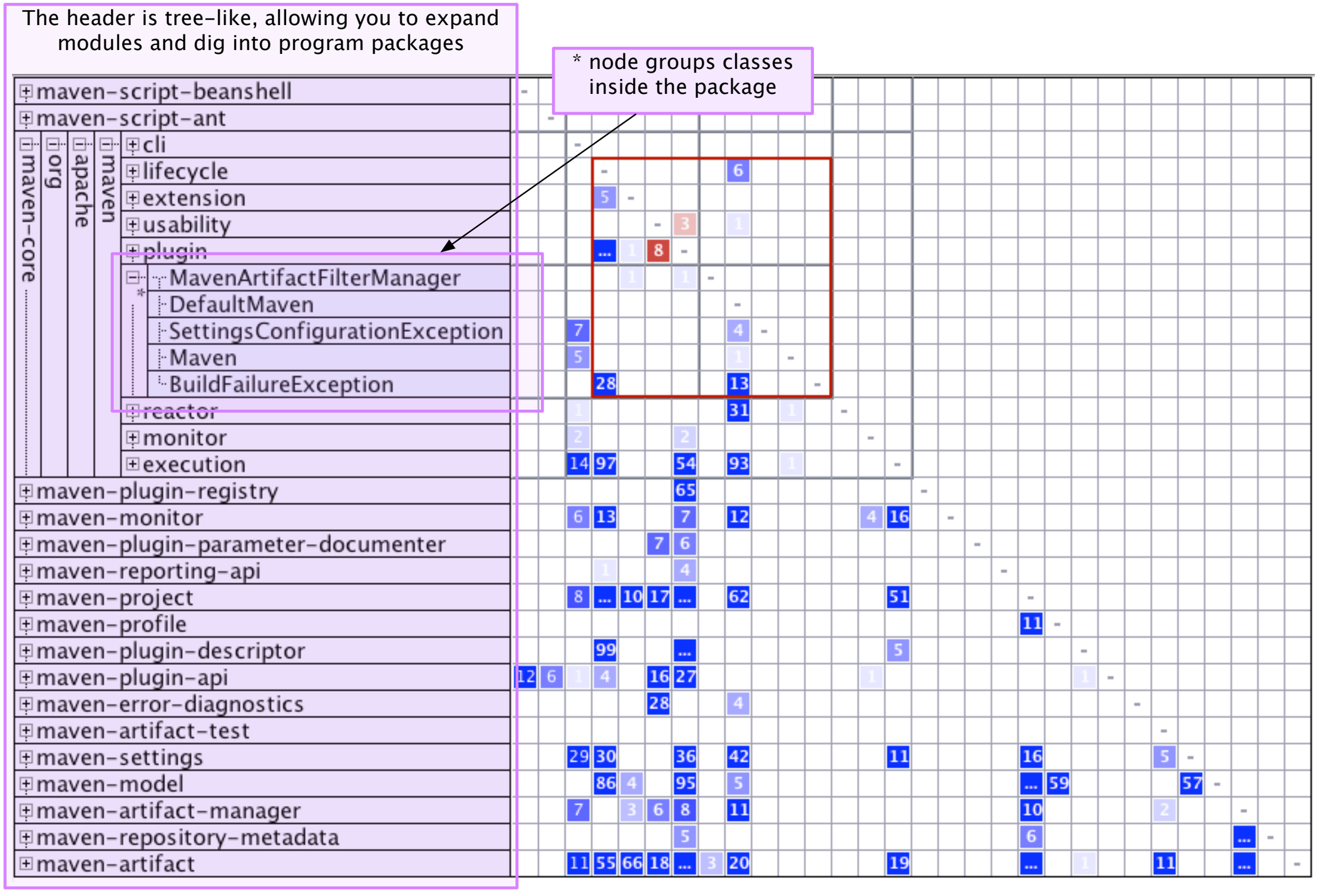
maven-script-beanshell																				
maven-script-ant			-																	
maven-core				-																
maven-plugin-registry				65	-															
maven-monitor				58		-														
maven-plugin-parameter-documenter				13			-													
maven-reporting-api				5				-												
maven-project				...					-											
maven-profile									11	-										
maven-plugin-descriptor				...							-									
maven-plugin-api	12	6		49							1	-								
maven-error-diagnostics				32									-							
maven-artifact-test														-						
maven-settings				...					16					5	-					
maven-model				...					...	59					57	-				
maven-artifact-manager				35					10					2			-			
maven-repository-metadata				5					6								...	-		
maven-artifact				...					...		1			11			...		-	

Column Headers

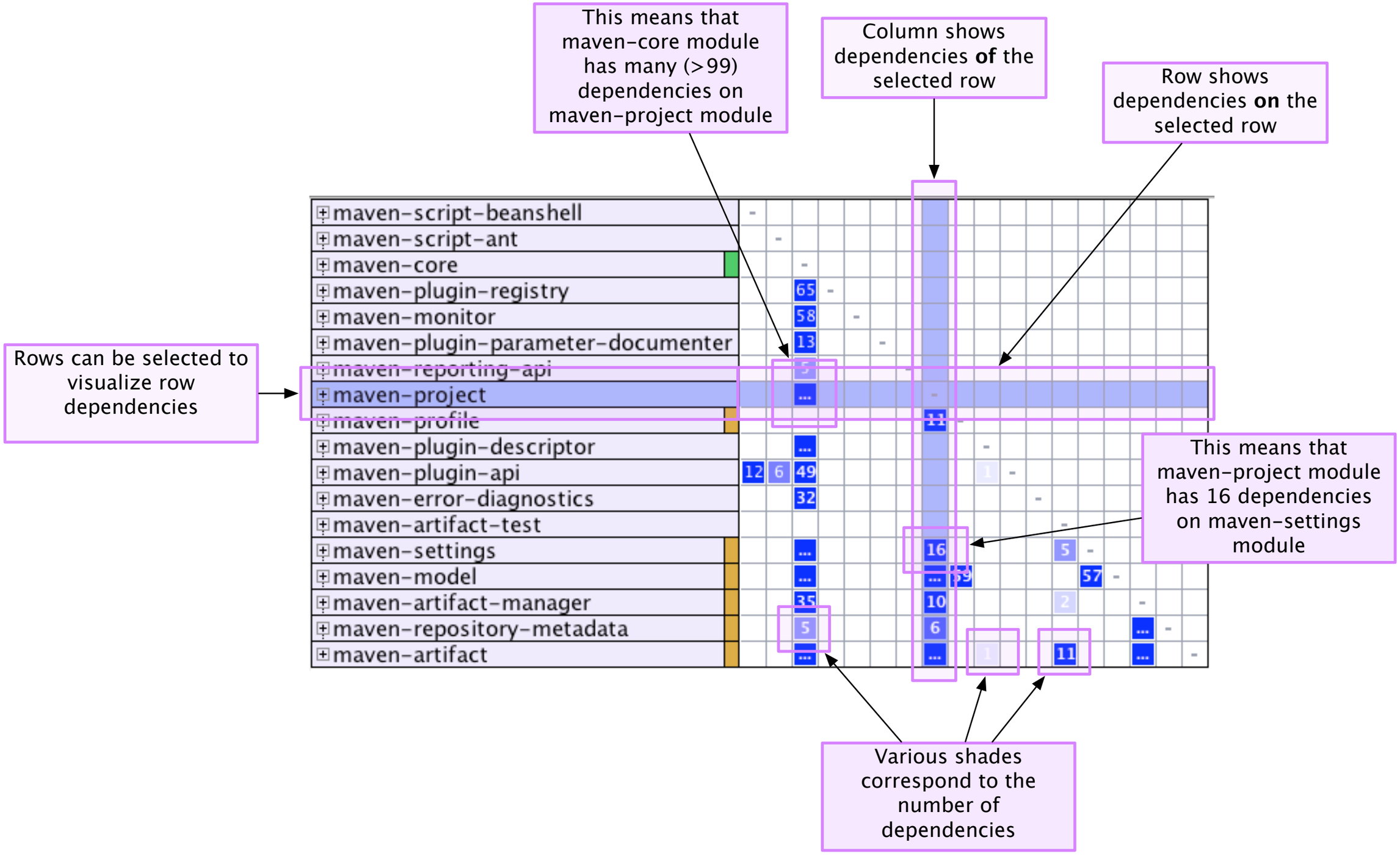
These headers are the same as the corresponding row headers. Thus they are not shown for space economy. Instead, different visual aids are used on the row headers.

	maven-script-beanshell	maven-script-ant	maven-core	maven-plugin-registry	maven-monitor	maven-plugin-parameter-documenter	maven-reporting-api	maven-project	maven-profile	maven-plugin-descriptor	maven-plugin-api	maven-error-diagnostics	maven-artifact-test	maven-settings	maven-model	maven-artifact-manager	maven-repository-metadata	maven-artifact
maven-script-beanshell	-																	
maven-script-ant		-																
maven-core			-															
maven-plugin-registry			65	-														
maven-monitor			58		-													
maven-plugin-parameter-documenter			13			-												
maven-reporting-api			5				-											
maven-project			...					-										
maven-profile								11	-									
maven-plugin-descriptor			...							-								
maven-plugin-api	12	6	49							1	-							
maven-error-diagnostics			32									-						
maven-artifact-test													-					
maven-settings			...					16					5	-				
maven-model			...					...	59					57	-			
maven-artifact-manager			35					10					2			-		
maven-repository-metadata			5					6								...	-	
maven-artifact			...					...		1			11			...		-

Expanded Headers



Row Selection



Row Selection

This color annotations help to visualize row dependencies at a glance

maven-core depends on maven-project

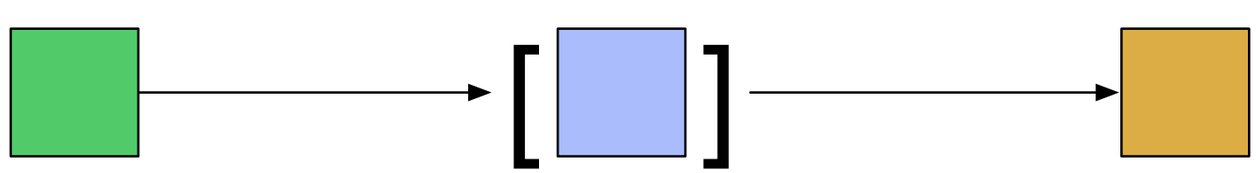
maven-project depends on maven-profile

Dashes on the diagonal correspond to self dependencies which are not shown

maven-script-beanshell		-																	
maven-script-ant			-																
maven-core				-															
maven-plugin-registry				65	-														
maven-monitor				58		-													
maven-plugin-parameter-documenter				13			-												
maven-reporting-api				5				-											
maven-project				...															
maven-profile																			
maven-plugin-descriptor				...															
maven-plugin-api	12	6		49								1	-						
maven-error-diagnostics				32										-					
maven-artifact-test															-				
maven-settings				...						16					5	-			
maven-model				...						...	59					57	-		
maven-artifact-manager				35						10					2			-	
maven-repository-metadata				5						6								...	-
maven-artifact				...						...		1			11			...		-

Simple Mnemonic

All dependencies always "flow" from Green to Yellow



Cell Selection

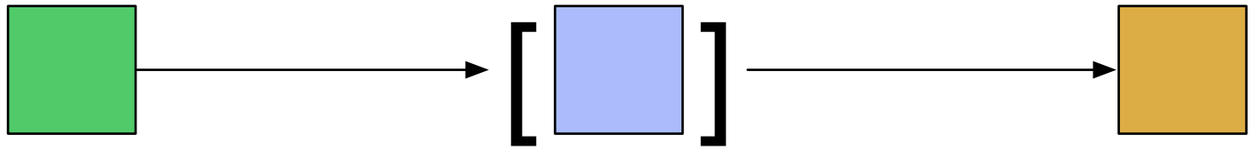
This cell was selected. It means that maven-project has 16 dependencies on maven-settings. Remember the mnemonics: from Green to Yellow.

The symmetrical point shows dependencies in the other direction - zero in this case

maven-script-beanshell																		
maven-script-ant		-																
maven-core			-															
maven-plugin-registry			65	-														
maven-monitor			58		-													
maven-plugin-parameter-documenter			13			-												
maven-reporting-api			5				-											
maven-project			...					-										
maven-profile								11	-									
maven-plugin-descriptor			...							-								
maven-plugin-api	12	6	49							1	-							
maven-error-diagnostics			32									-						
maven-artifact-test													-					
maven-settings			...					16					5	-				
maven-model			...					...	59					57	-			
maven-artifact-manager			35					10					2			-		
maven-repository-metadata			5					6								...	-	
maven-artifact			...					...		1			11			...		-

Simple Mnemonic

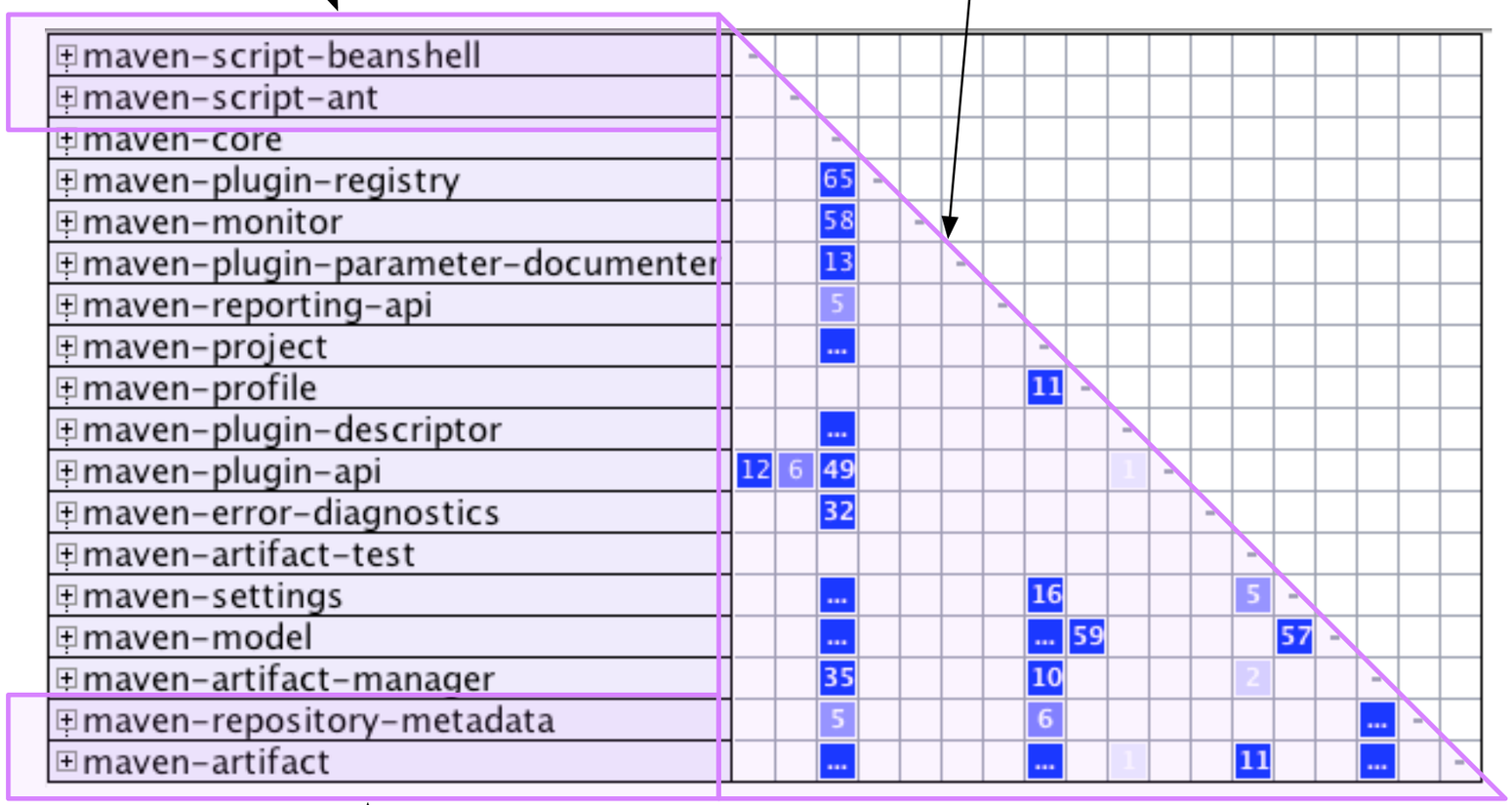
All dependencies always "flow" from Green to Yellow



Dependency Sorting

These are the highest-level modules. Note that their sorting can be arbitrary

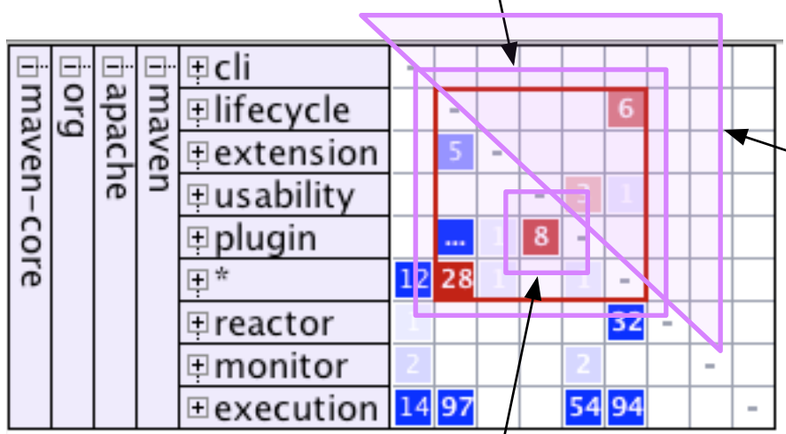
Instead of alphabetically sorting rows, DSM view performs a special kind of dependency sorting: classes, which are used most are moved to the bottom. In a project with good structure this creates a lower-triangular form.



These are the lowest-level modules. Note that their sorting can be arbitrary

Cycles

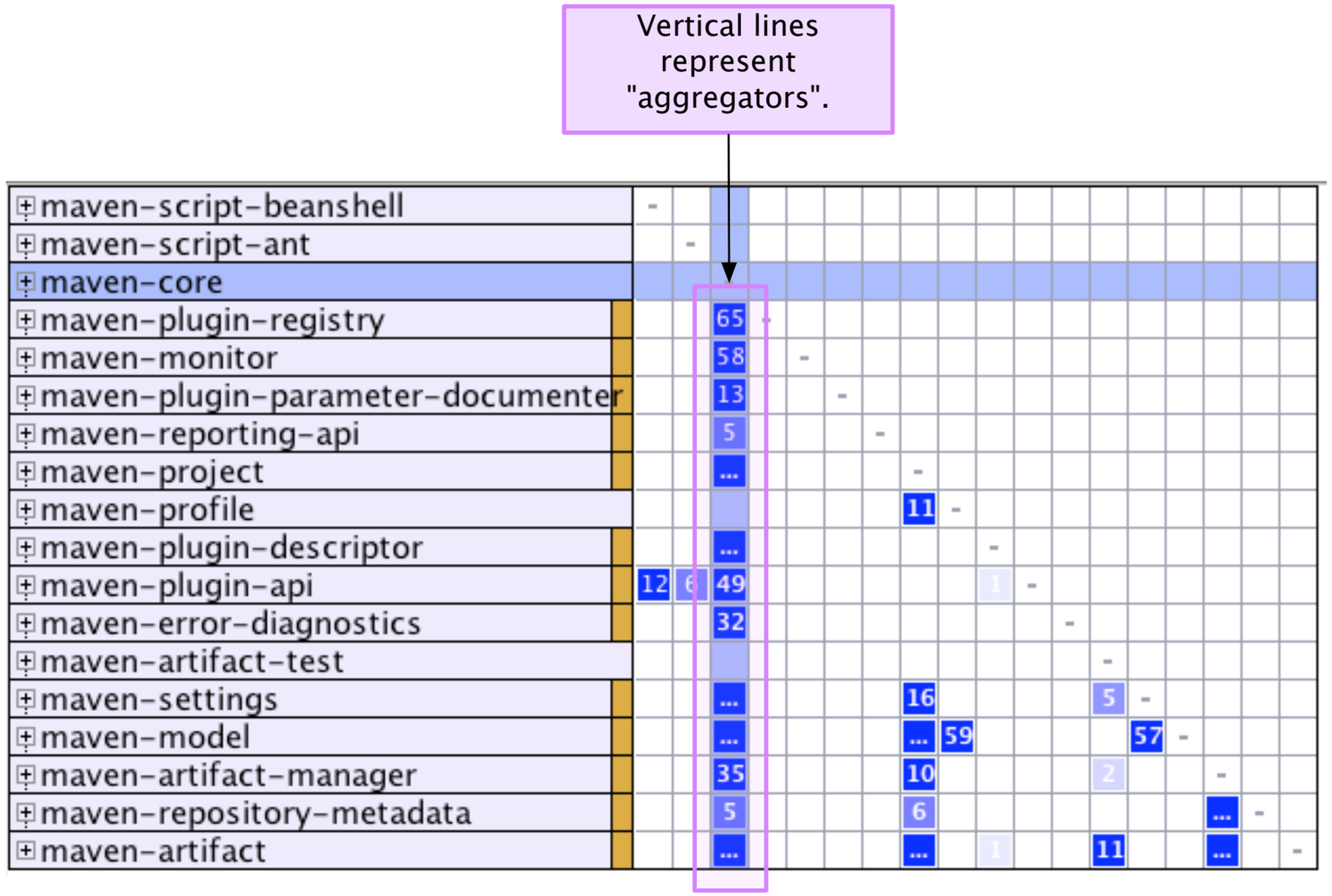
Sometimes dependency sorting is impossible, because dependencies form a cycle. IDEA highlights cycles with red squares. No package can be removed from the cycle without breaking a dependency.



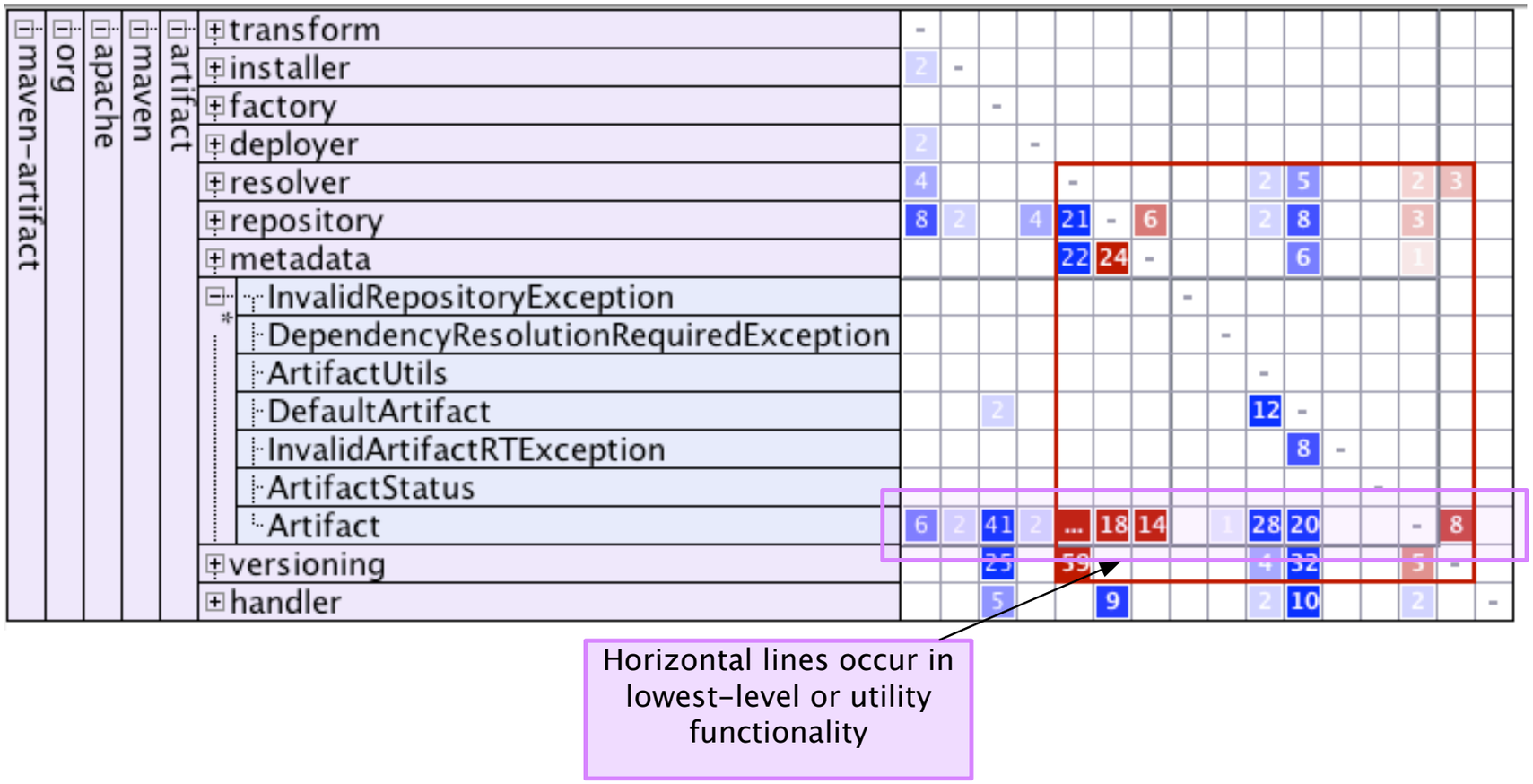
IDEA resorts rows to minimize dependencies in the upper-right corner thus emphasizing an easy to detect work front.

Mutual dependencies are shown with red color. It means that plugin and usability packages are both dependent on each other.

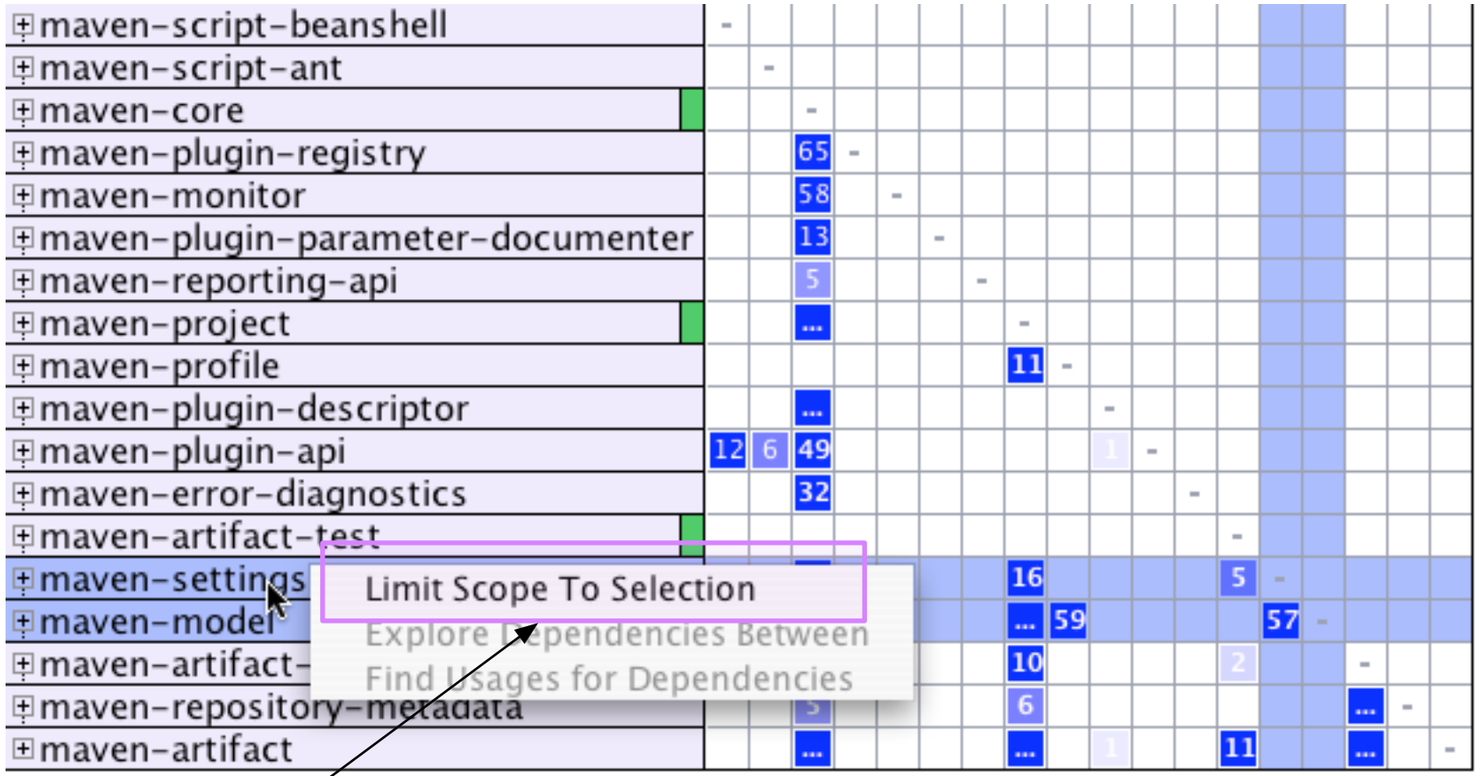
Patterns


Vertical lines represent "aggregators".
maven-script-beanshell
maven-script-ant
maven-core
maven-plugin-registry
maven-monitor
maven-plugin-parameter-documenter
maven-reporting-api
maven-project
maven-profile
maven-plugin-descriptor
maven-plugin-api
maven-error-diagnostics
maven-artifact-test
maven-settings
maven-model
maven-artifact-manager
maven-repository-metadata
maven-artifact

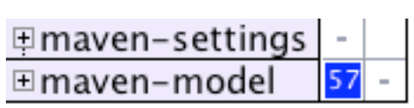
Patterns


maven-artifact
org
apache
maven
artifact
transform
installer
factory
deployer
resolver
repository
metadata
InvalidRepositoryException
DependencyResolutionRequiredException
ArtifactUtils
DefaultArtifact
InvalidArtifactRTException
ArtifactStatus
Artifact
versioning
handler
Horizontal lines occur in lowest-level or utility functionality

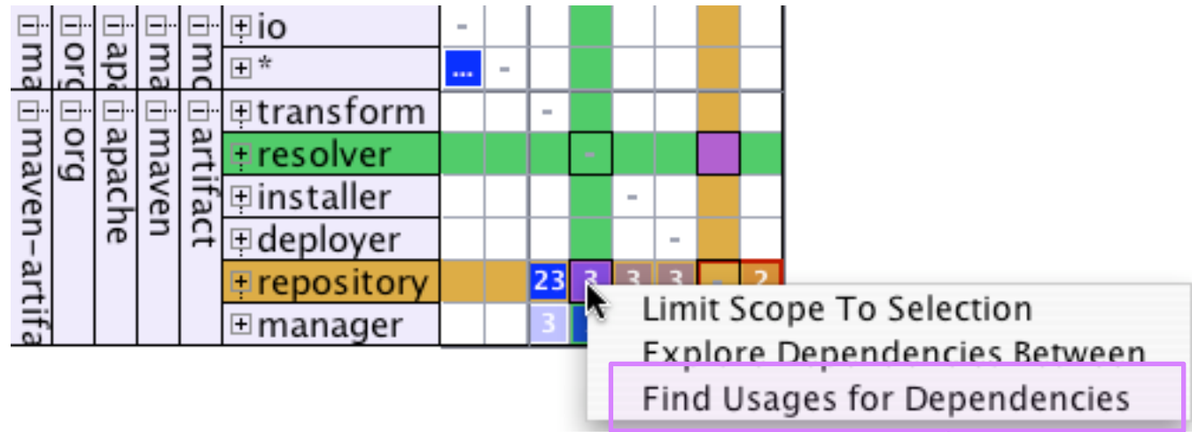
Limit DSM Scope



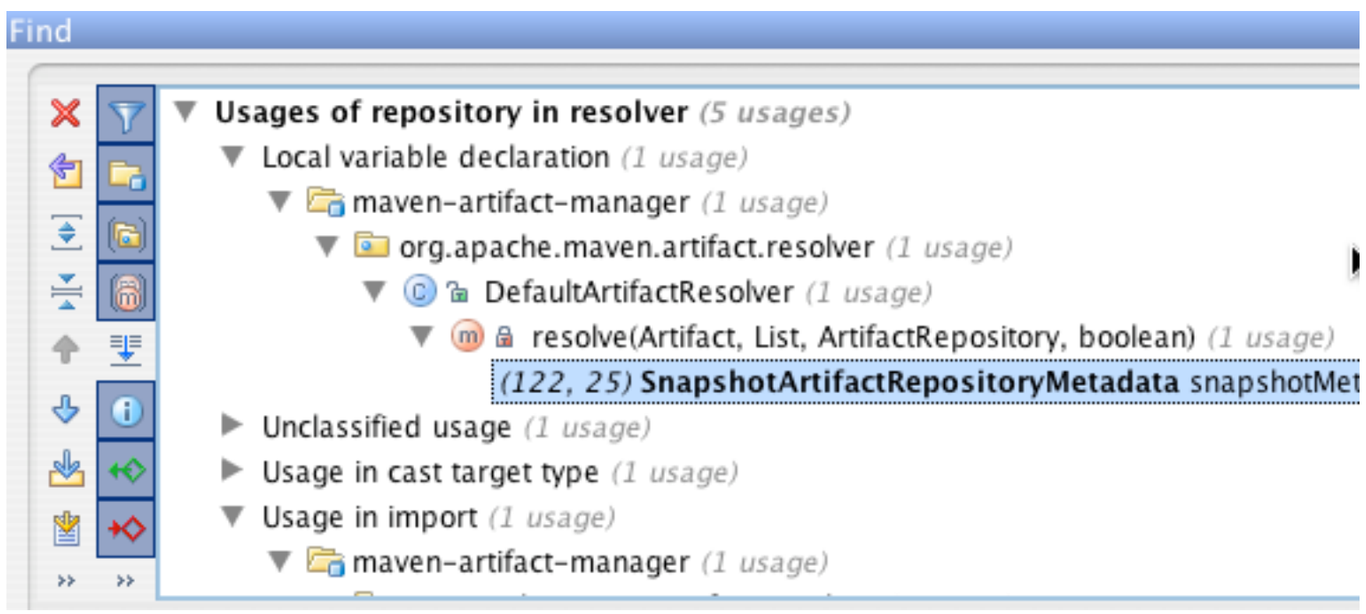
You can limit the scope of your DSM to the selected rows. Only these will remain in the new matrix.



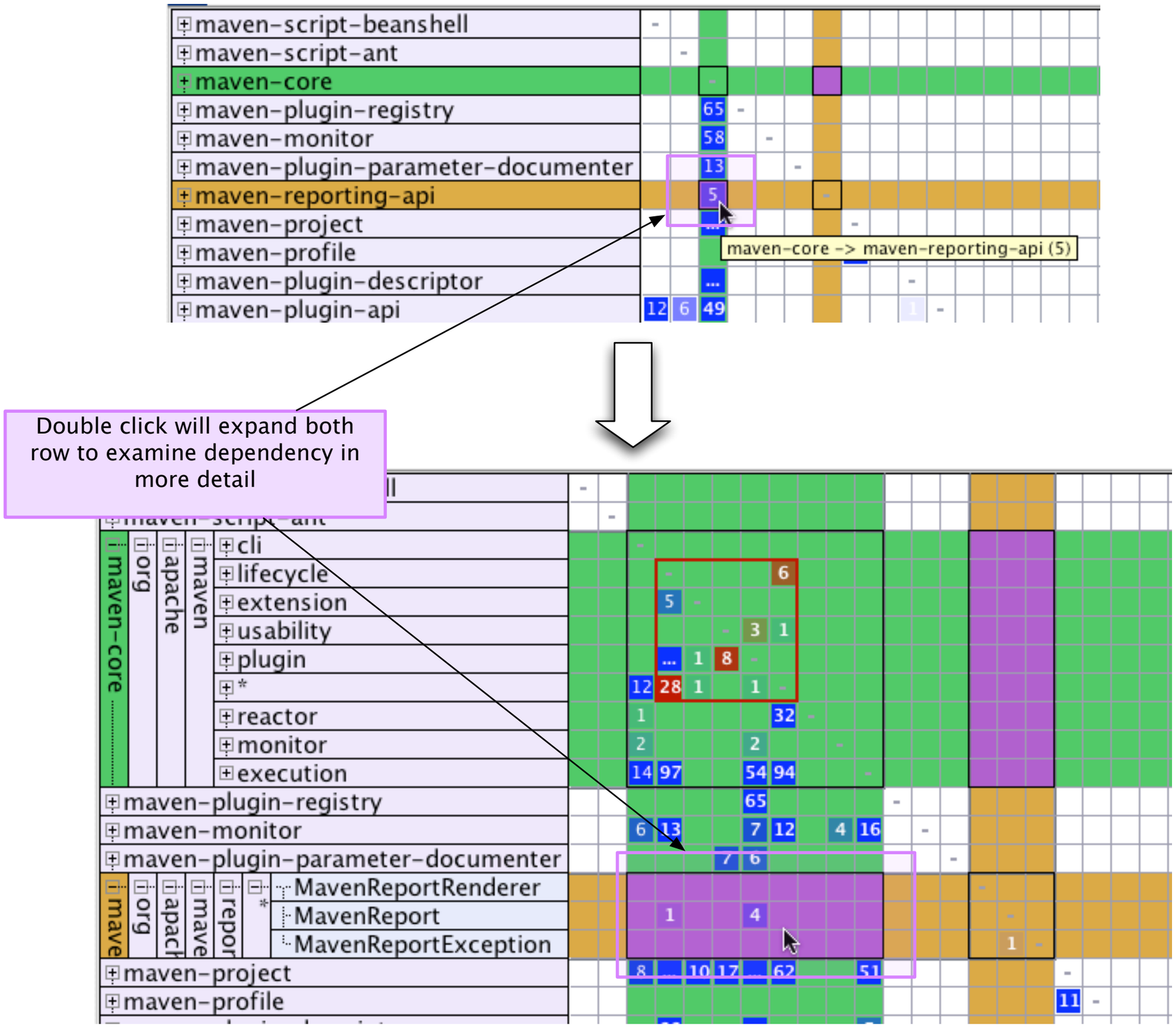
Find Usages for Dependencies



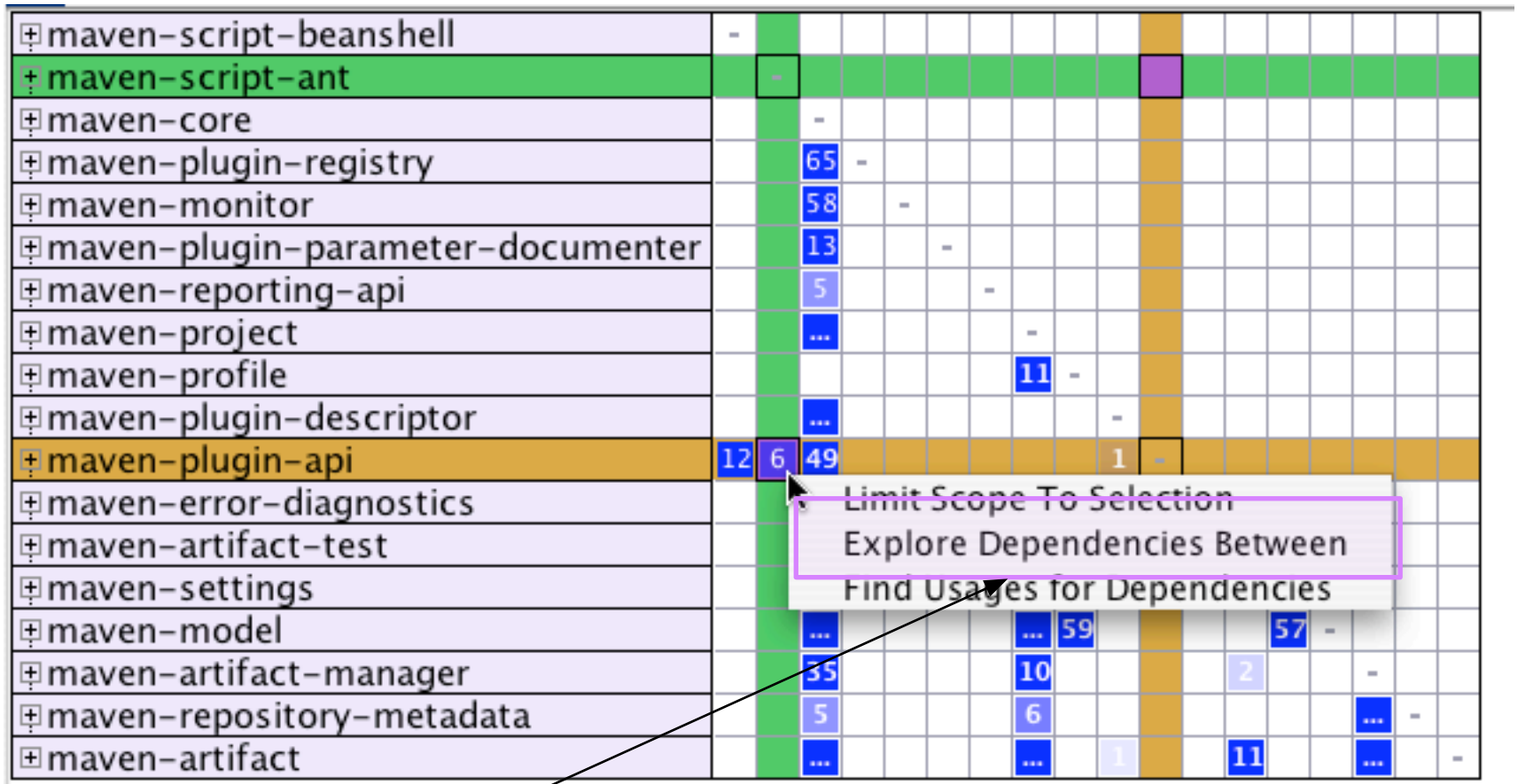
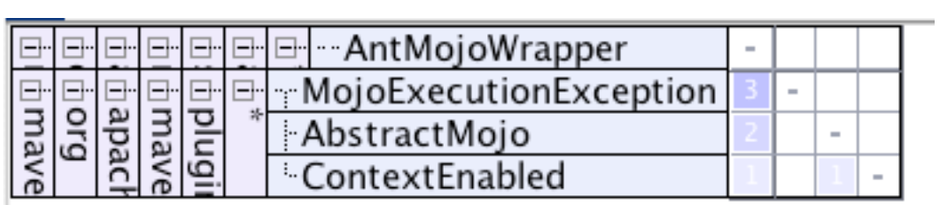
You can can open selected dependencies in Find Usages View for further source-code analysis



Expanding Dependencies



Exploring Dependencies



There's also a possibility to limit view to selected dependencies only. Please note that in contrary to Limit Scope, only classes which produce dependencies from script-ant to plugin-api are left.