

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 | | | | ... | | - |

Row Selection

This means that maven-core module has many (> 99) dependencies from maven-project module

Column shows dependencies of the selected row

Row shows dependencies from the selected row

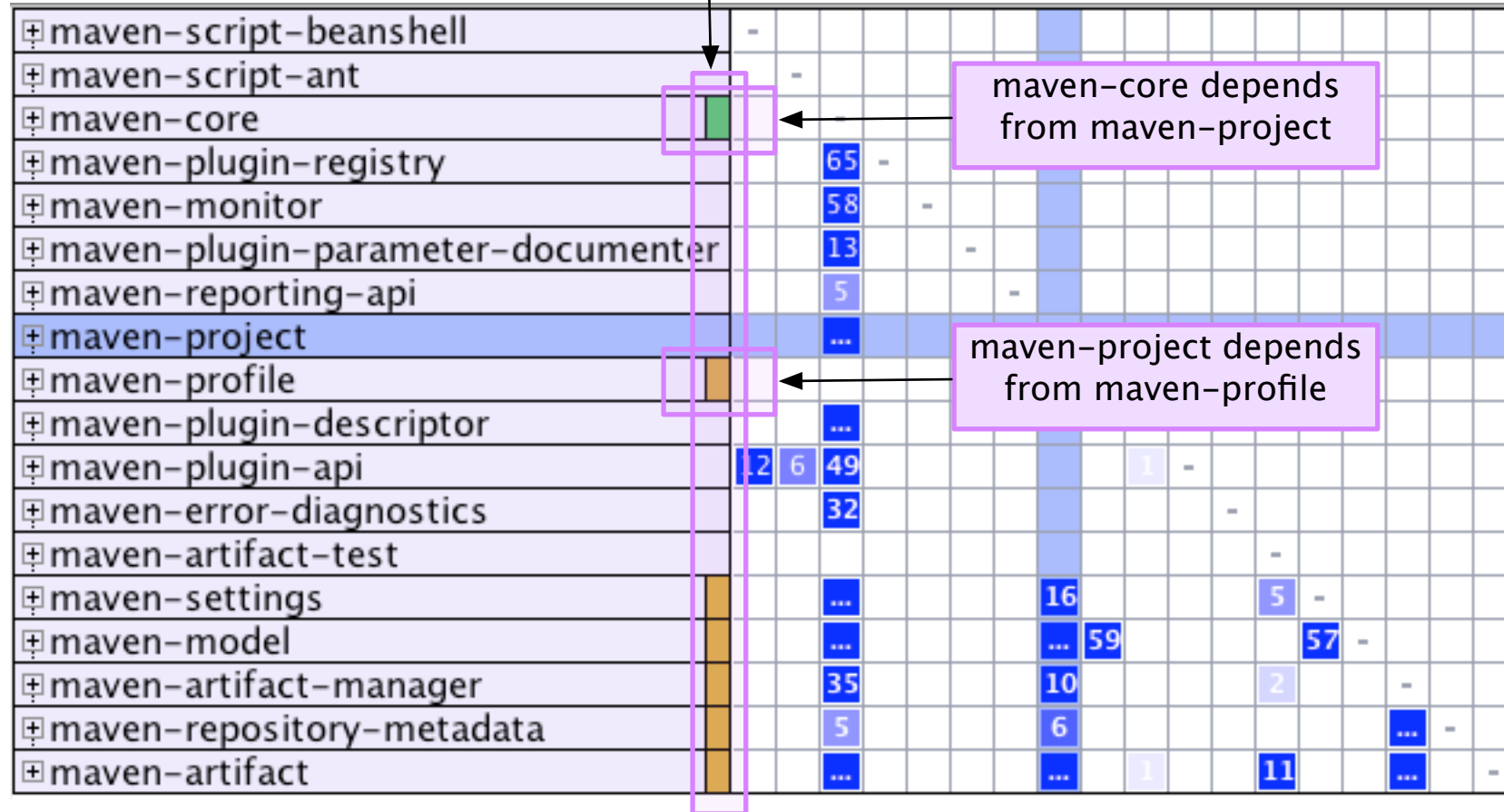
Rows can be selected to visualize row dependencies

| | | | | | | | | | | |
|-------------------------------------|-----|---|-----|----|--|-----|----|----|-----|---|
| ⊕ 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 | ... | - |

This means that maven-project module has 16 dependencies from maven-settings module

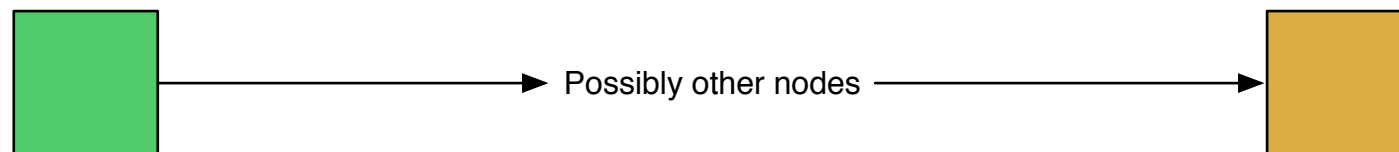
Row Selection

This color annotations help to visualize row dependencies at a glance



Simple Mnemonics

All dependencies always "flow" from Green to Yellow



Cell Selection

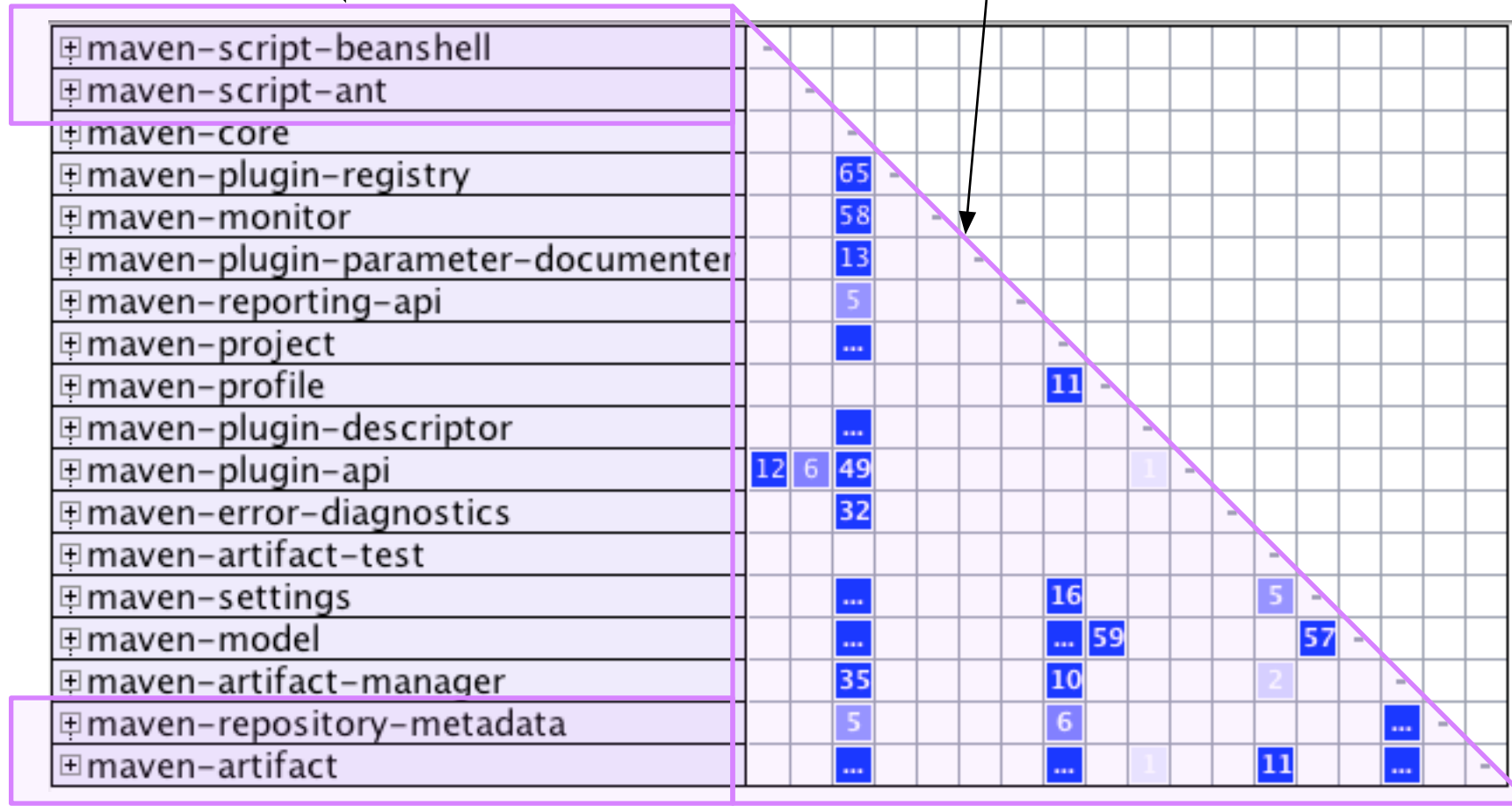
| | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|----|----|----|---|---|--|--|--|--|--|--|--|--|--|--|--|--|
| ⊕ maven-script-beanshell | - | | | | | | | | | | | | | | | | | | | |
| ⊕ maven-script-ant | | - | | | | | | | | | | | | | | | | | | |
| ⊕ maven-core | | | - | | | | | | | | | | | | | | | | | |
| ⊕ 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 | | | | | | | | | | | | | | | | | | | | |
| ⊕ maven-error-diagnostics | | | | | | | | | | | | | | | | | | | | |
| ⊕ maven-artifact-test | | | | | | | | | | | | | | | | | | | | |
| + maven-settings | | | | | | | | | | | | | | | | | | | | |
| ⊕ maven-model | | | | | | | | | | | | | | | | | | | | |
| ⊕ maven-artifact-manager | | | | | | | | | | | | | | | | | | | | |
| ⊕ maven-repository-metadata | | | | | | | | | | | | | | | | | | | | |
| ⊕ maven-artifact | | | | | | | | | | | | | | | | | | | | |

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

The table below represents the dependency matrix shown in the image. The rows are sorted by the number of dependencies in the upper-right corner. Red squares indicate mutual dependencies (cycles), and blue squares indicate dependencies. A diagonal line is drawn from the top-left to the bottom-right.

| Package | cli | lifecycle | extension | usability | plugin | * | reactor | monitor | execution |
|------------|-----|-----------|-----------|-----------|--------|---|---------|---------|-----------|
| maven-core | | | | | | | | | |
| org | | | | | | | | | |
| apache | | | | | | | | | |
| maven | | | | | | | | | |
| cli | | | | | | | | | |
| lifecycle | | | | | | | | | |
| extension | 5 | | | | | | | | |
| usability | | | | | | | | | |
| plugin | | | | | | | | | |
| * | 12 | 28 | | | | | | | |
| reactor | | | | | | | | | |
| monitor | 2 | | | | | | | | |
| execution | 14 | 97 | | | | | | | |

IDEA resorts row 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 from each other.

Patterns

Vertical lines represent "aggregators".

| | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|----|-----|----|--|--|--|--|-----|----|---|---|--|--|----|----|---|--|--|--|-----|---|
| ⊕ 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 | | | | | | ... | - |

Patterns

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|-----|--------|-------|----------|---------------------------------------|----|----|---|---|----|----|----|--|--|----|---|---|--|--|---|---|--|--|--|--|--|--|
| maven-artifact | org | apache | maven | artifact | transform | - | | | | | | | | | | | | | | | | | | | | | |
| | | | | | installer | 2 | - | | | | | | | | | | | | | | | | | | | | |
| | | | | | factory | | | - | | | | | | | | | | | | | | | | | | | |
| | | | | | deployer | 2 | | - | | | | | | | | | | | | | | | | | | | |
| | | | | | resolver | 4 | | | - | | | | | | 2 | 5 | | | | 2 | 3 | | | | | | |
| | | | | | repository | 8 | 2 | | 4 | 21 | - | 6 | | | 2 | 8 | | | | 3 | | | | | | | |
| | | | | | metadata | | | | | 22 | 24 | - | | | | 6 | | | | 1 | | | | | | | |
| | | | | | InvalidRepositoryException | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | DependencyResolutionRequiredException | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | ArtifactUtils | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | DefaultArtifact | | | | 2 | | | | | | 12 | - | | | | | | | | | | | |
| | | | | | InvalidArtifactRTEException | | | | | | | | | | | 8 | - | | | | | | | | | | |
| | | | | | ArtifactStatus | | | | | | | | | | | | | | | | | | | | | | |
| Artifact | 6 | 2 | 41 | 2 | ... | 18 | 14 | | | 1 | 28 | 20 | | | - | 8 | | | | | | | | | | | |
| versioning | | | 25 | | 59 | | | | | | 4 | 32 | | | 5 | - | | | | | | | | | | | |
| handler | | | 5 | | | 9 | | | | | 2 | 10 | | | 2 | | | | | | | | | | | | |

Horizontal lines occur in lowest-level or utility functionality