



Meta - Levels	Layers - Packages	Visibility
<ul style="list-style-type: none"> ● ml = N (collapse of all higher meta levels to one node) ● ml = 3 (meta meta types and meta meta relations) ● ml = 2 (meta types and meta relations) ● ml = 1 (classes and relations) 	<ul style="list-style-type: none"> ○ Layer 0 - MetaMetaMeta ○ Layer 1 - ClassInheritance ○ Layer 1 - PersistenceStructure ○ Layer 2 - Grounding 	<ul style="list-style-type: none"> □ public (visible to all following layers) ○ public+1 (visible to following layer only) ○ private (visible to this layer only)
Layer 0 - MetaMetaMeta	Layer 1 - Class-Inheritance (ml=2)	Layer 2 - Grounding
<p>MetaTypes (used in this layer)</p> <ul style="list-style-type: none"> ○ <i>mmt</i> = metaNType (ml=N) ○ <i>mt</i> = metaType (ml=3) ○ <i>mr</i> = metaRelation (ml=3) ○ <i>mrs</i> = metaRelationSignature (ml=3) ○ <i>rp</i> = relationProperty (ml=3) ○ <i>mlt</i> = metaLevelType (ml=2) <p>Types (used in following layers)</p> <ul style="list-style-type: none"> ○ <i>class</i> = class (ml=2) ○ <i>rel</i> = relation (ml=2) ○ <i>rs</i> = relationSignature (ml=2) <p>Relations (all ml=3)</p> <ul style="list-style-type: none"> □ → type = type □ → ml = metaLevel □ → sig = signature ○ → st = sourceType ○ → tt = targetType ○ → nml = nextMetaLevel □ → rpr = relationPropertyRelation <p>Signature nodes (all ml=3)</p> <ul style="list-style-type: none"> ○ <i>a2at</i> = any-to-anyType ○ <i>a2mlt</i> = any-to-metaLevelType ○ <i>mlt2mlt</i> = metaLevelType-to-metaLevelType ○ <i>mrs2mt</i> = metaRelationSignature-to-metaType ○ <i>mnt2mmt</i> = metaNType-to-metaNType ○ <i>mr2mrs</i> = metaRelation-to-metaRelationSignature ○ <i>rs2rp</i> = relationSignature-to-relationProperty <p>Relation properties (all ml=2)</p> <ul style="list-style-type: none"> □ <i>man</i> = mandatory □ <i>uni</i> = unique □ <i>imp</i> = implicit □ <i>tra</i> = transient <p>MetaLevel nodes (all ml=2)</p> <ul style="list-style-type: none"> ○ <i>ml0, ml1, ml2, ml3, mlN</i> 	<p>Relations</p> <ul style="list-style-type: none"> □ <i>tc</i> = targetClass □ <i>sc</i> = sourceClass □ <i>inh</i> = inheritance □ <i>supc</i> = superClass □ <i>ith</i> = inverseTransitiveHull <p>Relation Signatures</p> <ul style="list-style-type: none"> ○ <i>c2c</i> = class-to-class ○ <i>rs2c</i> = relationSignature-to-class ○ <i>r2r</i> = relation-to-relation ○ <i>mr2mr</i> = metaRelation-to-metaRelation 	<p>Types (ml=2)</p> <ul style="list-style-type: none"> ○ <i>gt</i> = groundingType <p>Relations (ml=2)</p> <ul style="list-style-type: none"> □ <i>gdr</i> = groundingDetailRelation □ <i>grr</i> = groundingReferenceRelation <p>Relation Signatures (ml=2)</p> <ul style="list-style-type: none"> ○ <i>gt2gt</i> = groundingType-to-groundingType ○ <i>gt2a</i> = groundingType-to-any <p>Grounding Nodes (ml=1)</p> <ul style="list-style-type: none"> ○ 5 grounding nodes
Layer 1 - Persistence-Structure (ml=2)		
<p>Types</p> <ul style="list-style-type: none"> ○ <i>lay</i> = layer ○ <i>pac</i> = package ○ <i>sh</i> = sheet ○ <i>vn</i> = versionNode ○ <i>dn</i> = descriptionNode <p>Relations</p> <ul style="list-style-type: none"> □ <i>version</i> = version □ <i>descr</i> = description □ <i>contains</i> = contains □ <i>refers</i> = refers <p>Relation Signatures</p> <ul style="list-style-type: none"> ○ <i>pa2pa</i> = package-to-package ○ <i>pa2sh</i> = package-to-sheet ○ <i>pa2ver</i> = package-to-version ○ <i>lay2lay</i> = layer-to-layer ○ <i>lay2pa</i> = layer-to-package ○ <i>sh2a</i> = sheet-to-any ○ <i>sh2sh</i> = sheet-to-sheet ○ <i>2desc</i> = to-description 		