

Chapter18TestCoverageNotes

XML Metadata Test Coverage

To support interface and property, we need a separate test schema, interfaces, and test cases.

The standard mappings of Company model will use the following elements and attributes.

XML Element/attribute	Tested by Company Model Completeness Test?	Use Company Model for test			
<IELEMENT jdo ((package)+, (query)*, (extension)*)>	y	y			
<IELEMENT package (interface*, class*, sequence*, extension*)>	y	y			
<IATTLIST package name CDATA #REQUIRED>	y	y			
<IELEMENT interface ((property)*, (extension*))>	.	n			
<IATTLIST interface name CDATA #REQUIRED>	.	n			
<IATTLIST interface requires-extent (true	false) 'true'>	.	n		
<IELEMENT property ((collection	map	array	column)? , extension*)>	.	n
<IATTLIST property name CDATA #REQUIRED>	.	n			
<IATTLIST property column CDATA #IMPLIED>	.	n			
<IELEMENT class (datastore-identity?, implements*, inheritance?, join*, foreign-key*, index*, field*, version?, query*, fetch-group*, extension*)>	y	y			
<IATTLIST class name CDATA #REQUIRED>	y	y			
<IATTLIST class identity-type (application	datastore	nondurable) #IMPLIED>	y	y	
<IATTLIST class table CDATA #IMPLIED>	y	y			
<IATTLIST class requires-extent (true	false) 'true'>	y	y		
<IATTLIST class persistence-capable-superclass CDATA #IMPLIED>	n/a	.			
<IATTLIST class embedded-only (true	false) #IMPLIED>	y	y		
<IATTLIST class persistence-modifier (persistence-capable	persistence-aware	non-persistent) #IMPLIED>	y	y	
<IELEMENT join (column*, index?, foreign-key?, extension*)>	y	y			
<IATTLIST join table CDATA #IMPLIED>	y	y			
<IATTLIST join column CDATA #IMPLIED>	y	y			
<IATTLIST join outer (true	false) 'false'>	n	yes		
<IATTLIST join foreign-key CDATA #IMPLIED>	y	y			
<IELEMENT datastore-identity ((column)*, (extension)*)>	y	y			
<IATTLIST datastore-identity column CDATA #IMPLIED>	y	y			
<IATTLIST datastore-identity strategy CDATA #IMPLIED>	y	multiple mappings			
<IATTLIST datastore-identity sequence-name CDATA #IMPLIED>	n	multiple mappings			
<IATTLIST datastore-identity factory-class CDATA #IMPLIED>	n	multiple mappings			
<IELEMENT implements ((property-field)+, (extension)*)>	separate schema	.			
<IATTLIST implements name CDATA #REQUIRED>	separate schema	.			
<IELEMENT inheritance (discriminator?, extension*)>	y	y			
<IATTLIST inheritance strategy CDATA #IMPLIED>	y	multiple mappings			
<IELEMENT discriminator (column?, extension*)>	y	y			
<IATTLIST discriminator column CDATA #IMPLIED>	y	yes, multiple mappings			
<IATTLIST discriminator value CDATA #IMPLIED>	y	multiple mappings			
<IATTLIST discriminator strategy CDATA #IMPLIED>	y	multiple mappings			
<IELEMENT column (extension*)>	y	y			
<IATTLIST column name CDATA #IMPLIED>	y	y			
<IATTLIST column target CDATA #IMPLIED>	y	y			
<IATTLIST column target-field CDATA #IMPLIED>	n	special test xcalia			
<IATTLIST column jdbc-type CDATA #IMPLIED>	y	y			
<IATTLIST column sql-type CDATA #IMPLIED>	n	special mapping			
<IATTLIST column length CDATA #IMPLIED>	y	y			
<IATTLIST column scale CDATA #IMPLIED>	y	y			
<IATTLIST column nulls-allowed CDATA #IMPLIED>	y	y			
<IELEMENT property-field (extension*)>	.	.			
<IATTLIST property-field name #REQUIRED>	.	.			
<IATTLIST property-field field-name #REQUIRED>	.	.			
<IELEMENT field ((collection	map	array	(column*))?, join?, element?, key?, value?, order?, embedded?, index?, foreign-key?, extension*)>	y	y
<IATTLIST field name CDATA #REQUIRED>	y	y			
<IATTLIST field persistence-modifier (persistent	transactional	none) #IMPLIED>	y	y	
<IATTLIST field table CDATA #IMPLIED>	y	y			
<IATTLIST field null-value (exception	default	none) 'none'>	y	different mapping	

<!ATTLIST field default-fetch-group (true	false) #IMPLIED>	y	different test case, different mappings		
<!ATTLIST field embedded (true	false) #IMPLIED>	y	yes, but need different mappings		
<!ATTLIST field serialized (true	false) #IMPLIED>	n	different mappings		
<!ATTLIST field dependent (true	false) #IMPLIED>	y	y		
<!ATTLIST field value-factory CDATA #IMPLIED>	n	different test case different mapping			
<!ATTLIST field foreign-key CDATA #IMPLIED>	y	y			
<!ATTLIST field fetch-group CDATA #IMPLIED>	n	same test different mapping			
<!ATTLIST field depth CDATA #IMPLIED>	n	different test case			
<IELEMENT foreign-key (column*, extension*)>	y	.			
<!ATTLIST foreign-key deferred (true	false) #IMPLIED>	n	different test case different mapping		
<!ATTLIST foreign-key delete-action (cascade	restrict	null	default) #IMPLIED>	n	what does this mean?
<!ATTLIST foreign-key update-action (cascade	restrict	null	default) #IMPLIED>	n	what does this mean?
<!ATTLIST foreign-key unique (true	false) #IMPLIED>	n	different test case		
<!ATTLIST foreign-key name CDATA #IMPLIED>	y	y			
<IELEMENT collection (extension*)>	y	y			
<!ATTLIST collection element-type CDATA #IMPLIED>	y	.			
<!ATTLIST collection embedded-element (true	false) #IMPLIED>	n	different test case different mapping		
<!ATTLIST collection dependent-element (true	false) #IMPLIED>	y	y		
<IELEMENT map (extension*)>	n	n			
<!ATTLIST map key-type CDATA #IMPLIED>	n	n			
<!ATTLIST map embedded-key (true	false) #IMPLIED>	n	n		
<!ATTLIST map dependent-key (true	false) #IMPLIED>	n	n		
<!ATTLIST map value-type CDATA #IMPLIED>	n	n			
<!ATTLIST map embedded-value (true	false) #IMPLIED>	n	n		
<!ATTLIST map dependent-value (true	false) #IMPLIED>	n	n		
<IELEMENT key (column*, index?, embedded?, foreign-key?, extension*)>	n	n			
<!ATTLIST key column CDATA #IMPLIED>	n	n			
<!ATTLIST key serialized (true	false) #IMPLIED>	n	n		
<!ATTLIST key foreign-key CDATA #IMPLIED>	n	n			
<IELEMENT value (column*, index?, embedded?, foreign-key?, extension*)>	n	n			
<!ATTLIST value column CDATA #IMPLIED>	n	n			
<!ATTLIST value serialized (true	false) #IMPLIED>	n	n		
<!ATTLIST value foreign-key CDATA #IMPLIED>	n	n			
<IELEMENT array (extension*)>	n	n			
<!ATTLIST array embedded-element (true	false) #IMPLIED>	n	n		
<!ATTLIST array dependent-element (true	false) #IMPLIED>	n	n		
<IELEMENT element (column*, index?, embedded?, foreign-key?, extension*)>	y	y			
<!ATTLIST element column CDATA #IMPLIED>	y	y			
<!ATTLIST element serialized (true	false) #IMPLIED>	n	different model		
<!ATTLIST element foreign-key CDATA #IMPLIED>	y	y			
<IELEMENT order (column*, extension*)>	n	different model			
<!ATTLIST order column CDATA #IMPLIED>	n	different model			
<IELEMENT fetch-group (fetch-group	field*)>	n	.		
<!ATTLIST fetch-group name CDATA #REQUIRED>	n	.			
<!ATTLIST fetch-group post-load (true	false) #IMPLIED>	n	.		
<IELEMENT embedded (field*, owner?, extension*)>	y	y			
<IELEMENT owner (field?, extension*)>	n	different model			
<IELEMENT sequence (extension*)>	n	same model, different mapping			
<!ATTLIST sequence name CDATA #REQUIRED>	n	same model, different mapping			
<!ATTLIST sequence sequence-name CDATA #REQUIRED>	n	same model, different mapping			
<!ATTLIST sequence strategy (non-transactional	transactional-contiguous	transactional-holes- allowed) #REQUIRED>	n	same model, different mapping	
<IELEMENT index (column*, extension*)>	y	y			
<!ATTLIST index name CDATA #IMPLIED>	y	y			
<!ATTLIST index unique (true	false) 'false'>	y	y		
<IELEMENT query (extension*)>	n/a	.			
<!ATTLIST query name CDATA #IMPLIED>	n/a	.			
<!ATTLIST query language CDATA #IMPLIED>	n/a	.			
<!ATTLIST query ignore-cache CDATA #IMPLIED>	n/a	.			
<!ATTLIST query unmodifiable (true	false) false>	n/a	.		

<!ELEMENT extension ANY>	n/a	.
<!ATTLIST extension vendor-name CDATA #REQUIRED>	n/a	.
<!ATTLIST extension key CDATA #IMPLIED>	n/a	.
<!ATTLIST extension value CDATA #IMPLIED>	n/a	.

Next rev draft at [Chapter18TestComponents](#).