|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr | Enumeration | Elements | R/O | Description |
| 1 | Access | value | R | Specification of field or property based access |
|  |  |  |  |  |
| 2 | AssociationOverride | name | R | The name of relationship property whose mapping is being overridden or the name of field if field based access is used |
|  |  | joinColumns | O | The join columns being mapped to persistent attributes |
|  |  | joinTable | O | The Join table that maps relationship |
|  |  |  |  |  |
| 4 | AssociationOverrides | Value | R | The association override mappings that are to be applied to the relationship field or property |
|  |  |  |  |  |
| 5 | AttributeOverride | Column | R | The column that is being mapped to persistent attribute |
|  |  | Name | R | The name of the property or field whose mapping is being overridden |
|  |  |  |  |  |
| 6 | AttributeOverrides | Value | R | One or more field or property mapping overrides |
|  |  |  |  |  |
| 7 | Basic | Fetch | O | Defines whether the value of the field or property should be lazily loaded or eagerly fetched |
|  |  | Optional | O | Defines whether the value of the field or property may be null |
|  |  |  |  |  |
| 8 | Cacheable | Value | O | Whether or not the entity should be cached |
|  |  |  |  |  |
| 9 | CollectionTable | Catalog | O | The catalog of table |
|  |  | joinColumns | O | Foreign key columns of collection table which reference the primary table of entity |
|  |  | Name | O | Name of collection table |
|  |  | Schema | O | Schema of table |
|  |  | uniqueConstraints | O | Unique constraints that are to be placed on the table |
|  |  |  |  |  |
| 10 | Column | columnDefinition | O | SQL column that is used while generating column |
|  |  | Insertable | O | Whether the column is included in SQL INSERT statements generated by persistence provider |
|  |  | Length | O | Column length |
|  |  | Nullable | O | Whether database column is nullable |
|  |  | Precision | O | Precision for decimal |
|  |  | Scale | O | The scale of decimal |
|  |  | Table | O | The name of table that contains column |
|  |  | Unique | O | Whether column is unique key |
|  |  | Updatable | O | Whether column is included in SQL update |
|  |  |  |  |  |
| 11 | ColumnResult | Name | R | The name of column in SELECT clause of SQL |
|  |  |  |  |  |
| 12 | DiscriminatorColumn | columnDefinition | O | SQL fragment used when generating DDL |
|  |  | discriminatorType | O | The type of object/column used as discriminator |
|  |  | Length | O | The column length of string based discriminator types |
|  |  | Name | O | The name of column to e used for discriminator |
|  |  |  |  |  |
| 13 | DiscriminatorValue | Value | O | Value indicates that row is an entity of annotated entity type |
|  |  |  |  |  |
| 14 | ElementCollection | Fetch | O | Whether column should be lazily loaded or eagerly loaded |
|  |  | targetClass | O | The basic or embeddable class that is element type of collection |
|  |  |  |  |  |
| 15 | Entity | Name | O | Name of entity |
|  |  |  |  |  |
| 16 | EntityListeners | Value | O | Callback listener classes |
|  |  |  |  |  |
| 17 | EntityResult | entityClass | R | Class of result |
|  |  | discriminatorColumn | O | Specifies the column name of the column in select list that is used to determine the type of the entity instance |
|  |  | Fields | O | Maps the columns specified in the SEKECT list of the query to the properties of fields of the entity class |
|  |  |  |  |  |
| 18 | Enumerated | Value | O | The type used in mapping an enum type |
|  |  |  |  |  |
| 19 | GeneratedValue | Generator | O | The name of primary key generator to use as sepecified in SequenceGenerator or TableGenerator annotation |
|  |  | Strategy | O | The primary key generation strategy that the persistence provider must to generate the annotated entity primary key |
|  |  |  |  |  |
| 20 | IdClass | Value | R | Primary Key class |
|  |  |  |  |  |
| 21 | Inheritance | Strategy | O | Strategy to be used for entity inheritance hierarchy |
|  |  |  |  |  |
| 22 | JoinColumn | columnDefinition | O | SQL fragment used when generating DDL for column |
|  |  | Insertable | O | Whether column is included in SQL INSERT statements generated by persistence provider |
|  |  | Name | O | Name of foreign key column |
|  |  | Nullable | O | Whether foreign key column is nullable |
|  |  | referencedColumnName | O | Name of column referenced by foreign key column |
|  |  | Table | O | Name of table that contains column |
|  |  | Unique | O | Whether property is unique key |
|  |  | Updatable | O | Whether column is included in SQL UPDATE statements generated by persistence provider |
|  |  |  |  |  |
| 23 | JoinColumns | Value | R | Join columns that map the relationship |
|  |  |  |  |  |
| 24 | JoinTable | Catalog | O | The catalog of table |
|  |  | inverseJoinColumns | O | Foreign key columns of join table which reference the primary key of the entity that does not own the association |
|  |  | joinColumns | O | The foreign key columns of the join table which reference the primary table of entity owning the association |
|  |  | Name | O | Name of join table |
|  |  | Schema | O | Schema of table |
|  |  | uniqueConstraints | O | Unique constraints that are placed on the table |
|  |  |  |  |  |
| 25 | ManyToMany | Cascade | O | Operations must be cascaded to target of association |
|  |  | Fetch | O | Whether association should be lazily loaded or eagerly fetched |
|  |  | mappedBy |  | The field that owns relationship |
|  |  | targetEntity | O | The entity class that is target of association |
|  |  |  |  |  |
| 26 | ManyToOne | Cascade | O | The operations that must be cascaded to target of association |
|  |  | Fetch | O | Whether association should be lazily loaded or eagerly fetched |
|  |  | Optional | O | Whether association is optional |
|  |  | targetEntity | O | The entity class that is target of association |
|  |  |  |  |  |
| 27 | MapKey | Name | O | The name of persistent field or property of associated entity that is used as map key |
|  |  |  |  |  |
| 28 | MapKeyClass | Value | R | The type of map key |
|  |  |  |  |  |
| 29 | MapKeyColumn | columnDefinition | O | SQL fragment that is used when generating DDL for column |
|  |  | Insertable | O | Whether column is included in SQL INSERT statements generated by persistence provider |
|  |  | Length | O | Column length |
|  |  | Name | O | Name of map key column |
|  |  | Nullable | O | Whether database column is nullable |
|  |  | Precision | O | The precision for decimal |
|  |  | Scale | O | Scale for decimal |
|  |  | Table | O | Name of table that contains column |
|  |  | Unique | O | Whether column is unique key |
|  |  | Updatable | O | Whether column is included in SQL UPDATE statements generated by the persistence provider |
|  |  |  |  |  |
| 30 | MapKeyEnumerated | Value | O | Type used in mapping a map key enum type |
|  |  |  |  |  |
| 31 | MapKeyTemporal | Value | R | The type used in mapping java.util.Date or java.util.Calendar |
|  |  |  |  |  |
| 32 | MapsId | Value | O | The name of attribute within the composite key to which the relationship attribute corresponds |
|  |  |  |  |  |
| 33 | NamedNativeQueries | Value | R | Array of NamedNativeQuery annotations |
|  |  |  |  |  |
| 34 | NamedNativeQuery | Name | R | THe name used to refer to the query with the entitymanager methods that create query objects |
|  |  | Query | R | SQL query string |
|  |  | Hints | O | Query properties and hints |
|  |  | resultClass | O | The class of result |
|  |  | resultSetMapping | O | The name of a SqlResultSetMapping as defined in metadata |
|  |  |  |  |  |
| 35 | NamedQueries | Value | R | An array of NamedQuery annotations |
|  |  |  |  |  |
| 36 | NamedQuery | Name | R | The name used to refer to the query with entitymanager methods that create query objects |
|  |  | query | R | Query string in JPQL |
|  |  | Hints | O | Query properties and hints |
|  |  | lockMode | O | The lock mode type to use in query execution |
|  |  |  |  |  |
| 37 | OneToMany | Cascade | O | The operations that must be cascaded to the target of association |
|  |  | Fetch | O | Whether association should be loaded lazily or eagerly |
|  |  | mappedBy | O | The fields that owns relationship |
|  |  | orphanRemoval | O | Whether to apply remove operation to entities that have been removed from relationship and to cascade remove operation to those entities |
|  |  | targetEntity | O | The entity class that is the target of the association |
|  |  |  |  |  |
| 38 | OneToOne | Same as OneToMany |  |  |
|  |  |  |  |  |
| 39 | OrderBy | Value | O | An orderby\_list |
|  |  |  |  |  |
| 40 | OrderColumn | columnDefinition | O | SQL fragment that is used when generating DDL |
|  |  | Insertable | O | Whether column is included in SQL INSERT statements generated by persistence provider |
|  |  | Name | O | The name of ordering column |
|  |  | Nullable | O | Whether database column is nullable |
|  |  | Updatable | O | Whether column is included in SQL UPDATE statements generated by persistence provider |
|  |  |  |  |  |
| 41 | PersistenceContext | Name | O | Name by which entity manager is to be accessed in environment; not needed when dependency injection used |
|  |  | Properties | O | Properties for container or persistence provider |
|  |  | Type | O | Specifies whether a transaction scoped persistence context or an extended persistence context to be used |
|  |  | unitName | O | The name of persistence unit as defined in persistence.xml |
|  |  |  |  |  |
| 42 | PersistenceProperty | Name | R | Name of property |
|  |  | Value | R | Value of property |
|  |  |  |  |  |
| 43 | PersistenceUnit | Name | O | The name by which entity manager factory is to be accessed in environment referencing context; not needed when dependency injection is used |
|  |  | unitName | O | The name of persistence unit as defined in persistence.xml |
|  |  |  |  |  |
| 44 | PrimaryKeyJoinColumn | columnDefinition | O | The SQL fragment that is used when generating DDL for column |
|  |  | Name | O | The name of primary key of current table |
|  |  | referencedColumnName | O | The name of primary key column of the table being joined to |
|  |  |  |  |  |
| 45 | SecondaryTable | Name | R | The name of table |
|  |  | Catalog | O | Catalog of table |
|  |  | pkJoinColumns | O | The columns that are used to join with primary table |
|  |  | Schema | O | The schema of the table |
|  |  | uniqueConstraints | O | Unique constraints that are to be placed on the table |
|  |  |  |  |  |
| 46 | SequenceGenerator | Name | R | A unique generator name that can be referenced by one or more classes to be the generator for primary key values |
|  |  | allocationSize | O | The amount to increment by when allocating sequence numberse from sequence |
|  |  | Catalog | O | Catalog of sequence generator |
|  |  | initialValue | O | The value from which sequence object is to start generating |
|  |  | Schema | O | The schema of sequence generator |
|  |  | sequenceName | O | The name of database sequence object from which to obtain primary key values |
|  |  |  |  |  |
| 47 | SqlResultSetMapping | Name | R | The name given to result set mapping, and used to refer to it in the methods of Query API |
|  |  | Columns | O | Result set mapping to scalar values |
|  |  | Entities | O | Specifies the result set mapping. |
|  |  |  |  |  |
| 48 | Table | Catalog | O | The catalog of table |
|  |  | Name | O | Name of table |
|  |  | Schema | O | Schema of table |
|  |  | uniqueConstraints | O | Unique constraints that are to be placed on table |
|  |  |  |  |  |
| 49 | TableGenerator | Name | R | Unique generator name that can be referenced by one or more classes to be the generator for id values |
|  |  | allocationSize | O | The amount to increment by when allocating id numbers from generator |
|  |  | Catalog | O | Catalog of table |
|  |  | initialValue | O | Initial value to initialize a column that stores last value generated |
|  |  | pkColumnName | O | Name of primary key of table |
|  |  | pkColumnValue | O | The primary key value in the generator table that distinguishes this set of generated values from others that may be stored in the table. |
|  |  | Schema | O | Schema of table |
|  |  | Table | O | Name of table that stores the generated id value |
|  |  | uniqueConstraints | O | Unique constraints that are to be placed on the table |
|  |  | valueColumnName | O | Name of the column that stores the last value generated |
|  |  |  |  |  |
| 50 | Temporal | Value | R | The type used in mapping java.util.Date or java.util.Calendar |
|  |  |  |  |  |
| 51 | UniqueConstraint | columnNames | R | An array of column names that make up the constrant |
|  |  | Name | O | Constraint name |
|  |  |  |  |  |
|  |  |  |  |  |