

Moveatis Java Class Documentation
Software version 2.0.0

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Contents

Class Hierarchy	14
1 Package com.moveatis.abstracts	18
1.1 Class AbstractBean	18
1.1.1 Declaration	18
1.1.2 All known subclasses	18
1.1.3 Constructors	19
1.1.4 Methods	19
1.2 Class AbstractCategoryEntity	20
1.2.1 Declaration	21
1.2.2 All known subclasses	21
1.2.3 Constructors	21
1.2.4 Methods	21
1.2.5 Members inherited from class BaseEntity	22
1.3 Class AbstractCategorySetEntity	22
1.3.1 Declaration	23
1.3.2 All known subclasses	23
1.3.3 Constructors	23
1.3.4 Methods	23
1.3.5 Members inherited from class BaseEntity	24
1.4 Class AbstractObservationEntity	25
1.4.1 Declaration	25
1.4.2 All known subclasses	25
1.4.3 Constructors	25
1.4.4 Methods	25
1.4.5 Members inherited from class BaseEntity	26
1.5 Class AbstractRecordEntity	26
1.5.1 Declaration	27
1.5.2 All known subclasses	27
1.5.3 Constructors	27
1.5.4 Methods	27
1.5.5 Members inherited from class BaseEntity	28
1.6 Class BaseEntity	28
1.6.1 Declaration	28
1.6.2 All known subclasses	28
1.6.3 Fields	28

1.6.4	Constructors	28
1.6.5	Methods	29
2	Package com.moveatis.application	30
2.1	Class ApplicationBean	30
2.1.1	Declaration	30
2.1.2	Constructors	30
2.1.3	Methods	31
2.1.4	Members inherited from class AbstractBean	31
2.2	Class ApplicationEntity	31
2.2.1	Declaration	31
2.2.2	Constructors	31
2.2.3	Methods	32
2.2.4	Members inherited from class BaseEntity	33
2.3	Class InstallationBean	33
2.3.1	Declaration	33
2.3.2	Constructors	33
2.3.3	Methods	33
2.4	Class RedirectURLs	34
2.4.1	Declaration	34
2.4.2	Fields	34
2.4.3	Constructors	34
3	Package com.moveatis.category	35
3.1	Class CategoryBean	35
3.1.1	Declaration	35
3.1.2	Constructors	35
3.1.3	Methods	36
3.1.4	Members inherited from class AbstractBean	36
3.2	Class CategoryEntity	36
3.2.1	Declaration	36
3.2.2	Constructors	36
3.2.3	Methods	37
3.2.4	Members inherited from class AbstractCategoryEntity	37
3.2.5	Members inherited from class BaseEntity	38
3.3	Class CategorySetBean	38
3.3.1	Declaration	38
3.3.2	Constructors	38
3.3.3	Methods	38
3.3.4	Members inherited from class AbstractBean	39
3.4	Class CategorySetEntity	39
3.4.1	Declaration	40
3.4.2	Constructors	40
3.4.3	Methods	40
3.4.4	Members inherited from class AbstractCategorySetEntity	40
3.4.5	Members inherited from class BaseEntity	40
3.5	Class CategoryType	41

3.5.1	Declaration	41
3.5.2	Fields	41
3.5.3	Methods	41
3.5.4	Members inherited from class Enum	41
4	Package com.moveatis.devel	42
4.1	Class DevelJYULoginBean	42
4.1.1	Declaration	42
4.1.2	Constructors	42
4.1.3	Methods	42
5	Package com.moveatis.enums	44
5.1	Class ApplicationStatusCode	44
5.1.1	Declaration	44
5.1.2	Fields	44
5.1.3	Methods	44
5.1.4	Members inherited from class Enum	45
5.2	Class MailStatus	45
5.2.1	Declaration	45
5.2.2	Fields	45
5.2.3	Methods	45
5.2.4	Members inherited from class Enum	46
6	Package com.moveatis.event	47
6.1	Class EventBean	47
6.1.1	Declaration	47
6.1.2	Constructors	47
6.1.3	Methods	47
6.1.4	Members inherited from class AbstractBean	48
6.2	Class EventEntity	49
6.2.1	Declaration	49
6.2.2	Constructors	49
6.2.3	Methods	49
6.2.4	Members inherited from class BaseEntity	51
6.3	Class EventGroupBean	51
6.3.1	Declaration	51
6.3.2	Constructors	51
6.3.3	Methods	51
6.3.4	Members inherited from class AbstractBean	52
6.4	Class EventGroupEntity	52
6.4.1	Declaration	53
6.4.2	Constructors	53
6.4.3	Methods	53
6.4.4	Members inherited from class BaseEntity	55

7	Package com.moveatis.exception	56
7.1	Exception InstallationRedirectException	56
7.1.1	Declaration	56
7.1.2	Constructors	56
7.1.3	Members inherited from class Throwable	57
8	Package com.moveatis.export	58
8.1	Class CSVBuilder	58
8.1.1	Declaration	58
8.1.2	Constructors	58
8.1.3	Methods	59
8.2	Class CSVFileBuilder	60
8.2.1	Declaration	60
8.2.2	Constructors	60
8.2.3	Methods	60
9	Package com.moveatis.feedbackanalysis	62
9.1	Class FeedbackAnalysisBean	62
9.1.1	Declaration	62
9.1.2	Constructors	62
9.1.3	Methods	62
9.1.4	Members inherited from class AbstractBean	65
9.2	Class FeedbackAnalysisEntity	65
9.2.1	Declaration	65
9.2.2	Constructors	65
9.2.3	Methods	65
9.2.4	Members inherited from class AbstractObservationEntity	66
9.2.5	Members inherited from class BaseEntity	67
10	Package com.moveatis.feedbackanalysiscategory	68
10.1	Class FeedbackAnalysisCategoryEntity	68
10.1.1	Declaration	68
10.1.2	Constructors	68
10.1.3	Methods	68
10.1.4	Members inherited from class AbstractCategoryEntity	69
10.1.5	Members inherited from class BaseEntity	70
10.2	Class FeedbackAnalysisCategorySetEntity	70
10.2.1	Declaration	70
10.2.2	Constructors	70
10.2.3	Methods	70
10.2.4	Members inherited from class AbstractCategorySetEntity	71
10.2.5	Members inherited from class BaseEntity	71
11	Package com.moveatis.filters	72
11.1	Class ControlFilter	72
11.1.1	Declaration	72
11.1.2	Constructors	72

11.1.3	Methods	72
11.2	Class LoginFilter	74
11.2.1	Declaration	74
11.2.2	Constructors	74
11.2.3	Methods	74
11.3	Class SuperUserFilter	75
11.3.1	Declaration	76
11.3.2	Constructors	76
11.3.3	Methods	76
12	Package com.moveatis.groupkey	78
12.1	Class GroupKeyBean	78
12.1.1	Declaration	78
12.1.2	Constructors	78
12.1.3	Methods	78
12.1.4	Members inherited from class AbstractBean	79
12.2	Class GroupKeyEntity	79
12.2.1	Declaration	80
12.2.2	Constructors	80
12.2.3	Methods	80
12.2.4	Members inherited from class BaseEntity	81
13	Package com.moveatis.helpers	82
13.1	Class DownloadTools	82
13.1.1	Declaration	82
13.1.2	Constructors	82
13.1.3	Methods	82
13.2	Class GroupKeyGenerator	83
13.2.1	Declaration	83
13.2.2	Constructors	83
13.2.3	Methods	84
13.3	Class Validation	84
13.3.1	Declaration	84
13.3.2	Constructors	84
13.3.3	Methods	84
14	Package com.moveatis.identityprovider	85
14.1	Interface IdentityProvider	85
14.1.1	Declaration	85
14.1.2	All known subinterfaces	85
14.1.3	All classes known to implement interface	86
14.1.4	Methods	86
14.2	Class IdentityProviderBean	86
14.2.1	Declaration	86
14.2.2	Constructors	86
14.2.3	Methods	86
14.2.4	Members inherited from class AbstractBean	86

14.3	Class IdentityProviderInformationEntity	87
14.3.1	Declaration	87
14.3.2	Constructors	87
14.3.3	Methods	87
14.3.4	Members inherited from class BaseEntity	88
14.4	Class IdentityProviderRegistrationBean	88
14.4.1	Declaration	88
14.4.2	Constructors	88
14.4.3	Methods	88
15	Package com.moveatis.interfaces	89
15.1	Interface AnonUser	90
15.1.1	Declaration	90
15.1.2	All known subinterfaces	90
15.1.3	All classes known to implement interface	90
15.1.4	Methods	90
15.2	Interface Application	91
15.2.1	Declaration	91
15.2.2	All known subinterfaces	91
15.2.3	All classes known to implement interface	91
15.2.4	Methods	91
15.3	Interface Category	92
15.3.1	Declaration	92
15.3.2	All known subinterfaces	92
15.3.3	All classes known to implement interface	92
15.3.4	Methods	92
15.4	Interface CategorySet	93
15.4.1	Declaration	93
15.4.2	All known subinterfaces	93
15.4.3	All classes known to implement interface	93
15.4.4	Methods	93
15.5	Interface Event	94
15.5.1	Declaration	95
15.5.2	All known subinterfaces	95
15.5.3	All classes known to implement interface	95
15.5.4	Methods	95
15.6	Interface EventGroup	96
15.6.1	Declaration	96
15.6.2	All known subinterfaces	96
15.6.3	All classes known to implement interface	96
15.6.4	Methods	96
15.7	Interface FeedbackAnalysis	98
15.7.1	Declaration	98
15.7.2	All known subinterfaces	98
15.7.3	All classes known to implement interface	98
15.7.4	Methods	98

15.8	Interface FeedbackAnalysisRecord	100
15.8.1	Declaration	100
15.8.2	All known subinterfaces	100
15.8.3	All classes known to implement interface	100
15.8.4	Methods	100
15.9	Interface GroupKey	101
15.9.1	Declaration	101
15.9.2	All known subinterfaces	101
15.9.3	All classes known to implement interface	101
15.9.4	Methods	101
15.10	Interface Label	102
15.10.1	Declaration	102
15.10.2	All known subinterfaces	102
15.10.3	All classes known to implement interface	102
15.10.4	Methods	103
15.11	Interface Mailer	103
15.11.1	Declaration	104
15.11.2	All known subinterfaces	104
15.11.3	All classes known to implement interface	104
15.11.4	Methods	104
15.12	Interface MessageBundle	104
15.12.1	Declaration	104
15.13	Interface Observation	104
15.13.1	Declaration	104
15.13.2	All known subinterfaces	104
15.13.3	All classes known to implement interface	105
15.13.4	Methods	105
15.14	Interface Record	106
15.14.1	Declaration	106
15.14.2	All known subinterfaces	106
15.14.3	All classes known to implement interface	106
15.14.4	Methods	106
15.15	Interface Role	107
15.15.1	Declaration	107
15.15.2	All known subinterfaces	107
15.15.3	All classes known to implement interface	107
15.15.4	Methods	108
15.16	Interface Session	108
15.16.1	Declaration	108
15.16.2	All known subinterfaces	108
15.16.3	All classes known to implement interface	108
15.16.4	Methods	109
15.17	Interface TagUser	111
15.17.1	Declaration	111
15.17.2	All known subinterfaces	111
15.17.3	All classes known to implement interface	111

15.17.4 Methods	111
15.18 Interface User	112
15.18.1 Declaration	112
15.18.2 All known subinterfaces	112
15.18.3 All classes known to implement interface	112
15.18.4 Methods	112
16 Package com.moveatis.label	114
16.1 Class LabelBean	114
16.1.1 Declaration	114
16.1.2 Constructors	114
16.1.3 Methods	114
16.1.4 Members inherited from class AbstractBean	115
16.2 Class LabelEntity	115
16.2.1 Declaration	115
16.2.2 Constructors	115
16.2.3 Methods	116
16.2.4 Members inherited from class BaseEntity	117
17 Package com.moveatis.mail	118
17.1 Class MailerBean	118
17.1.1 Declaration	118
17.1.2 Constructors	118
17.1.3 Methods	118
18 Package com.moveatis.managedbeans	120
18.1 Class ApplicationManagedBean	121
18.1.1 Declaration	121
18.1.2 Constructors	121
18.1.3 Methods	121
18.2 Class CategoryManagedBean	122
18.2.1 Declaration	122
18.2.2 Constructors	122
18.2.3 Methods	122
18.3 Class CategorySelectionManagedBean	123
18.3.1 Declaration	123
18.3.2 Constructors	123
18.3.3 Methods	123
18.4 Class CategorySetManagedBean	126
18.4.1 Declaration	127
18.4.2 Constructors	127
18.4.3 Methods	127
18.5 Class ControlManagedBean	127
18.5.1 Declaration	127
18.5.2 Constructors	127
18.5.3 Methods	128
18.6 Class EventGroupManagedBean	137

- 18.6.1 Declaration 137
- 18.6.2 Constructors 137
- 18.6.3 Methods 137
- 18.7 Class EventManagedBean 139
 - 18.7.1 Declaration 139
 - 18.7.2 Constructors 139
 - 18.7.3 Methods 139
- 18.8 Class FeedbackAnalysisRecordTableManagedBean 140
 - 18.8.1 Declaration 140
 - 18.8.2 Constructors 140
 - 18.8.3 Methods 140
- 18.9 Class FeedbackAnalysisCategorySelectionManagedBean 142
 - 18.9.1 Declaration 142
 - 18.9.2 Constructors 142
 - 18.9.3 Methods 143
- 18.10 Class FeedbackAnalysisManagedBean 146
 - 18.10.1 Declaration 147
 - 18.10.2 Constructors 147
 - 18.10.3 Methods 147
- 18.11 Class FeedbackAnalysisSummaryManagedBean 154
 - 18.11.1 Declaration 154
 - 18.11.2 Constructors 154
 - 18.11.3 Methods 154
- 18.12 Class FeedbackAnalysisSummaryManagedBean.TableInformation 158
 - 18.12.1 Declaration 158
 - 18.12.2 Constructors 158
 - 18.12.3 Methods 158
- 18.13 Class LoginManagedBean 159
 - 18.13.1 Declaration 159
 - 18.13.2 Constructors 159
 - 18.13.3 Methods 159
- 18.14 Class ObservationManagedBean 160
 - 18.14.1 Declaration 161
 - 18.14.2 Constructors 161
 - 18.14.3 Methods 161
- 18.15 Class SummaryManagedBean 163
 - 18.15.1 Declaration 164
 - 18.15.2 Constructors 164
 - 18.15.3 Methods 164
- 18.16 Class SuperUserManagedBean 167
 - 18.16.1 Declaration 167
 - 18.16.2 Constructors 167
 - 18.16.3 Methods 167
- 18.17 Class TimeManagedBean 168
 - 18.17.1 Declaration 168
 - 18.17.2 Constructors 168

18.17.3 Methods	168
18.18 Class UserManagedBean	169
18.18.1 Declaration	169
18.18.2 Constructors	169
18.18.3 Methods	169
18.19 Class ValidationManagedBean	170
18.19.1 Declaration	170
18.19.2 Constructors	170
18.19.3 Methods	170
19 Package com.moveatis.observation	172
19.1 Class ObservationBean	172
19.1.1 Declaration	172
19.1.2 Constructors	172
19.1.3 Methods	173
19.1.4 Members inherited from class AbstractBean	175
19.2 Class ObservationCategory	175
19.2.1 Declaration	175
19.2.2 Constructors	175
19.2.3 Methods	175
19.3 Class ObservationCategorySet	176
19.3.1 Declaration	177
19.3.2 Constructors	177
19.3.3 Methods	177
19.4 Class ObservationCategorySetList	178
19.4.1 Declaration	178
19.4.2 Constructors	178
19.4.3 Methods	179
19.5 Class ObservationEntity	179
19.5.1 Declaration	180
19.5.2 Constructors	180
19.5.3 Methods	180
19.5.4 Members inherited from class AbstractObservationEntity	181
19.5.5 Members inherited from class BaseEntity	182
20 Package com.moveatis.providers	183
20.1 Class MessageProvider	183
20.1.1 Declaration	183
20.1.2 Constructors	183
20.1.3 Methods	183
21 Package com.moveatis.records	184
21.1 Class FeedbackAnalysisRecordBean	184
21.1.1 Declaration	184
21.1.2 Constructors	184
21.1.3 Methods	184
21.1.4 Members inherited from class AbstractBean	185

21.2	Class FeedbackAnalysisRecordEntity	185
21.2.1	Declaration	185
21.2.2	Constructors	185
21.2.3	Methods	185
21.2.4	Members inherited from class AbstractRecordEntity	186
21.2.5	Members inherited from class BaseEntity	187
21.3	Class RecordBean	187
21.3.1	Declaration	187
21.3.2	Constructors	187
21.3.3	Methods	187
21.3.4	Members inherited from class AbstractBean	187
21.4	Class RecordEntity	187
21.4.1	Declaration	188
21.4.2	Constructors	188
21.4.3	Methods	188
21.4.4	Members inherited from class AbstractRecordEntity	189
21.4.5	Members inherited from class BaseEntity	189
22	Package com.moveatis.restful	190
22.1	Class DataReceiver	190
22.1.1	Declaration	190
22.1.2	Constructors	190
22.1.3	Methods	190
22.2	Class MoveatisRestApplication	191
22.2.1	Declaration	191
22.2.2	Constructors	191
22.2.3	Methods	191
22.3	Class NotFoundExceptionMapper	192
22.3.1	Declaration	192
22.3.2	Constructors	192
22.3.3	Methods	192
22.4	Class RecordListenerBean	192
22.4.1	Declaration	192
22.4.2	Constructors	192
22.4.3	Methods	192
23	Package com.moveatis.roles	194
23.1	Class AbstractRole	194
23.1.1	Declaration	194
23.1.2	All known subclasses	194
23.1.3	Fields	194
23.1.4	Constructors	195
23.1.5	Methods	195
23.1.6	Members inherited from class BaseEntity	196
23.2	Class RoleBean	196
23.2.1	Declaration	196
23.2.2	Constructors	196

23.2.3	Methods	196
23.2.4	Members inherited from class <code>AbstractBean</code>	198
23.3	Class <code>SuperUserRoleEntity</code>	198
23.3.1	Declaration	198
23.3.2	Constructors	198
23.3.3	Methods	198
23.3.4	Members inherited from class <code>AbstractRole</code>	199
23.3.5	Members inherited from class <code>BaseEntity</code>	199
24	Package <code>com.moveatis.servlet</code>	200
24.1	Class <code>JyuIdentityServlet</code>	200
24.1.1	See also	200
24.1.2	Declaration	200
24.1.3	Constructors	200
24.1.4	Methods	201
25	Package <code>com.moveatis.session</code>	202
25.1	Class <code>LogoutBean</code>	202
25.1.1	Declaration	202
25.1.2	Constructors	202
25.1.3	Methods	202
25.2	Class <code>SessionBean</code>	203
25.2.1	Declaration	203
25.2.2	Constructors	203
25.2.3	Methods	203
26	Package <code>com.moveatis.timezone</code>	207
26.1	Class <code>TimeZoneInformation</code>	207
26.1.1	Declaration	207
26.1.2	Constructors	207
26.1.3	Methods	207
27	Package <code>com.moveatis.user</code>	209
27.1	Class <code>AbstractUser</code>	209
27.1.1	Declaration	209
27.1.2	All known subclasses	210
27.1.3	Constructors	210
27.1.4	Methods	210
27.1.5	Members inherited from class <code>BaseEntity</code>	210
27.2	Class <code>AnonUserBean</code>	211
27.2.1	Declaration	211
27.2.2	Constructors	211
27.2.3	Methods	211
27.2.4	Members inherited from class <code>AbstractBean</code>	211
27.3	Class <code>AnonUserEntity</code>	211
27.3.1	Declaration	212
27.3.2	Constructors	212

27.3.3	Methods	212
27.3.4	Members inherited from class AbstractUser	213
27.3.5	Members inherited from class BaseEntity	213
27.4	Class IdentifiedUserEntity	213
27.4.1	Declaration	213
27.4.2	Constructors	213
27.4.3	Methods	213
27.4.4	Members inherited from class AbstractUser	215
27.4.5	Members inherited from class BaseEntity	215
27.5	Class TagUserBean	215
27.5.1	Declaration	215
27.5.2	Constructors	215
27.5.3	Methods	215
27.5.4	Members inherited from class AbstractBean	216
27.6	Class TagUserEntity	216
27.6.1	Declaration	216
27.6.2	Constructors	216
27.6.3	Methods	216
27.6.4	Members inherited from class AbstractUser	217
27.6.5	Members inherited from class BaseEntity	217
27.7	Class UserBean	217
27.7.1	Declaration	218
27.7.2	Constructors	218
27.7.3	Methods	218
27.7.4	Members inherited from class AbstractBean	218
28	Package com.moveatis.validation	219
28.1	Class EmailValidatorBean	219
28.1.1	Declaration	219
28.1.2	Constructors	219
28.1.3	Methods	219

Class Hierarchy

Classes

- `java.lang.Object`
 - `Application`
 - `com.moveatis.restful.MoveatisRestApplication` (in 22.2, page 191)
 - `HttpServlet`
 - `com.moveatis.servlet.JyuIdentityServlet` (in 24.1, page 200)
 - `com.moveatis.abstracts.AbstractBean` (in 1.1, page 18)
 - `com.moveatis.application.ApplicationBean` (in 2.1, page 30)
 - `com.moveatis.category.CategoryBean` (in 3.1, page 35)
 - `com.moveatis.category.CategorySetBean` (in 3.3, page 38)
 - `com.moveatis.event.EventBean` (in 6.1, page 47)
 - `com.moveatis.event.EventGroupBean` (in 6.3, page 51)
 - `com.moveatis.feedbackanalysis.FeedbackAnalysisBean` (in 9.1, page 62)
 - `com.moveatis.groupkey.GroupKeyBean` (in 12.1, page 78)
 - `com.moveatis.identityprovider.IdentityProviderBean` (in 14.2, page 86)
 - `com.moveatis.label.LabelBean` (in 16.1, page 114)
 - `com.moveatis.observation.ObservationBean` (in 19.1, page 172)
 - `com.moveatis.records.FeedbackAnalysisRecordBean` (in 21.1, page 184)
 - `com.moveatis.records.RecordBean` (in 21.3, page 187)
 - `com.moveatis.roles.RoleBean` (in 23.2, page 196)
 - `com.moveatis.user.AnonUserBean` (in 27.2, page 211)
 - `com.moveatis.user.TagUserBean` (in 27.5, page 215)
 - `com.moveatis.user.UserBean` (in 27.7, page 217)
 - `com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)
 - `com.moveatis.abstracts.AbstractCategoryEntity` (in 1.2, page 20)
 - `com.moveatis.category.CategoryEntity` (in 3.2, page 36)
 - `com.moveatis.feedbackanalysiscategory.FeedbackAnalysisCategoryEntity` (in 10.1, page 68)
 - `com.moveatis.abstracts.AbstractCategorySetEntity` (in 1.3, page 22)
 - `com.moveatis.category.CategorySetEntity` (in 3.4, page 39)
 - `com.moveatis.feedbackanalysiscategory.FeedbackAnalysisCategorySetEntity` (in 10.2, page 70)
 - `com.moveatis.abstracts.AbstractObservationEntity` (in 1.4, page 25)
 - `com.moveatis.feedbackanalysis.FeedbackAnalysisEntity` (in 9.2, page 65)
 - `com.moveatis.observation.ObservationEntity` (in 19.5, page 179)

- [com.moveatis.abstracts.AbstractRecordEntity](#) (in 1.5, page 26)
 - [com.moveatis.records.FeedbackAnalysisRecordEntity](#) (in 21.2, page 185)
 - [com.moveatis.records.RecordEntity](#) (in 21.4, page 187)
- [com.moveatis.application.ApplicationEntity](#) (in 2.2, page 31)
- [com.moveatis.event.EventEntity](#) (in 6.2, page 49)
- [com.moveatis.event.EventGroupEntity](#) (in 6.4, page 52)
- [com.moveatis.groupkey.GroupKeyEntity](#) (in 12.2, page 79)
- [com.moveatis.identityprovider.IdentityProviderInformationEntity](#) (in 14.3, page 87)
- [com.moveatis.label.LabelEntity](#) (in 16.2, page 115)
- [com.moveatis.roles.AbstractRole](#) (in 23.1, page 194)
 - [com.moveatis.roles.SuperUserRoleEntity](#) (in 23.3, page 198)
- [com.moveatis.user.AbstractUser](#) (in 27.1, page 209)
 - [com.moveatis.user.AnonUserEntity](#) (in 27.3, page 211)
 - [com.moveatis.user.IdentifiedUserEntity](#) (in 27.4, page 213)
 - [com.moveatis.user.TagUserEntity](#) (in 27.6, page 216)
- [com.moveatis.application.InstallationBean](#) (in 2.3, page 33)
- [com.moveatis.application.RedirectURLs](#) (in 2.4, page 34)
- [com.moveatis.devel.DevelJYULoginBean](#) (in 4.1, page 42)
- [com.moveatis.export.CSVBuilder](#) (in 8.1, page 58)
- [com.moveatis.export.CSVFileBuilder](#) (in 8.2, page 60)
- [com.moveatis.filters.ControlFilter](#) (in 11.1, page 72)
- [com.moveatis.filters.LoginFilter](#) (in 11.2, page 74)
- [com.moveatis.filters.SuperUserFilter](#) (in 11.3, page 75)
- [com.moveatis.helpers.DownloadTools](#) (in 13.1, page 82)
- [com.moveatis.helpers.GroupKeyGenerator](#) (in 13.2, page 83)
- [com.moveatis.helpers.Validation](#) (in 13.3, page 84)
- [com.moveatis.identityprovider.IdentityProviderRegistrationBean](#) (in 14.4, page 88)
- [com.moveatis.mail.MailerBean](#) (in 17.1, page 118)
- [com.moveatis.managedbeans.ApplicationManagedBean](#) (in 18.1, page 121)
- [com.moveatis.managedbeans.CategoryManagedBean](#) (in 18.2, page 122)
- [com.moveatis.managedbeans.CategorySelectionManagedBean](#) (in 18.3, page 123)
- [com.moveatis.managedbeans.CategorySetManagedBean](#) (in 18.4, page 126)
- [com.moveatis.managedbeans.ControlManagedBean](#) (in 18.5, page 127)
- [com.moveatis.managedbeans.EventGroupManagedBean](#) (in 18.6, page 137)
- [com.moveatis.managedbeans.EventManagedBean](#) (in 18.7, page 139)
- [com.moveatis.managedbeans.FeedbackAnalysisRecordTableManagedBean](#) (in 18.8, page 140)
- [com.moveatis.managedbeans.FeedbackAnalysisCategorySelectionManagedBean](#) (in 18.9, page 142)
- [com.moveatis.managedbeans.FeedbackAnalysisManagedBean](#) (in 18.10, page 146)
- [com.moveatis.managedbeans.FeedbackAnalysisSummaryManagedBean](#) (in 18.11, page 154)
- [com.moveatis.managedbeans.FeedbackAnalysisSummaryManagedBean.TableInformation](#) (in 18.12, page 158)
- [com.moveatis.managedbeans.LoginManagedBean](#) (in 18.13, page 159)
- [com.moveatis.managedbeans.ObservationManagedBean](#) (in 18.14, page 160)
- [com.moveatis.managedbeans.SummaryManagedBean](#) (in 18.15, page 163)

- `com.moveatis.managedbeans.SuperUserManagedBean` (in 18.16, page 167)
- `com.moveatis.managedbeans.TimeManagedBean` (in 18.17, page 168)
- `com.moveatis.managedbeans.UserManagedBean` (in 18.18, page 169)
- `com.moveatis.managedbeans.ValidationManagedBean` (in 18.19, page 170)
- `com.moveatis.observation.ObservationCategory` (in 19.2, page 175)
- `com.moveatis.observation.ObservationCategorySet` (in 19.3, page 176)
- `com.moveatis.observation.ObservationCategorySetList` (in 19.4, page 178)
- `com.moveatis.providers.MessageProvider` (in 20.1, page 183)
- `com.moveatis.restful.DataReceiver` (in 22.1, page 190)
- `com.moveatis.restful.NotFoundExceptionMapper` (in 22.3, page 192)
- `com.moveatis.restful.RecordListenerBean` (in 22.4, page 192)
- `com.moveatis.session.LogoutBean` (in 25.1, page 202)
- `com.moveatis.session.SessionBean` (in 25.2, page 203)
- `com.moveatis.timezone.TimeZoneInformation` (in 26.1, page 207)
- `com.moveatis.validation.EmailValidatorBean` (in 28.1, page 219)
- `java.lang.Enum`
 - `com.moveatis.category.CategoryType` (in 3.5, page 41)
 - `com.moveatis.enums.ApplicationStatusCode` (in 5.1, page 44)
 - `com.moveatis.enums.MailStatus` (in 5.2, page 45)

Interfaces

- `com.moveatis.identityprovider.IdentityProvider` (in 14.1, page 85)
- `com.moveatis.interfaces.AnonUser` (in 15.1, page 90)
- `com.moveatis.interfaces.Application` (in 15.2, page 91)
- `com.moveatis.interfaces.Category` (in 15.3, page 92)
- `com.moveatis.interfaces.CategorySet` (in 15.4, page 93)
- `com.moveatis.interfaces.Event` (in 15.5, page 94)
- `com.moveatis.interfaces.EventGroup` (in 15.6, page 96)
- `com.moveatis.interfaces.FeedbackAnalysis` (in 15.7, page 98)
- `com.moveatis.interfaces.FeedbackAnalysisRecord` (in 15.8, page 100)
- `com.moveatis.interfaces.GroupKey` (in 15.9, page 101)
- `com.moveatis.interfaces.Label` (in 15.10, page 102)
- `com.moveatis.interfaces.Mailer` (in 15.11, page 103)
- `com.moveatis.interfaces.Observation` (in 15.13, page 104)
- `com.moveatis.interfaces.Record` (in 15.14, page 106)
- `com.moveatis.interfaces.Role` (in 15.15, page 107)
- `com.moveatis.interfaces.Session` (in 15.16, page 108)
- `com.moveatis.interfaces.TagUser` (in 15.17, page 111)
- `com.moveatis.interfaces.User` (in 15.18, page 112)
- `java.lang.annotation.Annotation`
- `com.moveatis.interfaces.MessageBundle` (in 15.12, page 104)

Exceptions

- `java.lang.Object`
- `java.lang.Throwable`
- `java.lang.Exception`
- `java.lang.RuntimeException`
- `com.moveatis.exception.InstallationRedirectException` (in [7.1](#), page [56](#))

Chapter 1

Package com.moveatis.abstracts

<i>Package Contents</i>	<i>Page</i>
Classes	
AbstractBean 18 The super class to the enterprise beans manages the persistent connection and entities.	
AbstractCategoryEntity 20 Abstracts the categories to allow for categories in simple observations and in feedback analysis	
AbstractCategorySetEntity 22 Common features of the categorysets for feedback analysis and observations	
AbstractObservationEntity 25 Superclass for the common features of feedback analyses and observations	
AbstractRecordEntity 26 Superclass for the common features of records in observations and feedback analysis	
BaseEntity 28 The entity is the base of all the entities of the application.	

1.1 Class AbstractBean

The super class to the enterprise beans manages the persistent connection and entities.

1.1.1 Declaration

```
public abstract class AbstractBean
    extends java.lang.Object
```

1.1.2 All known subclasses

ApplicationBean (in 2.1, page 30), CategorySetBean (in 3.3, page 38), CategoryBean (in 3.1, page 35), EventGroupBean (in 6.3, page 51), EventBean (in 6.1, page 47), FeedbackAnalysisBean (in 9.1, page 62), GroupKeyBean (in 12.1, page 78), IdentityProviderBean (in 14.2, page 86), LabelBean (in 16.1, page

114), `ObservationBean` (in 19.1, page 172), `RecordBean` (in 21.3, page 187), `FeedbackAnalysisRecordBean` (in 21.1, page 184), `RoleBean` (in 23.2, page 196), `UserBean` (in 27.7, page 217), `TagUserBean` (in 27.5, page 215), `AnonUserBean` (in 27.2, page 211)

1.1.3 Constructors

- **AbstractBean**

```
public AbstractBean(java.lang.Class entityClass)
```

1.1.4 Methods

- **count**

```
public int count()
```

- **Description**

Counts how many entities there are of the requested type.

- **Returns** – The count of the entities.

- **create**

```
public void create(BaseEntity entity)
```

- **Description**

Creates a new entity.

- **Parameters**

* `entity` – The entity to be created.

- **edit**

```
public void edit(BaseEntity entity)
```

- **Description**

Edits the entity.

- **Parameters**

* `entity` – The entity to be edited.

- **find**

```
public BaseEntity find(java.lang.Object id)
```

- **Description**
Finds an entity and returns it if it's not out of date.
- **Parameters**
 - * `id` – The id of the entity to be found.
- **Returns** – The entity, if it is found. Otherwise null.

- **findAll**

```
public java.util.List findAll()
```

- **Description**
Finds all the entities, whose type matches the requested entity.
- **Returns** – A list of all the entities of the requested entity type.

- **findRange**

```
public java.util.List findRange(int [] range)
```

- **Description**
Finds and returns the list of entities in the specified range. The range array has two elements: the minimum and the maximum of the range.
- **Parameters**
 - * `range` – An array with two elements.
- **Returns** – A list of the entities in the range.

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```

- **remove**

```
public void remove(BaseEntity entity)
```

- **Description**
Removes the entity.
- **Parameters**
 - * `entity` – The entity to be removed.

1.2 Class AbstractCategoryEntity

Abstracts the categories to allow for categories in simple observations and in feedback analysis

1.2.1 Declaration

```
public abstract class AbstractCategoryEntity
    extends com.moveatis.abstracts.BaseEntity
```

1.2.2 All known subclasses

CategoryEntity (in [3.2](#), page [36](#)), FeedbackAnalysisCategoryEntity (in [10.1](#), page [68](#))

1.2.3 Constructors

- **AbstractCategoryEntity**

```
public AbstractCategoryEntity ()
```

1.2.4 Methods

- **equals**

```
public boolean equals (java.lang.Object arg0)
```

- **getCategorySet**

```
public abstract AbstractCategorySetEntity getCategorySet ()
```

- **getDescription**

```
public java.lang.String getDescription ()
```

- **getId**

```
public java.lang.Long getId ()
```

- **getLabel**

```
public com.moveatis.label.LabelEntity getLabel ()
```

- **getOrderNumber**

```
public java.lang.Integer getOrderNumber ()
```

- **hashCode**

```
public native int hashCode ()
```

- **setCategorySet**

```
public abstract void setCategorySet( AbstractCategorySetEntity  
    abstractCategorySetEntity )
```

- **setDescription**

```
public void setDescription( java.lang.String description )
```

- **setId**

```
public void setId( java.lang.Long id )
```

- **setLabel**

```
public void setLabel( com.moveatis.label.LabelEntity label )
```

- **setOrderNumber**

```
public void setOrderNumber( java.lang.Integer orderNumber )
```

- **toString**

```
public java.lang.String toString()
```

1.2.5 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date **getCreated()**
- public Long **getId()**
- protected Date **getRemoved()**
- protected **id**
- public void **setCreated()**
- public void **setId(java.lang.Long id)**
- protected void **setRemoved()**

1.3 Class AbstractCategorySetEntity

Common features of the categorysets for feedback analysis and observations

1.3.1 Declaration

```
public abstract class AbstractCategorySetEntity
    extends com.moveatis.abstracts.BaseEntity implements java.io.
        Serializable
```

1.3.2 All known subclasses

CategorySetEntity (in 3.4, page 39), FeedbackAnalysisCategorySetEntity (in 10.2, page 70)

1.3.3 Constructors

- **AbstractCategorySetEntity**

```
public AbstractCategorySetEntity()
```

1.3.4 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getCategoryEntitys**

```
public abstract java.util.Map getCategoryEntitys()
```

- **getCreator**

```
public com.moveatis.user.IdentifiedUserEntity getCreator()
```

- **getDescription**

```
public java.lang.String getDescription()
```

- **getEventGroupEntity**

```
public com.moveatis.event.EventGroupEntity getEventGroupEntity()
```

- **getId**

```
public java.lang.Long getId()
```

- **getLabel**

- ```
public java.lang.String getLabel()
```
- hashCode
- ```
public native int hashCode()
```
- setCategoryEntitys
- ```
public abstract void setCategoryEntitys(java.util.Map categories
)
```
- setCreator
- ```
public void setCreator(com.moveatis.user.IdentifiedUserEntity
    creator)
```
- setDescription
- ```
public void setDescription(java.lang.String description)
```
- setEventGroupEntity
- ```
public void setEventGroupEntity(com.moveatis.event.
    EventGroupEntity eventGroupEntity)
```
- setId
- ```
public void setId(java.lang.Long id)
```
- setLabel
- ```
public void setLabel(java.lang.String label)
```
- toString
- ```
public java.lang.String toString()
```

### 1.3.5 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date getCreated()
- public Long getId()
- protected Date getRemoved()
- protected id
- public void setCreated()
- public void setId(java.lang.Long id)
- protected void setRemoved()

## 1.4 Class AbstractObservationEntity

Superclass for the common features of feedback analyses and observations

### 1.4.1 Declaration

```
public abstract class AbstractObservationEntity
 extends com.moveatis.abstracts.BaseEntity
```

### 1.4.2 All known subclasses

FeedbackAnalysisEntity (in [9.2](#), page [65](#)), ObservationEntity (in [19.5](#), page [179](#))

### 1.4.3 Constructors

- **AbstractObservationEntity**

```
public AbstractObservationEntity ()
```

### 1.4.4 Methods

- **equals**

```
public boolean equals (java.lang.Object arg0)
```

- **getDescription**

```
public java.lang.String getDescription ()
```

- **getDuration**

```
public long getDuration ()
```

- **getEvent**

```
public com.moveatis.event.EventEntity getEvent ()
```

- **getId**

```
public java.lang.Long getId ()
```

- **getObserver**

```
public com.moveatis.user.AbstractUser getObserver ()
```

- **hashCode**

```
public native int hashCode()
```

- **setDescription**

```
public void setDescription(java.lang.String description)
```

- **setDuration**

```
public void setDuration(long duration)
```

- **setEvent**

```
public void setEvent(com.moveatis.event.EventEntity event)
```

- **setId**

```
public void setId(java.lang.Long id)
```

- **setObserver**

```
public void setObserver(com.moveatis.user.AbstractUser observer)
```

- **toString**

```
public java.lang.String toString()
```

### 1.4.5 Members inherited from class **BaseEntity**

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## 1.5 Class **AbstractRecordEntity**

Superclass for the common features of records in observations and feedback analysis

### 1.5.1 Declaration

```
public abstract class AbstractRecordEntity
 extends com.moveatis.abstracts.BaseEntity
```

### 1.5.2 All known subclasses

RecordEntity (in 21.4, page 187), FeedbackAnalysisRecordEntity (in 21.2, page 185)

### 1.5.3 Constructors

- **AbstractRecordEntity**

```
public AbstractRecordEntity()
```

### 1.5.4 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getComment**

```
public java.lang.String getComment()
```

- **getStartTime**

```
public java.lang.Long getStartTime()
```

- **hashCode**

```
public native int hashCode()
```

- **setComment**

```
public void setComment(java.lang.String comment)
```

- **setStartTime**

```
public void setStartTime(java.lang.Long startTime)
```

- **toString**

```
public java.lang.String toString()
```

### 1.5.5 Members inherited from class BaseEntity

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## 1.6 Class BaseEntity

The entity is the base of all the entities of the application. It has the id and the dates for creation and removal. Like the `MappedSuperclass`, it's not persisted to the database itself.

### 1.6.1 Declaration

```
public abstract class BaseEntity
 extends java.lang.Object
```

### 1.6.2 All known subclasses

`AbstractRecordEntity` (in 1.5, page 26), `AbstractObservationEntity` (in 1.4, page 25), `AbstractCategorySetEntity` (in 1.3, page 22), `AbstractCategoryEntity` (in 1.2, page 20), `ApplicationEntity` (in 2.2, page 31), `CategorySetEntity` (in 3.4, page 39), `CategoryEntity` (in 3.2, page 36), `EventGroupEntity` (in 6.4, page 52), `EventEntity` (in 6.2, page 49), `FeedbackAnalysisEntity` (in 9.2, page 65), `FeedbackAnalysisCategorySetEntity` (in 10.2, page 70), `FeedbackAnalysisCategoryEntity` (in 10.1, page 68), `GroupKeyEntity` (in 12.2, page 79), `IdentityProviderInformationEntity` (in 14.3, page 87), `LabelEntity` (in 16.2, page 115), `ObservationEntity` (in 19.5, page 179), `RecordEntity` (in 21.4, page 187), `FeedbackAnalysisRecordEntity` (in 21.2, page 185), `SuperUserRoleEntity` (in 23.3, page 198), `AbstractRole` (in 23.1, page 194), `TagUserEntity` (in 27.6, page 216), `IdentifiedUserEntity` (in 27.4, page 213), `AnonUserEntity` (in 27.3, page 211), `AbstractUser` (in 27.1, page 209)

### 1.6.3 Fields

- `protected java.lang.Long id`

### 1.6.4 Constructors

- `BaseEntity`

```
public BaseEntity()
```

### 1.6.5 Methods

- **getCreated**

```
public java.util.Date getCreated()
```

- **getId**

```
public java.lang.Long getId()
```

- **getRemoved**

```
protected java.util.Date getRemoved()
```

- **setCreated**

```
public void setCreated()
```

- **setId**

```
public void setId(java.lang.Long id)
```

- **setRemoved**

```
protected void setRemoved()
```

## Chapter 2

# Package `com.moveatis.application`

| <i>Package Contents</i>                                                              | <i>Page</i> |
|--------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                       |             |
| <b>ApplicationBean</b> .....                                                         | 30          |
| The Application enterprise bean controls access to the application entity.           |             |
| <b>ApplicationEntity</b> .....                                                       | 31          |
| The entity represents the data of the application in the database.                   |             |
| <b>InstallationBean</b> .....                                                        | 33          |
| The class does the installation task of the Moveatis application.                    |             |
| <b>RedirectURLs</b> .....                                                            | 34          |
| The class has the URIs for redirection within the Jyväskylä University login system. |             |

## 2.1 Class `ApplicationBean`

The Application enterprise bean controls access to the application entity. It is a singleton bean, so only one instance is running at any time, and it is automatically started when the application is started.

### 2.1.1 Declaration

```
public class ApplicationBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.Application
```

### 2.1.2 Constructors

- `ApplicationBean`

```
public ApplicationBean()
```

### 2.1.3 Methods

- **checkInstalled**

```
public boolean checkInstalled ()
```

- **Description**

Checks if the application has been installed.

- **getApplicationEntity**

```
public ApplicationEntity getApplicationEntity ()
```

- **Description**

Gets the singleton application entity.

- **getEntityManager**

```
protected abstract EntityManager getEntityManager ()
```

### 2.1.4 Members inherited from class AbstractBean

com.moveatis.abstracts.AbstractBean (in [1.1](#), page [18](#))

- public int count()
- public void create(BaseEntity entity)
- public void edit(BaseEntity entity)
- public BaseEntity find(java.lang.Object id)
- public List findAll()
- public List findRange(int[] range)
- protected abstract EntityManager getEntityManager()
- public void remove(BaseEntity entity)

## 2.2 Class ApplicationEntity

The entity represents the data of the application in the database.

### 2.2.1 Declaration

```
public class ApplicationEntity
 extends com.moveatis.abstracts.BaseEntity implements java.io.
 Serializable
```

### 2.2.2 Constructors

- **ApplicationEntity**

```
public ApplicationEntity ()
```



### 2.2.3 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getApplicationInstalled**

```
public java.util.Date getApplicationInstalled()
```

- **Description**

- Returns the date when the application was installed.

- **getReportEmail**

```
public java.lang.String getReportEmail()
```

- **getSuperUsers**

```
public java.util.List getSuperUsers()
```

- **Description**

- Gets the list of the users with the superuser role.

- **hashCode**

```
public native int hashCode()
```

- **setApplicationInstalled**

```
public void setApplicationInstalled(java.util.Date
 applicationInstalled)
```

- **Description**

- Sets the date when the application was installed.

- **setReportEmail**

```
public void setReportEmail(java.lang.String reportEmail)
```

- **setSuperUsers**

```
public void setSuperUsers(java.util.List superUsers)
```

- **toString**

```
public java.lang.String toString()
```

### 2.2.4 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date **getCreated()**
- public Long **getId()**
- protected Date **getRemoved()**
- protected **id**
- public void **setCreated()**
- public void **setId(java.lang.Long id)**
- protected void **setRemoved()**

## 2.3 Class InstallationBean

The class does the installation task of the Moveatis application.

### 2.3.1 Declaration

```
public class InstallationBean
 extends java.lang.Object implements java.io.Serializable
```

### 2.3.2 Constructors

- **InstallationBean**

```
public InstallationBean()
```

### 2.3.3 Methods

- **createApplication**

```
public com.moveatis.enums.ApplicationStatusCode
 createApplication()
```

- **Description**

The method creates the application, which includes setting the installation date, adding the user to superusers, and adding the reporting email address, where possible error reports are sent.

- **Returns** – enum, which result of the installation.

## 2.4 Class RedirectURLs

The class has the URIs for redirection within the Jyväskylä University login system.

### 2.4.1 Declaration

```
public class RedirectURLs
 extends java.lang.Object
```

### 2.4.2 Fields

- `public static final java.lang.String HOME_URI`
- `public static final java.lang.String SHIBBOLETH_REDIRECT_SECURE_URI`
- `public static final java.lang.String LOCALHOST_REDIRECT_SECURE_URI`
- `public static final java.lang.String LOCALHOST_HOME_URI`
- `public static final java.lang.String SHIBBOLET_LOGOUT_URL`
- `public static final java.lang.String CONTROL_PAGE_URI`
- `public static final java.lang.String ERROR_PAGE_URI`
- `public static final java.lang.String SMTP_HOST`

### 2.4.3 Constructors

- `RedirectURLs`

```
public RedirectURLs()
```

## Chapter 3

# Package `com.moveatis.category`

| <i>Package Contents</i>                                                     | <i>Page</i> |
|-----------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                              |             |
| <b>CategoryBean</b> ..... 35                                                |             |
| The EJB manages categories for both feedbackanalysis and observation.       |             |
| <b>CategoryEntity</b> ..... 36                                              |             |
| The entity represents the categories of an observation in the database.     |             |
| <b>CategorySetBean</b> ..... 38                                             |             |
| The EJB manages the CategorySet entities for both observation and analysis. |             |
| <b>CategorySetEntity</b> ..... 39                                           |             |
| The entity represents a category set in the database.                       |             |
| <b>CategoryType</b> ..... 41                                                |             |
| The enum represents the information of a category.                          |             |

### 3.1 Class `CategoryBean`

The EJB manages categories for both feedbackanalysis and observation.

#### 3.1.1 Declaration

```
public class CategoryBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.Category
```

#### 3.1.2 Constructors

- **CategoryBean**

```
public CategoryBean ()
```

### 3.1.3 Methods

- `getEntityManager`

```
protected abstract EntityManager getEntityManager()
```

- `removeFromCategorySet`

```
public void removeFromCategorySet(com.moveatis.abstracts.
 AbstractCategorySetEntity whichCategorySet ,com.moveatis.
 abstracts.AbstractCategoryEntity whichCategory)
```

– **Description**

Removes the category from the category set.

– **Parameters**

- \* `whichCategorySet` – The category set the category belongs to.
- \* `whichCategory` – The category to be removed.

### 3.1.4 Members inherited from class `AbstractBean`

`com.moveatis.abstracts.AbstractBean` (in 1.1, page 18)

- `public int count()`
- `public void create(BaseEntity entity)`
- `public void edit(BaseEntity entity)`
- `public BaseEntity find(java.lang.Object id)`
- `public List findAll()`
- `public List findRange(int[] range)`
- `protected abstract EntityManager getEntityManager()`
- `public void remove(BaseEntity entity)`

## 3.2 Class `CategoryEntity`

The entity represents the categories of an observation in the database.

### 3.2.1 Declaration

```
public class CategoryEntity
 extends com.moveatis.abstracts.AbstractCategoryEntity implements
 java.io.Serializable
```

### 3.2.2 Constructors

- `CategoryEntity`

```
public CategoryEntity()
```

### 3.2.3 Methods

- **getCanOverlap**

```
public java.lang.Boolean getCanOverlap()
```

- **getCategorySet**

```
public abstract com.moveatis.abstracts.AbstractCategorySetEntity
 getCategorySet()
```

- **getCategoryType**

```
public CategoryType getCategoryType()
```

- **setCanOverlap**

```
public void setCanOverlap(java.lang.Boolean canOverlap)
```

- **setCategorySet**

```
public abstract void setCategorySet(com.moveatis.abstracts.
 AbstractCategorySetEntity abstractCategorySetEntity)
```

- **setCategoryType**

```
public void setCategoryType(CategoryType categoryType)
```

### 3.2.4 Members inherited from class AbstractCategoryEntity

com.moveatis.abstracts.AbstractCategoryEntity (in 1.2, page 20)

- public boolean equals(java.lang.Object object)
- public abstract AbstractCategorySetEntity getCategorySet()
- public String getDescription()
- public Long getId()
- public LabelEntity getLabel()
- public Integer getOrderNumber()
- public int hashCode()
- public abstract void setCategorySet(AbstractCategorySetEntity abstractCategorySetEntity)
- public void setDescription(java.lang.String description)
- public void setId(java.lang.Long id)
- public void setLabel(com.moveatis.label.LabelEntity label)
- public void setOrderNumber(java.lang.Integer orderNumber)
- public String toString()

### 3.2.5 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date `getCreated()`
- public Long `getId()`
- protected Date `getRemoved()`
- protected `id`
- public void `setCreated()`
- public void `setId(java.lang.Long id)`
- protected void `setRemoved()`

## 3.3 Class CategorySetBean

The EJB manages the CategorySet entities for both observation and analysis.

### 3.3.1 Declaration

```
public class CategorySetBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.CategorySet
```

### 3.3.2 Constructors

- **CategorySetBean**

```
public CategorySetBean()
```

### 3.3.3 Methods

- **detachCategorySet**

```
void detachCategorySet(com.moveatis.abstracts.
 AbstractCategorySetEntity categorySetEntity)
```

- **findPublicCategorySets**

```
public java.util.Set findPublicCategorySets()
```

- **Description**

Finds the category sets that are set as public.

- **Returns** – Set of all public category set entities.

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```

- **remove**

```
public void remove(com.moveatis.abstracts.
 AbstractCategorySetEntity categorySetEntity)
```

- **Description**

Sets the category set removal date and removes the category set from event groups.

- **Parameters**

- \* `categorySetEntity` – The category set entity to be removed.

- **removeCategoryFromCategorySet**

```
public void removeCategoryFromCategorySet(com.moveatis.abstracts
 .AbstractCategorySetEntity categorySet ,com.moveatis.abstracts
 .AbstractCategoryEntity categoryEntity)
```

- **Description**

Removes the category from the category set.

- **Parameters**

- \* `categorySet` – The category set from which the category is removed from.
- \* `categoryEntity` – The category to be removed from the category set.

### 3.3.4 Members inherited from class `AbstractBean`

`com.moveatis.abstracts.AbstractBean` (in 1.1, page 18)

- `public int count()`
- `public void create(BaseEntity entity)`
- `public void edit(BaseEntity entity)`
- `public BaseEntity find(java.lang.Object id)`
- `public List findAll()`
- `public List findRange(int[] range)`
- `protected abstract EntityManager getEntityManager()`
- `public void remove(BaseEntity entity)`

## 3.4 Class `CategorySetEntity`

The entity represents a category set in the database.



### 3.4.1 Declaration

```
public class CategorySetEntity
 extends com.moveatis.abstracts.AbstractCategorySetEntity implements
 java.io.Serializable
```

### 3.4.2 Constructors

- **CategorySetEntity**

```
public CategorySetEntity()
```

### 3.4.3 Methods

- **getCategoryEntitys**

```
public abstract java.util.Map getCategoryEntitys()
```

- **setCategoryEntitys**

```
public abstract void setCategoryEntitys(java.util.Map categories
)
```

### 3.4.4 Members inherited from class AbstractCategorySetEntity

com.moveatis.abstracts.AbstractCategorySetEntity (in 1.3, page 22)

- public boolean equals(java.lang.Object object)
- public abstract Map getCategoryEntitys()
- public IdentifiedUserEntity getCreator()
- public String getDescription()
- public EventGroupEntity getEventGroupEntity()
- public Long getId()
- public String getLabel()
- public int hashCode()
- public abstract void setCategoryEntitys(java.util.Map categories)
- public void setCreator(com.moveatis.user.IdentifiedUserEntity creator)
- public void setDescription(java.lang.String description)
- public void setEventGroupEntity(com.moveatis.event.EventGroupEntity event-GroupEntity)
- public void setId(java.lang.Long id)
- public void setLabel(java.lang.String label)
- public String toString()

### 3.4.5 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date getCreated()
- public Long getId()
- protected Date getRemoved()
- protected id
- public void setCreated()
- public void setId(java.lang.Long id)
- protected void setRemoved()

## 3.5 Class CategoryType

The enum represents the information of a category. A category can be either a timed category with a time value, or a counted category with an amount value.

### 3.5.1 Declaration

```
public final class CategoryType
 extends java.lang.Enum
```

### 3.5.2 Fields

- `public static final CategoryType TIMED`
- `public static final CategoryType COUNTED`

### 3.5.3 Methods

- `valueOf`

```
public static CategoryType valueOf(java.lang.String name)
```

- `values`

```
public static CategoryType[] values()
```

### 3.5.4 Members inherited from class Enum

```
java.lang.Enum
```

- `protected final Object clone() throws CloneNotSupportedException`
- `public final int compareTo(Enum arg0)`
- `public final boolean equals(Object arg0)`
- `protected final void finalize()`
- `public final Class getDeclaringClass()`
- `public final int hashCode()`
- `public final String name()`
- `public final int ordinal()`
- `public String toString()`
- `public static Enum valueOf(Class arg0, String arg1)`

## Chapter 4

# Package com.moveatis.devel

| <i>Package Contents</i>                                                                                                              | <i>Page</i>        |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>Classes</b>                                                                                                                       |                    |
| <b>DevelJYULoginBean</b> .....                                                                                                       | <a href="#">42</a> |
| The bean is a dummy login bean for development purposes, as it mocks the Sibboleth identity provider system of Jyväskylä University. |                    |

### 4.1 Class DevelJYULoginBean

The bean is a dummy login bean for development purposes, as it mocks the Sibboleth identity provider system of Jyväskylä University.

#### 4.1.1 Declaration

```
public class DevelJYULoginBean
 extends java.lang.Object
```

#### 4.1.2 Constructors

- **DevelJYULoginBean**

```
public DevelJYULoginBean()
```

- **Description**

Creates a new instance of DevelJYULoginBean.

#### 4.1.3 Methods

- **doLogin**

```
public java.lang.String doLogin()
```

- **doRegistration**

```
public java.lang.String doRegistration()
```

- **doSuperUserRegistration**

```
public java.lang.String doSuperUserRegistration()
```

- **getAffiliation**

```
public java.lang.String getAffiliation()
```

- **getGivenName**

```
public java.lang.String getGivenName()
```

- **getIsLocalhost**

```
public java.lang.Boolean getIsLocalhost()
```

- **getUsername**

```
public java.lang.String getUsername()
```

- **setAffiliation**

```
public void setAffiliation(java.lang.String affiliation)
```

- **setGivenName**

```
public void setGivenName(java.lang.String givenName)
```

- **setUsername**

```
public void setUsername(java.lang.String username)
```

## Chapter 5

# Package `com.moveatis.enums`

| <i>Package Contents</i>                                             | <i>Page</i>        |
|---------------------------------------------------------------------|--------------------|
| <b>Classes</b>                                                      |                    |
| <b>ApplicationStatusCode</b> .....                                  | <a href="#">44</a> |
| The enum contains the information of the status of the application. |                    |
| <b>MailStatus</b> .....                                             | <a href="#">45</a> |
| The enum represents the status of the mail that was sent.           |                    |

### 5.1 Class `ApplicationStatusCode`

The enum contains the information of the status of the application. The application can be already installed, the installation went fine, or there was an error.

#### 5.1.1 Declaration

```
public final class ApplicationStatusCode
 extends java.lang.Enum
```

#### 5.1.2 Fields

- `public static final ApplicationStatusCode ALREADY_INSTALLED`
- `public static final ApplicationStatusCode INSTALLATION_OK`
- `public static final ApplicationStatusCode INSTALLATION_FAILED`

#### 5.1.3 Methods

- `valueOf`

```
public static ApplicationStatusCode valueOf(java.lang.String
 name)
```

- values

```
public static ApplicationStatusCode [] values()
```

#### 5.1.4 Members inherited from class Enum

```
java.lang.Enum
```

- protected final Object `clone()` throws CloneNotSupportedException
- public final int `compareTo(Enum arg0)`
- public final boolean `equals(Object arg0)`
- protected final void `finalize()`
- public final Class `getDeclaringClass()`
- public final int `hashCode()`
- public final String `name()`
- public final int `ordinal()`
- public String `toString()`
- public static Enum `valueOf(Class arg0, String arg1)`

## 5.2 Class MailStatus

The enum represents the status of the mail that was sent. The mail was either sent successfully or the sending failed.

### 5.2.1 Declaration

```
public final class MailStatus
 extends java.lang.Enum
```

### 5.2.2 Fields

- public static final MailStatus `MAIL_SENT_OK`
- public static final MailStatus `MAIL_SENT_FAILED`

### 5.2.3 Methods

- valueOf

```
public static MailStatus valueOf(java.lang.String name)
```

- values

```
public static MailStatus [] values()
```

### 5.2.4 Members inherited from class Enum

java.lang.Enum

- protected final Object **clone()** throws CloneNotSupportedException
- public final int **compareTo**(Enum arg0)
- public final boolean **equals**(Object arg0)
- protected final void **finalize**()
- public final Class **getDeclaringClass**()
- public final int **hashCode**()
- public final String **name**()
- public final int **ordinal**()
- public String **toString**()
- public static Enum **valueOf**(Class arg0, String arg1)

## Chapter 6

# Package com.moveatis.event

| <i>Package Contents</i>                                                        | <i>Page</i> |
|--------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                 |             |
| <b>EventBean</b> ..... 47                                                      |             |
| The EJB manages the events of an user.                                         |             |
| <b>EventEntity</b> ..... 49                                                    |             |
| The entity represents the information of the events.                           |             |
| <b>EventGroupBean</b> ..... 51                                                 |             |
| The EJB manages the event group entities.                                      |             |
| <b>EventGroupEntity</b> ..... 52                                               |             |
| The entity represents the information for the event groups of the application. |             |

### 6.1 Class EventBean

The EJB manages the events of an user.

#### 6.1.1 Declaration

```
public class EventBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.Event
```

#### 6.1.2 Constructors

- **EventBean**

```
public EventBean()
```

#### 6.1.3 Methods

- **findEventsForUser**



```
public java.util.List findEventsForUser (com.moveatis.user .
 IdentifiedUserEntity user)
```

– **Description**

Returns a list of the events belonging to the requested user.

– **Parameters**

\* **user** – The user for which the events should be searched for.

– **Returns** – A list of the user’s events.

• **getEntityManager**

```
protected abstract EntityManager getEntityManager ()
```

• **getEventEntity**

```
public EventEntity getEventEntity ()
```

– **Description**

Gets the event that is currently associated with the instance of the eventBean.

– **Returns** – the EventEntity associated with the instance.

• **removeFeedbackAnalysis**

```
void removeFeedbackAnalysis (com.moveatis.feedbackanalysis .
 FeedbackAnalysisEntity feedbackAnalysisEntity)
```

• **removeObservation**

```
public void removeObservation (com.moveatis.observation .
 ObservationEntity observationEntity)
```

– **Description**

The method removes the observations from the event of the instance of the eventBean.

– **Parameters**

\* **observationEntity** – The observation to be removed from the event.

#### 6.1.4 Members inherited from class AbstractBean

com.moveatis.abstracts.AbstractBean (in [1.1](#), page [18](#))

- public int count()
- public void create(BaseEntity entity)
- public void edit(BaseEntity entity)
- public BaseEntity find(java.lang.Object id)
- public List findAll()
- public List findRange(int[] range)
- protected abstract EntityManager getEntityManager()
- public void remove(BaseEntity entity)

## 6.2 Class EventEntity

The entity represents the information of the events.

### 6.2.1 Declaration

```
public class EventEntity
 extends com.moveatis.abstracts.BaseEntity implements java.io.
 Serializable
```

### 6.2.2 Constructors

- **EventEntity**

```
public EventEntity()
```

### 6.2.3 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getAnalyses**

```
public java.util.Set getAnalyses()
```

- **getCreator**

```
public com.moveatis.user.AbstractUser getCreator()
```

- **getDescription**

```
public java.lang.String getDescription()
```

- **getEventGroup**

```
public EventGroupEntity getEventGroup()
```

- **getId**

```
public java.lang.Long getId()
```

- **getLabel**

```
public java.lang.String getLabel()
```

- **getObservations**

```
public java.util.Set getObservations()
```

- **hashCode**

```
public native int hashCode()
```

- **setAnalyses**

```
public void setAnalyses(java.util.Set analyses)
```

- **setCreator**

```
public void setCreator(com.moveatis.user.AbstractUser creator)
```

- **setDescription**

```
public void setDescription(java.lang.String description)
```

- **setEventGroup**

```
public void setEventGroup(EventGroupEntity eventGroup)
```

- **setId**

```
public void setId(java.lang.Long id)
```

- **setLabel**

```
public void setLabel(java.lang.String label)
```

- **setObservations**

```
public void setObservations(java.util.Set observations)
```

- **toString**

```
public java.lang.String toString()
```

### 6.2.4 Members inherited from class BaseEntity

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## 6.3 Class EventGroupBean

The EJB manages the event group entities.

### 6.3.1 Declaration

```
public class EventGroupBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.EventGroup
```

### 6.3.2 Constructors

- **EventGroupBean**

```
public EventGroupBean()
```

### 6.3.3 Methods

- **findAllForOwner**

```
public java.util.List findAllForOwner(com.moveatis.user.
 AbstractUser owner)
```

– **Description**

Finds and returns a list of the event groups belonging to the given user.

– **Parameters**

\* `owner` – The user whose event groups are searched for.

– **Returns** – A list of the event groups.

- **findAllForPublicUser**

```
public java.util.List findAllForPublicUser()
```

– **Description**

Finds and returns the event groups that are allowed for public use.

– **Returns** – A list of the event groups.

- **findAllForUser**

```
public java.util.List findAllForUser(com.moveatis.user.
 AbstractUser user)
```

– **Description**

Finds and returns a list of event groups, which the given user has access to.

– **Parameters**

\* **user** – The user whose event groups are searched for.

– **Returns** – A list of the event groups.

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```

- **removeCategorySetEntityFromEventGroups**

```
public void removeCategorySetEntityFromEventGroups(com.moveatis.
 abstracts.AbstractCategorySetEntity categorySetEntity)
```

– **Description**

The method removes the given category set from all of the event groups that have the category set.

– **Parameters**

\* **categorySetEntity** – The category set to be removed from the event groups.

### 6.3.4 Members inherited from class AbstractBean

com.moveatis.abstracts.AbstractBean (in 1.1, page 18)

- public int **count()**
- public void **create(BaseEntity entity)**
- public void **edit(BaseEntity entity)**
- public BaseEntity **find(java.lang.Object id)**
- public List **findAll()**
- public List **findRange(int[] range)**
- protected abstract EntityManager **getEntityManager()**
- public void **remove(BaseEntity entity)**

## 6.4 Class EventGroupEntity

The entity represents the information for the event groups of the application. The event group has just one event, but the class could be extended to support multiple events. The event group can be identified with a groupkey, which allows semi-public usage.

### 6.4.1 Declaration

```
public class EventGroupEntity
 extends com.moveatis.abstracts.BaseEntity implements java.io.
 Serializable
```

### 6.4.2 Constructors

- **EventGroupEntity**

```
 public EventGroupEntity()
```

### 6.4.3 Methods

- **equals**

```
 public boolean equals(java.lang.Object arg0)
```

- **getCategorySets**

```
 public java.util.Set getCategorySets()
```

- **getDescription**

```
 public java.lang.String getDescription()
```

- **getEvent**

```
 public EventEntity getEvent()
```

- **getFeedbackAnalysisCategorySets**

```
 public java.util.Set getFeedbackAnalysisCategorySets()
```

- **getGroupKey**

```
 public com.moveatis.groupkey.GroupKeyEntity getGroupKey()
```

- **getId**

```
 public java.lang.Long getId()
```

- **getLabel**

```
public java.lang.String getLabel()
```

- **getOwner**

```
public com.moveatis.user.AbstractUser getOwner()
```

- **getUsers**

```
public java.util.Set getUsers()
```

- **hashCode**

```
public native int hashCode()
```

- **setCategorySets**

```
public void setCategorySets(java.util.Set categorySets)
```

- **setDescription**

```
public void setDescription(java.lang.String description)
```

- **setEvent**

```
public void setEvent(EventEntity event)
```

- **setFeedbackAnalysisCategorySets**

```
public void setFeedbackAnalysisCategorySets(java.util.Set
feedbackAnalysisCategorySets)
```

- **setGroupKey**

```
public void setGroupKey(com.moveatis.groupkey.GroupKeyEntity
groupKey)
```

- **setId**

```
public void setId(java.lang.Long id)
```

- **setLabel**

```
public void setLabel(java.lang.String label)
```

- **setOwner**

```
public void setOwner(com.moveatis.user.AbstractUser owner)
```

- **setUsers**

```
public void setUsers(java.util.Set users)
```

- **toString**

```
public java.lang.String toString()
```

#### 6.4.4 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date **getCreated()**
- public Long **getId()**
- protected Date **getRemoved()**
- protected **id**
- public void **setCreated()**
- public void **setId(java.lang.Long id)**
- protected void **setRemoved()**



# Chapter 7

## Package `com.moveatis.exception`

*Package Contents*

*Page*

### 7.1 Exception `InstallationRedirectException`

The exception informs the developers or the admin that something went wrong with the installation.

#### 7.1.1 Declaration

```
public class InstallationRedirectException
 extends java.lang.RuntimeException
```

#### 7.1.2 Constructors

- **InstallationRedirectException**

```
public InstallationRedirectException ()
```

- **Description**

- Creates a new instance of `InstallationRedirectException` without a detailed message.

- **InstallationRedirectException**

```
public InstallationRedirectException (java.lang.String msg)
```

- **Description**

- Constructs an instance of `InstallationRedirectException` with the specified detailed message.

- **Parameters**

- \* `msg` – the detailed message.

- **InstallationRedirectException**

```
public InstallationRedirectException(java.lang.String msg, java.
 lang.Throwable cause)
```

- **InstallationRedirectException**

```
public InstallationRedirectException(java.lang.String msg, java.
 lang.Throwable cause, boolean enableSuppression, boolean
 writableStackTrace)
```

- **InstallationRedirectException**

```
public InstallationRedirectException(java.lang.Throwable cause)
```

### 7.1.3 Members inherited from class Throwable

java.lang.Throwable

- public final synchronized void **addSuppressed**(Throwable arg0)
- public synchronized Throwable **fillInStackTrace**()
- public synchronized Throwable **getCause**()
- public String **getLocalizedMessage**()
- public String **getMessage**()
- public StackTraceElement **getStackTrace**()
- public final synchronized Throwable **getSuppressed**()
- public synchronized Throwable **initCause**(Throwable arg0)
- public void **printStackTrace**()
- public void **printStackTrace**(java.io.PrintStream arg0)
- public void **printStackTrace**(java.io.PrintWriter arg0)
- public void **setStackTrace**(StackTraceElement[] arg0)
- public String **toString**()

## Chapter 8

# Package `com.moveatis.export`

| <i>Package Contents</i>                    | <i>Page</i>        |
|--------------------------------------------|--------------------|
| <b>Classes</b>                             |                    |
| <b>CSVBuilder</b> .....                    | <a href="#">58</a> |
| Builds CSV formatted data to OutputStream. |                    |
| <b>CSVFileBuilder</b> .....                | <a href="#">60</a> |
| Builds a CSV file from an observation.     |                    |

### 8.1 Class CSVBuilder

Builds CSV formatted data to OutputStream.

#### 8.1.1 Declaration

```
public class CSVBuilder
 extends java.lang.Object
```

#### 8.1.2 Constructors

- **CSVBuilder**

```
public CSVBuilder(java.io.OutputStream output, java.lang.String
 separator)
```

– **Description**

Constructs a builder with the given stream and separator.

– **Parameters**

- \* **output** – The stream to write the CSV data to.
- \* **separator** – The separator to be used between the fields.

### 8.1.3 Methods

- **add**

```
public CSVBuilder add(java.lang.Long value) throws java.io.
 IOException
```

- **Description**

Adds the long field to the stream.

- **Parameters**

- \* `value` – The field value.

- **Returns** – The instance of the CSVBuilder for convenience.

- **Throws**

- \* `java.io.IOException` –

- **add**

```
public CSVBuilder add(java.lang.String value) throws java.io.
 IOException
```

- **Description**

Escapes the string field and adds it to the stream.

- **Parameters**

- \* `value` – The field value.

- **Returns** – The instance of the CSVBuilder for convenience.

- **Throws**

- \* `java.io.IOException` –

- **addPercent**

```
public CSVBuilder addPercent(java.lang.Long value) throws java.
 io.IOException
```

- **Description**

Adds the long field followed by a percent character (%) to the stream.

- **Parameters**

- \* `value` – Field value.

- **Returns** – The instance of the CSVBuilder for convenience.

- **Throws**

- \* `java.io.IOException` –

- **close**

```
public void close() throws java.io.IOException
```

- **Description**

- Closes the writer that uses the OutputStream given in the constructor.

- **Throws**

- \* java.io.IOException –

- **newLine**

```
public CSVBuilder newLine() throws java.io.IOException
```

- **Description**

- Adds a CSV new line to the stream.

- **Returns** – The instance of the CSVBuilder for convenience.

- **Throws**

- \* java.io.IOException –

## 8.2 Class CSVFileBuilder

Builds a CSV file from an observation.

### 8.2.1 Declaration

```
public class CSVFileBuilder
 extends java.lang.Object
```

### 8.2.2 Constructors

- **CSVFileBuilder**

```
public CSVFileBuilder()
```

### 8.2.3 Methods

- **buildCSV**

```
public void buildCSV(java.io.OutputStream outputStream , com.
 moveatis.feedbackanalysis.FeedbackAnalysisEntity
 feedbackAnalysis , java.lang.String separator)
```

- **buildCSV**

```
public void buildCSV(java.io.OutputStream out, com.moveatis.
 observation.ObservationEntity obs, java.lang.String separator)
 throws java.io.IOException
```

- **Description**

- Builds a CSV file from the given observation and writes it to the output stream.

- **Parameters**

- \* **out** – The stream to write the CSV data to.
    - \* **obs** – The observation to be built.
    - \* **separator** – The separator used between the CSV fields.

- **Throws**

- \* **java.io.IOException** –

- **msToTimeStamp**

```
public java.lang.String msToTimeStamp(long ms)
```

## Chapter 9

# Package

# com.moveatis.feedbackanalysis

| <i>Package Contents</i>                                                                         | <i>Page</i>        |
|-------------------------------------------------------------------------------------------------|--------------------|
| <b>Classes</b>                                                                                  |                    |
| <b>FeedbackAnalysisBean</b> .....                                                               | <a href="#">62</a> |
| Manages the database connection for the feedback analyses                                       |                    |
| <b>FeedbackAnalysisEntity</b> .....                                                             | <a href="#">65</a> |
| The entity for the feedback analysis, corresponds to the feedbackanalysis-table in the database |                    |

### 9.1 Class FeedbackAnalysisBean

Manages the database connection for the feedback analyses

#### 9.1.1 Declaration

```
public class FeedbackAnalysisBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.FeedbackAnalysis, java.io.Serializable
```

#### 9.1.2 Constructors

- **FeedbackAnalysisBean**

```
public FeedbackAnalysisBean()
```

#### 9.1.3 Methods

- **create**

```
public void create(FeedbackAnalysisEntity feedbackAnalysis)
```

- **Description**

Persists the observations to the database.

- **Parameters**

- \* `feedbackAnalysis` – The observatio entity to be persisted.

- **edit**

```
void edit(FeedbackAnalysisEntity feedbackAnalysisEntity)
```

- **findAllByObserver**

```
public java.util.List findAllByObserver(com.moveatis.user.
AbstractUser observer)
```

- **Description**

Finds and returns all observations for the specific user.

- **Parameters**

- \* `observer` – The user, whose analyses are to be searched.

- **Returns** – A list of the analyses for the user.

- **findByEventsNotOwned**

```
public java.util.List findByEventsNotOwned(com.moveatis.user.
AbstractUser observer)
```

- **Description**

Finds the analyzatinos that are made for events that the specified user does not own.

- **Parameters**

- \* `observer` – The user, whose analyses are to be searched.

- **Returns** – A list of the analyses.

- **findRecords**

```
public java.util.List findRecords(java.lang.Object id)
```

- **Description**

Finds a list of the records for the observation with the given id.

- **Parameters**

- \* `id` – The id of the analysis.

- **Returns** – A list of the records.



- **findWithoutEvent**

```
public java.util.List findWithoutEvent(com.moveatis.user.
 AbstractUser observer)
```

- **Description**

Finds the analyses for the user, which have no event attached to them.

- **Parameters**

- \* **observer** – The user, whose analyses are to be searched.

- **Returns** – A list of the analyses.

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```

- **remove**

```
public void remove(FeedbackAnalysisEntity feedbackAnalysisEntity
)
```

- **Description**

Removes the analysis and also removes the analysis from the event it was associated with.

- **Parameters**

- \* **feedbackAnalysisEntity** – The analysis to be removed.

- **removeRecordFromAnalysis**

```
void removeRecordFromAnalysis(FeedbackAnalysisEntity
 feedbackAnalysis, com.moveatis.records.
 FeedbackAnalysisRecordEntity record)
```

- **Description** copied from **com.moveatis.interfaces.FeedbackAnalysis** (in [15.7](#), page [98](#))

Removes the given feedbackanalysisrecord from the given analysis and saves the changes to the database Assumes that all the required changes such as updating the ordernumbers of the remaining records have been done before this method is called

- **Parameters**

- \* **feedbackAnalysis** – the analysis from which the record is removed

- \* **record** – the record to be removed

- **removeUnsavedObservation**

```
public void removeUnsavedObservation(FeedbackAnalysisEntity
 feedbackAnalysisEntity)
```

– **Description**

Permanently removes the analysis, which the user did not set to be saved into the database.

– **Parameters**

\* `feedbackAnalysisEntity` – The analysis to be removed.

### 9.1.4 Members inherited from class `AbstractBean`

`com.moveatis.abstracts.AbstractBean` (in 1.1, page 18)

- `public int count()`
- `public void create(BaseEntity entity)`
- `public void edit(BaseEntity entity)`
- `public BaseEntity find(java.lang.Object id)`
- `public List findAll()`
- `public List findRange(int[] range)`
- `protected abstract EntityManager getEntityManager()`
- `public void remove(BaseEntity entity)`

## 9.2 Class `FeedbackAnalysisEntity`

The entity for the feedback analysis, corresponds to the `feedbackanalysis-table` in the database

### 9.2.1 Declaration

```
public class FeedbackAnalysisEntity
 extends com.moveatis.abstracts.AbstractObservationEntity
```

### 9.2.2 Constructors

- **FeedbackAnalysisEntity**

```
public FeedbackAnalysisEntity()
```

### 9.2.3 Methods

- **addRecord**

```
public void addRecord(com.moveatis.records.
 FeedbackAnalysisRecordEntity record)
```

- **getAnalysisName**

```
public java.lang.String getAnalysisName()
```

- **getFeedbackAnalysisCategorySets**

```
public java.util.List getFeedbackAnalysisCategorySets()
```

- **Description**

The feedbackanalysiscategorysets for the feedback analysis aren't saved so they have to be fetched by getting the categorysets to which all the selected categories belong to. This means that if an analysis has a categoryset that is not used in the analysis, it won't be accessible when loading the analysis later.

- **Returns** – the feedbackanalysiscategorysets used by the analysis

- **getRecords**

```
public java.util.List getRecords()
```

- **getTargetOfAnalysis**

```
public java.lang.String getTargetOfAnalysis()
```

- **setAnalysisName**

```
public void setAnalysisName(java.lang.String name)
```

- **setRecords**

```
public void setRecords(java.util.List records)
```

- **setTargetOfAnalysis**

```
public void setTargetOfAnalysis(java.lang.String target)
```

#### 9.2.4 Members inherited from class **AbstractObservationEntity**

com.moveatis.abstracts.AbstractObservationEntity (in 1.4, page 25)

- public boolean equals(java.lang.Object object)
- public String getDescription()
- public long getDuration()
- public EventEntity getEvent()
- public Long getId()

- `public AbstractUser getObserver()`
- `public int hashCode()`
- `public void setDescription(java.lang.String description)`
- `public void setDuration(long duration)`
- `public void setEvent(com.moveatis.event.EventEntity event)`
- `public void setId(java.lang.Long id)`
- `public void setObserver(com.moveatis.user.AbstractUser observer)`
- `public String toString()`

### 9.2.5 Members inherited from class BaseEntity

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## Chapter 10

# Package

# com.moveatis.feedbackanalysiscategory

| <i>Package Contents</i>                           | <i>Page</i> |
|---------------------------------------------------|-------------|
| <b>Classes</b>                                    |             |
| <b>FeedbackAnalysisCategoryEntity</b> ..... 68    |             |
| The Categories for feedback analysis              |             |
| <b>FeedbackAnalysisCategorySetEntity</b> ..... 70 |             |
| The categorysets for feedback analysis            |             |

### 10.1 Class FeedbackAnalysisCategoryEntity

The Categories for feedback analysis

#### 10.1.1 Declaration

```
public class FeedbackAnalysisCategoryEntity
 extends com.moveatis.abstracts.AbstractCategoryEntity implements
 java.io.Serializable
```

#### 10.1.2 Constructors

- **FeedbackAnalysisCategoryEntity**

```
public FeedbackAnalysisCategoryEntity ()
```

#### 10.1.3 Methods

- **getCategorySet**

```
public abstract com.moveatis.abstracts.AbstractCategorySetEntity
 getCategorySet ()
```

- **getInRecord**

```
public boolean getInRecord()
```

- **getRecordsContainingThisFeedbackAnalysisCategory**

```
public java.util.List
 getRecordsContainingThisFeedbackAnalysisCategory()
```

- **setCategorySet**

```
public abstract void setCategorySet(com.moveatis.abstracts.
 AbstractCategorySetEntity abstractCategorySetEntity)
```

- **setInRecord**

```
public void setInRecord(boolean inRecord)
```

- **Description**

Sets the category to be in the currently shown record, makes sure that no other categories from the same categoryset are also selected

- **Parameters**

\* `inRecord` – whether the category is in the currently shown record

- **setRecordsContainingThisFeedbackAnalysisCategory**

```
public void setRecordsContainingThisFeedbackAnalysisCategory(
 java.util.List recordsContainingThisFeedbackAnalysisCategory)
```

- **Description**

sets the records that contain this category, makes sure that the connections between the category and feedbackanalysisrecord are correct

- **Parameters**

\* `recordsContainingThisFeedbackAnalysisCategory` – list that stores the records containing this category.

#### 10.1.4 Members inherited from class AbstractCategoryEntity

`com.moveatis.abstracts.AbstractCategoryEntity` (in 1.2, page 20)

- `public boolean equals(java.lang.Object object)`
- `public abstract AbstractCategorySetEntity getCategorySet()`
- `public String getDescription()`
- `public Long getId()`

- `public LabelEntity getLabel()`
- `public Integer getOrderNumber()`
- `public int hashCode()`
- `public abstract void setCategorySet(AbstractCategorySetEntity abstractCategorySetEntity)`
- `public void setDescription(java.lang.String description)`
- `public void setId(java.lang.Long id)`
- `public void setLabel(com.moveatis.label.LabelEntity label)`
- `public void setOrderNumber(java.lang.Integer orderNumber)`
- `public String toString()`

### 10.1.5 Members inherited from class BaseEntity

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## 10.2 Class FeedbackAnalysisCategorySetEntity

The categorysets for feedback analysis

### 10.2.1 Declaration

```
public class FeedbackAnalysisCategorySetEntity
extends com.moveatis.abstracts.AbstractCategorySetEntity implements
 java.io.Serializable
```

### 10.2.2 Constructors

- **FeedbackAnalysisCategorySetEntity**

```
public FeedbackAnalysisCategorySetEntity()
```

### 10.2.3 Methods

- **getCategoryEntitys**

```
public abstract java.util.Map getCategoryEntitys()
```

- **setCategoryEntitys**

```
public abstract void setCategoryEntitys(java.util.Map categories
)
```

### 10.2.4 Members inherited from class `AbstractCategorySetEntity`

`com.moveatis.abstracts.AbstractCategorySetEntity` (in 1.3, page 22)

- `public boolean equals(java.lang.Object object)`
- `public abstract Map getCategoryEntitys()`
- `public IdentifiedUserEntity getCreator()`
- `public String getDescription()`
- `public EventGroupEntity getEventGroupEntity()`
- `public Long getId()`
- `public String getLabel()`
- `public int hashCode()`
- `public abstract void setCategoryEntitys(java.util.Map categories)`
- `public void setCreator(com.moveatis.user.IdentifiedUserEntity creator)`
- `public void setDescription(java.lang.String description)`
- `public void setEventGroupEntity(com.moveatis.event.EventGroupEntity event-GroupEntity)`
- `public void setId(java.lang.Long id)`
- `public void setLabel(java.lang.String label)`
- `public String toString()`

### 10.2.5 Members inherited from class `BaseEntity`

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`



# Chapter 11

## Package com.moveatis.filters

| <i>Package Contents</i>                                                                            | <i>Page</i>        |
|----------------------------------------------------------------------------------------------------|--------------------|
| <b>Classes</b>                                                                                     |                    |
| <b>ControlFilter</b> .....                                                                         | <a href="#">72</a> |
| The filter controls access to the control page only for the identified users.                      |                    |
| <b>LoginFilter</b> .....                                                                           | <a href="#">74</a> |
| The filter checks that the pages in /app folder are accessed only through the frontpage.           |                    |
| <b>SuperUserFilter</b> .....                                                                       | <a href="#">75</a> |
| The filter allows only identified users that have the superuser role to access the superuser page. |                    |

### 11.1 Class ControlFilter

The filter controls access to the control page only for the identified users.

#### 11.1.1 Declaration

```
public class ControlFilter
 extends java.lang.Object
```

#### 11.1.2 Constructors

- **ControlFilter**

```
 public ControlFilter ()
```

#### 11.1.3 Methods

- **destroy**

```
 public void destroy ()
```

- **Description**  
Destroys the filter.

- **doFilter**

```
public void doFilter(ServletRequest request, ServletResponse
 response, FilterChain chain) throws java.io.IOException,
 ServletException
```

- **Parameters**
  - \* **request** – The servlet request to be processed.
  - \* **response** – The servlet response to be created.
  - \* **chain** – The filter chain to be processed.
- **Throws**
  - \* **java.io.IOException** – if an input or output error occurs.
  - \* **ServletException** – if a servlet error occurs.

- **getFilterConfig**

```
public FilterConfig getFilterConfig()
```

- **Description**  
Returns the filter configuration object for the filter.

- **init**

```
public void init(FilterConfig filterConfig)
```

- **Description**  
Initializes the filter.

- **log**

```
public void log(java.lang.String msg)
```

- **setFilterConfig**

```
public void setFilterConfig(FilterConfig filterConfig)
```

- **Description**  
Sets the filter configuration object for the filter.
- **Parameters**

\* `filterConfig` – The filter configuration object.

- **toString**

```
public java.lang.String toString()
```

- **Description**

Returns a string representation of the object.

## 11.2 Class LoginFilter

The filter checks that the pages in /app folder are accessed only through the frontpage.

### 11.2.1 Declaration

```
public class LoginFilter
 extends java.lang.Object
```

### 11.2.2 Constructors

- **LoginFilter**

```
public LoginFilter()
```

### 11.2.3 Methods

- **destroy**

```
public void destroy()
```

- **Description**

Destroys the filter.

- **doFilter**

```
public void doFilter(ServletRequest request, ServletResponse
 response, FilterChain chain) throws java.io.IOException,
 ServletException
```

- **Parameters**

- \* `request` – The servlet request to be processed.
- \* `response` – The servlet response to be created.
- \* `chain` – The filter chain to be processed.

- **Throws**

- \* `java.io.IOException` – if an input or output error occurs.
- \* `ServletException` – if a servlet error occurs.

- **getFilterConfig**

```
public FilterConfig getFilterConfig()
```

- **Description**

Returns the filter configuration object for the filter.

- **init**

```
public void init(FilterConfig filterConfig)
```

- **Description**

Initializes the filter.

- **log**

```
public void log(java.lang.String msg)
```

- **setFilterConfig**

```
public void setFilterConfig(FilterConfig filterConfig)
```

- **Description**

Sets the filter configuration object for the filter.

- **Parameters**

- \* `filterConfig` – The filter configuration object.

- **toString**

```
public java.lang.String toString()
```

- **Description**

Returns a string representation of the object.

### 11.3 Class SuperUserFilter

The filter allows only identified users that have the superuser role to access the superuser page.

### 11.3.1 Declaration

```
public class SuperUserFilter
 extends java.lang.Object
```

### 11.3.2 Constructors

- **SuperUserFilter**

```
 public SuperUserFilter ()
```

### 11.3.3 Methods

- **destroy**

```
 public void destroy ()
```

- **Description**

- Destroys the filter.

- **doFilter**

```
 public void doFilter(ServletRequest request, ServletResponse
 response, FilterChain chain) throws java.io.IOException,
 ServletException
```

- **Parameters**

- \* **request** – The servlet request to be processed.
    - \* **response** – The servlet response to be created.
    - \* **chain** – The filter chain to be processed.

- **Throws**

- \* **java.io.IOException** – if an input or output error occurs.
    - \* **ServletException** – if a servlet error occurs.

- **getFilterConfig**

```
 public FilterConfig getFilterConfig ()
```

- **Description**

- Returns the filter configuration object for the filter.

- **init**

```
 public void init(FilterConfig filterConfig)
```

- **Description**

Initializes the filter.

- **log**

```
public void log(java.lang.String msg)
```

- **setFilterConfig**

```
public void setFilterConfig(FilterConfig filterConfig)
```

- **Description**

Sets the filter configuration object for the filter.

- **Parameters**

\* `filterConfig` – The filter configuration object.

- **toString**

```
public java.lang.String toString()
```

- **Description**

Returns a string representation of the object.

## Chapter 12

# Package com.moveatis.groupkey

| <i>Package Contents</i>                                                                         | <i>Page</i> |
|-------------------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                                  |             |
| <b>GroupKeyBean</b> ..... 78                                                                    |             |
| The EJB manages group keys that are used to access the event groups in a "semi-public" fashion. |             |
| <b>GroupKeyEntity</b> ..... 79                                                                  |             |
| The entity presents the group key that the event groups can be identified with in the database. |             |

### 12.1 Class GroupKeyBean

The EJB manages group keys that are used to access the event groups in a "semi-public" fashion.

#### 12.1.1 Declaration

```
public class GroupKeyBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.GroupKey
```

#### 12.1.2 Constructors

- **GroupKeyBean**

```
public GroupKeyBean()
```

#### 12.1.3 Methods

- **findByKey**

```
public GroupKeyEntity findByKey(java.lang.String key)
```

- **Description**

The method finds and returns the group key, which has the same value as the specified parameter.

- **Parameters**

- \* **key** – String-representation of the key.

- **Returns** – the group key or null.

- **getEntityManager**

```
protected abstract EntityManager getEntityManager ()
```

- **getGroupKeyEntity**

```
public GroupKeyEntity getGroupKeyEntity ()
```

- **Description**

The method returns the group key, which currently is associated with the instance.

- **Returns** – The group key associated with the instance for groupkeyEJB.

- **removePermanently**

```
public void removePermanently (GroupKeyEntity groupKeyEntity)
```

- **Description**

The method removes the group keys permanently. Usually the entities are not removed from the database, as only their removal date is set. If the group key need to be reused, they need to be removed permanently before reuse.

- **Parameters**

- \* **groupKeyEntity** – The group key to be removed.

#### 12.1.4 Members inherited from class AbstractBean

com.moveatis.abstracts.AbstractBean (in 1.1, page 18)

- public int count()
- public void create(BaseEntity entity)
- public void edit(BaseEntity entity)
- public BaseEntity find(java.lang.Object id)
- public List findAll()
- public List findRange(int[] range)
- protected abstract EntityManager getEntityManager()
- public void remove(BaseEntity entity)

## 12.2 Class GroupKeyEntity

The entity presents the group key that the event groups can be identified with in the database.



### 12.2.1 Declaration

```
public class GroupKeyEntity
 extends com.moveatis.abstracts.BaseEntity implements java.io.
 Serializable
```

### 12.2.2 Constructors

- **GroupKeyEntity**

```
 public GroupKeyEntity()
```

### 12.2.3 Methods

- **equals**

```
 public boolean equals(java.lang.Object arg0)
```

- **getCreator**

```
 public com.moveatis.user.IdentifiedUserEntity getCreator()
```

- **getEventGroup**

```
 public com.moveatis.event.EventGroupEntity getEventGroup()
```

- **getGroupKey**

```
 public java.lang.String getGroupKey()
```

- **getLabel**

```
 public java.lang.String getLabel()
```

- **getTagUser**

```
 public com.moveatis.user.TagUserEntity getTagUser()
```

- **hashCode**

```
 public native int hashCode()
```

- **setCreator**

```
public void setCreator(com.moveatis.user.IdentifiedUserEntity
 creator)
```

- **setEventGroup**

```
public void setEventGroup(com.moveatis.event.EventGroupEntity
 eventGroup)
```

- **setGroupKey**

```
public void setGroupKey(java.lang.String groupKey)
```

- **setLabel**

```
public void setLabel(java.lang.String label)
```

- **setTagUser**

```
public void setTagUser(com.moveatis.user.TagUserEntity tagUser)
```

- **toString**

```
public java.lang.String toString()
```

### 12.2.4 Members inherited from class **BaseEntity**

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date **getCreated()**
- public Long **getId()**
- protected Date **getRemoved()**
- protected **id**
- public void **setCreated()**
- public void **setId(java.lang.Long id)**
- protected void **setRemoved()**

## Chapter 13

# Package com.moveatis.helpers

| <i>Package Contents</i>                                                                                        | <i>Page</i>        |
|----------------------------------------------------------------------------------------------------------------|--------------------|
| <b>Classes</b>                                                                                                 |                    |
| <b>DownloadTools</b> .....                                                                                     | <a href="#">82</a> |
| Provides static file-download functionalities                                                                  |                    |
| <b>GroupKeyGenerator</b> .....                                                                                 | <a href="#">83</a> |
| The helper class could be used to generate a random group key, if the user cannot come up with one by herself. |                    |
| <b>Validation</b> .....                                                                                        | <a href="#">84</a> |
| The helper class contains the static validation function(s).                                                   |                    |

### 13.1 Class DownloadTools

Provides static file-download functionalities

#### 13.1.1 Declaration

```
public class DownloadTools
 extends java.lang.Object
```

#### 13.1.2 Constructors

- **DownloadTools**

```
public DownloadTools()
```

#### 13.1.3 Methods

- **downloadCSV**

```
public static void downloadCSV(java.lang.String data, java.lang.
 String fileName)
```

- **Description**

Downloads the data given in a string as a UTF8-encoded csv-file

- **Parameters**

- \* `data` – The data to be downloaded
- \* `fileName` – The name for the csv-file to be downloaded

- **downloadFile**

```
public static void downloadFile(java.io.File file , java.lang.
String responseType , java.lang.String downloadName)
```

- **Description**

Downloads the given file as the given MIME-type with the given name

- **Parameters**

- \* `file` – the file to be downloaded
- \* `responseType` – the MIME-type of the file
- \* `downloadName` – The name with which the file is downloaded

- **getImageFromByteArr**

```
public static java.io.File getImageFromByteArr(java.lang.String
filename , byte [] img_bytes)
```

- **Description**

Creates a png-file with the given filename from a byte array

- **Parameters**

- \* `filename` – the filename for the image
- \* `img_bytes` – the byte-array containing the image

- **Returns** – The image-file

## 13.2 Class GroupKeyGenerator

The helper class could be used to generate a random group key, if the user cannot come up with one by herself.

### 13.2.1 Declaration

```
public class GroupKeyGenerator
extends java.lang.Object
```

### 13.2.2 Constructors

- **GroupKeyGenerator**

```
public GroupKeyGenerator()
```

### 13.2.3 Methods

- `getGroupKey`

```
public static java.lang.String getGroupKey()
```

## 13.3 Class Validation

The helper class contains the static validation function(s).

### 13.3.1 Declaration

```
public class Validation
 extends java.lang.Object
```

### 13.3.2 Constructors

- **Validation**

```
public Validation()
```

### 13.3.3 Methods

- **validateForJsAndHtml**

```
public static java.lang.String validateForJsAndHtml(java.lang.
 String s)
```

– **Description**

Validates the given string so that it can be placed as a JavaScript string in an HTML script tag.

– **Parameters**

\* **s** – The string to be validated.

– **Returns** – The validated string that contains only accepted characters.

## Chapter 14

# Package com.moveatis.identityprovider

| <i>Package Contents</i>                                                                                                                                         | <i>Page</i> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Interfaces</b>                                                                                                                                               |             |
| <b>IdentityProvider</b> .....                                                                                                                                   | 85          |
| The interface for the identity provider service that must be implemented, if the identity provider service needs to be customized outside Jyväskylä University. |             |
| <b>Classes</b>                                                                                                                                                  |             |
| <b>IdentityProviderBean</b> .....                                                                                                                               | 86          |
| An example EJB that implements the custom identity provider service.                                                                                            |             |
| <b>IdentityProviderInformationEntity</b> .....                                                                                                                  | 87          |
| The entity represents the data needed to identify an existing user.                                                                                             |             |
| <b>IdentityProviderRegistrationBean</b> .....                                                                                                                   | 88          |
| An example managed bean for customizing an identity service.                                                                                                    |             |

### 14.1 Interface IdentityProvider

The interface for the identity provider service that must be implemented, if the identity provider service needs to be customized outside Jyväskylä University.

#### 14.1.1 Declaration

```
public interface IdentityProvider
```

#### 14.1.2 All known subinterfaces

IdentityProviderRegistrationBean (in 14.4, page 88), IdentityProviderInformationEntity (in 14.3, page 87)

### 14.1.3 All classes known to implement interface

IdentityProviderRegistrationBean (in 14.4, page 88), IdentityProviderInformationEntity (in 14.3, page 87)

### 14.1.4 Methods

- **getIdentifiedUserEntity**

```
com.moveatis.user.IdentifiedUserEntity getIdentifiedUserEntity()
```

## 14.2 Class IdentityProviderBean

An example EJB that implements the custom identity provider service.

### 14.2.1 Declaration

```
public class IdentityProviderBean
 extends com.moveatis.abstracts.AbstractBean
```

### 14.2.2 Constructors

- **IdentityProviderBean**

```
public IdentityProviderBean()
```

### 14.2.3 Methods

- **findIpEntityByUsername**

```
public IdentityProviderInformationEntity findIpEntityByUsername(
 java.lang.String userName)
```

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```

### 14.2.4 Members inherited from class AbstractBean

com.moveatis.abstracts.AbstractBean (in 1.1, page 18)

- public int count()
- public void create(BaseEntity entity)
- public void edit(BaseEntity entity)
- public BaseEntity find(java.lang.Object id)
- public List findAll()
- public List findRange(int[] range)
- protected abstract EntityManager getEntityManager()
- public void remove(BaseEntity entity)

## 14.3 Class IdentityProviderInformationEntity

The entity represents the data needed to identify an existing user. The example entity must be rewritten, if a custom identity service is to be used.

### 14.3.1 Declaration

```
public class IdentityProviderInformationEntity
extends com.moveatis.abstracts.BaseEntity implements
 IdentityProvider , java.io.Serializable
```

### 14.3.2 Constructors

- **IdentityProviderInformationEntity**

```
public IdentityProviderInformationEntity ()
```

### 14.3.3 Methods

- **getAffiliation**

```
public java.lang.String getAffiliation ()
```

- **getIdentifiedUserEntity**

```
com.moveatis.user.IdentifiedUserEntity getIdentifiedUserEntity ()
```

- **getUsername**

```
public java.lang.String getUsername ()
```

- **setAffiliation**

```
public void setAffiliation (java.lang.String affiliation)
```

- **setUserEntity**

```
public void setUserEntity (com.moveatis.user.IdentifiedUserEntity
 userEntity)
```

- **setUsername**

```
public void setUsername (java.lang.String username)
```



### 14.3.4 Members inherited from class BaseEntity

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## 14.4 Class IdentityProviderRegistrationBean

An example managed bean for customizing an identity service.

### 14.4.1 Declaration

```
public class IdentityProviderRegistrationBean
 extends java.lang.Object implements IdentityProvider , java.io.
 Serializable
```

### 14.4.2 Constructors

- **IdentityProviderRegistrationBean**

```
public IdentityProviderRegistrationBean ()
```

### 14.4.3 Methods

- **getIdentifiedUserEntity**

```
com.moveatis.user.IdentifiedUserEntity getIdentifiedUserEntity ()
```

- **registerSuperUser**

```
public void registerSuperUser (ActionEvent actionEvent)
```

# Chapter 15

## Package com.moveatis.interfaces

| <i>Package Contents</i>                                                                                                          | <i>Page</i> |
|----------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Interfaces</b>                                                                                                                |             |
| <b>AnonUser</b> .....                                                                                                            | 90          |
| The interface to manage public users within the Moveatis.                                                                        |             |
| <b>Application</b> .....                                                                                                         | 91          |
| The interface to manage the application entity.                                                                                  |             |
| <b>Category</b> .....                                                                                                            | 92          |
| The interface to manage the category entity.                                                                                     |             |
| <b>CategorySet</b> .....                                                                                                         | 93          |
| The interface to manage the category set entity.                                                                                 |             |
| <b>Event</b> .....                                                                                                               | 94          |
| The interface to manage the event entity.                                                                                        |             |
| <b>EventGroup</b> .....                                                                                                          | 96          |
| The interface to manage the event group entity.                                                                                  |             |
| <b>FeedbackAnalysis</b> .....                                                                                                    | 98          |
| The interface for the feedback analysis enterprise java bean                                                                     |             |
| <b>FeedbackAnalysisRecord</b> .....                                                                                              | 100         |
| the interface for the feedbackanalysisrecord enterprise java bean                                                                |             |
| <b>GroupKey</b> .....                                                                                                            | 101         |
| The interface to manage the group key entity.                                                                                    |             |
| <b>Label</b> .....                                                                                                               | 102         |
| The interface to manage the label entity.                                                                                        |             |
| <b>Mailer</b> .....                                                                                                              | 103         |
| The interface to send mails.                                                                                                     |             |
| <b>MessageBundle</b> .....                                                                                                       | 104         |
| The qualifier for the message bundle is needed to provide a resource bundle<br>as injected resource for transient managed beans. |             |
| <b>Observation</b> .....                                                                                                         | 104         |
| The interface to manage the observation entity.                                                                                  |             |
| <b>Record</b> .....                                                                                                              | 106         |
| The interface to manage the record entity.                                                                                       |             |
| <b>Role</b> .....                                                                                                                | 107         |

|                |                                              |     |
|----------------|----------------------------------------------|-----|
|                | The interface to manage the role entity.     |     |
| <b>Session</b> | .....                                        | 108 |
|                | The interface to manage the session entity.  |     |
| <b>TagUser</b> | .....                                        | 111 |
|                | The interface to manage the tag user entity. |     |
| <b>User</b>    | .....                                        | 112 |
|                | The interface to manage the user entity.     |     |

## 15.1 Interface AnonUser

The interface to manage public users within the Moveatis.

### 15.1.1 Declaration

```
public interface AnonUser
```

### 15.1.2 All known subinterfaces

AnonUserBean (in [27.2](#), page [211](#))

### 15.1.3 All classes known to implement interface

AnonUserBean (in [27.2](#), page [211](#))

### 15.1.4 Methods

- **create**

```
void create(com.moveatis.user.AnonUserEntity userEntity)
```

- **edit**

```
void edit(com.moveatis.user.AnonUserEntity userEntity)
```

- **find**

```
com.moveatis.user.AnonUserEntity find()
```

- **findAll**

```
java.util.List findAll()
```

- **remove**

```
void remove(com.moveatis.user.AnonUserEntity userEntity)
```

## 15.2 Interface Application

The interface to manage the application entity.

### 15.2.1 Declaration

```
public interface Application
```

### 15.2.2 All known subinterfaces

ApplicationBean (in [2.1](#), page [30](#))

### 15.2.3 All classes known to implement interface

ApplicationBean (in [2.1](#), page [30](#))

### 15.2.4 Methods

- **checkInstalled**

```
boolean checkInstalled()
```

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.application.ApplicationEntity
applicationEntity)
```

- **edit**

```
void edit(com.moveatis.application.ApplicationEntity
applicationEntity)
```

- **getApplicationEntity**

```
com.moveatis.application.ApplicationEntity
getApplicationEntity
()
```

- **remove**

```
void remove(com.moveatis.application.ApplicationEntity
applicationEntity)
```

## 15.3 Interface Category

The interface to manage the category entity. The category specifies the type or class of an observation record. For example, a teacher giving feedback to a student could be categorized as "Giving feedback".

### 15.3.1 Declaration

```
public interface Category
```

### 15.3.2 All known subinterfaces

CategoryBean (in 3.1, page 35)

### 15.3.3 All classes known to implement interface

CategoryBean (in 3.1, page 35)

### 15.3.4 Methods

- **count**

```
int count ()
```

- **create**

```
void create (com.moveatis.abstracts.AbstractCategoryEntity
categoryEntity)
```

- **edit**

```
void edit (com.moveatis.abstracts.AbstractCategoryEntity
categoryEntity)
```

- **find**

```
com.moveatis.abstracts.AbstractCategoryEntity find (java.lang.
Object id)
```

- **findAll**

```
java.util.List findAll ()
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **remove**

```
void remove(com.moveatis.abstracts.AbstractCategoryEntity
 categoryEntity)
```

- **removeFromCategorySet**

```
void removeFromCategorySet(com.moveatis.abstracts.
 AbstractCategorySetEntity whichCategorySet ,com.moveatis.
 abstracts.AbstractCategoryEntity abstractCategoryEntity)
```

## 15.4 Interface CategorySet

The interface to manage the category set entity. The category set contains different categories that can be thought as a group. For example, a category set named "Teacher's activities" could contain categories like "Organizing", "Observing", and "Giving feedback".

### 15.4.1 Declaration

```
public interface CategorySet
```

### 15.4.2 All known subinterfaces

CategorySetBean (in 3.3, page 38)

### 15.4.3 All classes known to implement interface

CategorySetBean (in 3.3, page 38)

### 15.4.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.abstracts.AbstractCategorySetEntity
 categoryTemplateEntity)
```

- **detachCategorySet**

```
void detachCategorySet (com.moveatis.abstracts.
 AbstractCategorySetEntity categorySetEntity)
```

- **edit**

```
void edit (com.moveatis.abstracts.AbstractCategorySetEntity
 categoryTemplateEntity)
```

- **find**

```
com.moveatis.abstracts.AbstractCategorySetEntity find (java.lang.
 Object id)
```

- **findAll**

```
java.util.List findAll ()
```

- **findPublicCategorySets**

```
java.util.Set findPublicCategorySets ()
```

- **findRange**

```
java.util.List findRange (int [] range)
```

- **remove**

```
void remove (com.moveatis.abstracts.AbstractCategorySetEntity
 categoryTemplateEntity)
```

- **removeCategoryFromCategorySet**

```
void removeCategoryFromCategorySet (com.moveatis.abstracts.
 AbstractCategorySetEntity categorySet, com.moveatis.abstracts.
 AbstractCategoryEntity whichCategory)
```

## 15.5 Interface Event

The interface to manage the event entity. Event specifies the situation that is observed. For example, the event could be "Teaching situation number 4".

### 15.5.1 Declaration

```
public interface Event
```

### 15.5.2 All known subinterfaces

EventBean (in 6.1, page 47)

### 15.5.3 All classes known to implement interface

EventBean (in 6.1, page 47)

### 15.5.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.event.EventEntity eventEntity)
```

- **edit**

```
void edit(com.moveatis.event.EventEntity eventEntity)
```

- **find**

```
com.moveatis.event.EventEntity find(java.lang.Object id)
```

- **findAll**

```
java.util.List findAll()
```

- **findEventsForUser**

```
java.util.List findEventsForUser(com.moveatis.user.
 IdentifiedUserEntity user)
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **getEventEntity**



```
com.moveatis.event.EventEntity getEventEntity()
```

- **remove**

```
void remove(com.moveatis.event.EventEntity eventEntity)
```

- **removeFeedbackAnalysis**

```
void removeFeedbackAnalysis(com.moveatis.feedbackanalysis.
 FeedbackAnalysisEntity feedbackAnalysisEntity)
```

- **removeObservation**

```
void removeObservation(com.moveatis.observation.
 ObservationEntity observationEntity)
```

## 15.6 Interface EventGroup

The interface to manage the event group entity. The event group contains different events that can be thought as a group. For example, an event group named "Exploratory teacher" could contain events like "Teaching situation number 1", "Teaching situation number 2", etc.

### 15.6.1 Declaration

```
public interface EventGroup
```

### 15.6.2 All known subinterfaces

EventGroupBean (in 6.3, page 51)

### 15.6.3 All classes known to implement interface

EventGroupBean (in 6.3, page 51)

### 15.6.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.event.EventGroupEntity eventGroupEntity
)
```

- **edit**

```
void edit(com.moveatis.event.EventGroupEntity eventGroupEntity)
```

- **find**

```
com.moveatis.event.EventGroupEntity find(java.lang.Object id)
```

- **findAll**

```
java.util.List findAll()
```

- **findAllForOwner**

```
java.util.List findAllForOwner(com.moveatis.user.AbstractUser
 owner)
```

- **findAllForPublicUser**

```
java.util.List findAllForPublicUser()
```

- **findAllForUser**

```
java.util.List findAllForUser(com.moveatis.user.AbstractUser
 user)
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **remove**

```
void remove(com.moveatis.event.EventGroupEntity eventGroupEntity
)
```

- **removeCategorySetEntityFromEventGroups**

```
void removeCategorySetEntityFromEventGroups(com.moveatis.
 abstracts.AbstractCategorySetEntity categorySetEntity)
```

## 15.7 Interface FeedbackAnalysis

The interface for the feedback analysis enterprise java bean

### 15.7.1 Declaration

```
public interface FeedbackAnalysis
```

### 15.7.2 All known subinterfaces

FeedbackAnalysisBean (in [9.1](#), page [62](#))

### 15.7.3 All classes known to implement interface

FeedbackAnalysisBean (in [9.1](#), page [62](#))

### 15.7.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.feedbackanalysis.FeedbackAnalysisEntity
 feedbackAnalysisEntity)
```

- **edit**

```
void edit(com.moveatis.feedbackanalysis.FeedbackAnalysisEntity
 feedbackAnalysisEntity)
```

- **find**

```
com.moveatis.feedbackanalysis.FeedbackAnalysisEntity find(java.
 lang.Object id)
```

- **findAll**

```
java.util.List findAll()
```

- **findAllByObserver**

```
java.util.List findAllByObserver(com.moveatis.user.AbstractUser
 analyzer)
```

- **findByEventsNotOwned**

```
java.util.List findByEventsNotOwned(com.moveatis.user.
 AbstractUser analyzer)
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **findRecords**

```
java.util.List findRecords(java.lang.Object id)
```

- **findWithoutEvent**

```
java.util.List findWithoutEvent(com.moveatis.user.AbstractUser
 analyzer)
```

- **remove**

```
void remove(com.moveatis.feedbackanalysis.FeedbackAnalysisEntity
 feedbackAnalysisEntity)
```

- **removeRecordFromAnalysis**

```
void removeRecordFromAnalysis(com.moveatis.feedbackanalysis.
 FeedbackAnalysisEntity feedbackAnalysis ,com.moveatis.records.
 FeedbackAnalysisRecordEntity record)
```

- **Description**

Removes the given feedbackanalysisrecord from the given analysis and saves the changes to the database Assumes that all the required changes such as updating the ordernumbers of the remaining records have been done before this method is called

- **Parameters**

- \* **feedbackAnalysis** – the analysis from which the record is removed
- \* **record** – the record to be removed

- **removeUnsavedObservation**

```
void removeUnsavedObservation(com.moveatis.feedbackanalysis.
 FeedbackAnalysisEntity feedbackAnalysisEntity)
```

## 15.8 Interface FeedbackAnalysisRecord

the interface for the feedbackanalysisrecord enterprise java bean

### 15.8.1 Declaration

```
public interface FeedbackAnalysisRecord
```

### 15.8.2 All known subinterfaces

FeedbackAnalysisRecordBean (in [21.1](#), page [184](#))

### 15.8.3 All classes known to implement interface

FeedbackAnalysisRecordBean (in [21.1](#), page [184](#))

### 15.8.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.records.FeedbackAnalysisRecordEntity
 feedbackAnalysisRecordEntity)
```

- **edit**

```
void edit(com.moveatis.records.FeedbackAnalysisRecordEntity
 feedbackAnalysisRecordEntity)
```

- **find**

```
com.moveatis.records.FeedbackAnalysisRecordEntity find(java.lang
 .Object id)
```

- **findAll**

```
java.util.List findAll()
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **remove**

```
void remove(com.moveatis.records.FeedbackAnalysisRecordEntity
 feedbackAnalysisRecordEntity)
```

## 15.9 Interface GroupKey

The interface to manage the group key entity. A group key is used to identify an event group for "semi-public" usage. Anyone who knows the group key for a particular event group, can use the event group.

### 15.9.1 Declaration

```
public interface GroupKey
```

### 15.9.2 All known subinterfaces

GroupKeyBean (in [12.1](#), page 78)

### 15.9.3 All classes known to implement interface

GroupKeyBean (in [12.1](#), page 78)

### 15.9.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.groupkey.GroupKeyEntity groupKeyEntity)
```

- **edit**

```
void edit(com.moveatis.groupkey.GroupKeyEntity groupKeyEntity)
```

- **find**

```
com.moveatis.groupkey.GroupKeyEntity find(java.lang.Object id)
```

- **findAll**

```
java.util.List findAll()
```

- **findByKey**

```
com.moveatis.groupkey.GroupKeyEntity findByKey(java.lang.String
 key)
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **getGroupKeyEntity**

```
com.moveatis.groupkey.GroupKeyEntity getGroupKeyEntity()
```

- **remove**

```
void remove(com.moveatis.groupkey.GroupKeyEntity groupKeyEntity)
```

- **removePermanently**

```
void removePermanently(com.moveatis.groupkey.GroupKeyEntity
 groupKeyEntity)
```

## 15.10 Interface Label

The interface to manage the label entity. A label is a name for a category. If there are several similarly named categories, like "Giving feedback", they can all use the same label.

### 15.10.1 Declaration

```
public interface Label
```

### 15.10.2 All known subinterfaces

LabelBean (in [16.1](#), page [114](#))

### 15.10.3 All classes known to implement interface

LabelBean (in [16.1](#), page [114](#))

#### 15.10.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.label.LabelEntity labelEntity)
```

- **edit**

```
void edit(com.moveatis.label.LabelEntity labelEntity)
```

- **find**

```
com.moveatis.label.LabelEntity find(java.lang.Object id)
```

- **findAll**

```
java.util.List findAll()
```

- **findByLabel**

```
com.moveatis.label.LabelEntity findByLabel(java.lang.String
label)
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **remove**

```
void remove(com.moveatis.label.LabelEntity labelEntity)
```

### 15.11 Interface Mailer

The interface to send mails.



### 15.11.1 Declaration

```
public interface Mailer
```

### 15.11.2 All known subinterfaces

MailerBean (in [17.1](#), page [118](#))

### 15.11.3 All classes known to implement interface

MailerBean (in [17.1](#), page [118](#))

### 15.11.4 Methods

- **sendEmail**

```
com.moveatis.enums.MailStatus sendEmail(java.lang.String []
 recipients ,java.lang.String subject ,java.lang.String message)
```

- **sendEmailWithAttachment**

```
com.moveatis.enums.MailStatus sendEmailWithAttachment(java.lang.
 String [] recipient ,java.lang.String subject ,java.lang.String
 message ,java.io.File [] attachmentFile)
```

## 15.12 Interface MessageBundle

The qualifier for the message bundle is needed to provide a resource bundle as injected resource for transient managed beans.

### 15.12.1 Declaration

```
public interface MessageBundle
 extends java.lang.annotation.Annotation
```

## 15.13 Interface Observation

The interface to manage the observation entity. The observation contains the records a user made when he or she was observing some event.

### 15.13.1 Declaration

```
public interface Observation
```

### 15.13.2 All known subinterfaces

ObservationBean (in [19.1](#), page [172](#))

### 15.13.3 All classes known to implement interface

ObservationBean (in [19.1](#), page [172](#))

### 15.13.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.observation.ObservationEntity
 observationEntity)
```

- **edit**

```
void edit(com.moveatis.observation.ObservationEntity
 observationEntity)
```

- **find**

```
com.moveatis.observation.ObservationEntity find(java.lang.Object
id)
```

- **findAll**

```
java.util.List findAll()
```

- **findAllByObserver**

```
java.util.List findAllByObserver(com.moveatis.user.AbstractUser
observer)
```

- **findByEventsNotOwned**

```
java.util.List findByEventsNotOwned(com.moveatis.user.
AbstractUser observer)
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **findRecords**

```
java.util.List findRecords(java.lang.Object id)
```

- **findWithoutEvent**

```
java.util.List findWithoutEvent(com.moveatis.user.AbstractUser
 observer)
```

- **remove**

```
void remove(com.moveatis.observation.ObservationEntity
 observationEntity)
```

- **removeUnsavedObservation**

```
void removeUnsavedObservation(com.moveatis.observation.
 ObservationEntity observationEntity)
```

## 15.14 Interface Record

The interface to manage the record entity. A record is a single instance of a category in an observation. For example, if during an observation a teacher gives feedback for 5 minutes, there would be a record of the category "Giving feedback" with a duration of 5 minutes.

### 15.14.1 Declaration

```
public interface Record
```

### 15.14.2 All known subinterfaces

RecordBean (in [21.3](#), page [187](#))

### 15.14.3 All classes known to implement interface

RecordBean (in [21.3](#), page [187](#))

### 15.14.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.records.RecordEntity recordEntity)
```

- **edit**

```
void edit(com.moveatis.records.RecordEntity recordEntity)
```

- **find**

```
com.moveatis.records.RecordEntity find(java.lang.Object id)
```

- **findAll**

```
java.util.List findAll()
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **remove**

```
void remove(com.moveatis.records.RecordEntity recordEntity)
```

## 15.15 Interface Role

The interface to manage the role entity. A role grants more finegrained access rights to the users. For now, the only role is the superuser role.

### 15.15.1 Declaration

```
public interface Role
```

### 15.15.2 All known subinterfaces

RoleBean (in [23.2](#), page [196](#))

### 15.15.3 All classes known to implement interface

RoleBean (in [23.2](#), page [196](#))

### 15.15.4 Methods

- **addSuperuserRoleToUser**

```
void addSuperuserRoleToUser (com.moveatis.user .
 IdentifiedUserEntity user)
```

- **addSuperuserRoleToUser**

```
void addSuperuserRoleToUser (com.moveatis.user .
 IdentifiedUserEntity user ,java.util.Date startDate ,java.util .
 Date endDate)
```

- **checkIfUserIsSuperUser**

```
boolean checkIfUserIsSuperUser (com.moveatis.user .
 IdentifiedUserEntity user)
```

- **listSuperusers**

```
java.util.List listSuperusers ()
```

- **removeSuperuserRoleFromUser**

```
void removeSuperuserRoleFromUser (com.moveatis.user .
 IdentifiedUserEntity user)
```

## 15.16 Interface Session

The interface to manage the session entity. The session is a context, in which a particular user is using Moveatis. The session has information, that is meaningful in the current context, such as whether the user has been identified or not.

### 15.16.1 Declaration

```
public interface Session
```

### 15.16.2 All known subinterfaces

SessionBean (in [25.2](#), page [203](#))

### 15.16.3 All classes known to implement interface

SessionBean (in [25.2](#), page [203](#))

#### 15.16.4 Methods

- **getCategorySetsInUse**

```
java.util.List getCategorySetsInUse()
```

- **getFeedbackAnalysisCategorySetsInUse**

```
java.util.List getFeedbackAnalysisCategorySetsInUse()
```

- **getGroupKey**

```
com.moveatis.groupkey.GroupKeyEntity getGroupKey()
```

- **getIsLocalhost**

```
boolean getIsLocalhost()
```

- **getLoggedIdentifiedUser**

```
com.moveatis.user.IdentifiedUserEntity getLoggedIdentifiedUser()
```

- **getLoggedInUser**

```
com.moveatis.user.AbstractUser getLoggedInUser()
```

- **getReturnUri**

```
java.lang.String getReturnUri()
```

- **getSessionObservationsIds**

```
java.util.SortedSet getSessionObservationsIds()
```

- **getSessionTimeZone**

```
java.util.TimeZone getSessionTimeZone()
```

- **isIdentifiedUser**

```
boolean isIdentifiedUser()
```

- **isLoggedIn**

```
boolean isLoggedIn()
```

- **isSaveable**

```
boolean isSaveable()
```

- **setAnonymityUser**

```
void setAnonymityUser()
```

- **setCategorySetsInUse**

```
void setCategorySetsInUse(java.util.List categorySets)
```

- **setFeedbackAnalysisCategorySetsInUse**

```
void setFeedbackAnalysisCategorySetsInUse(java.util.List
feedbackAnalysisCategorySets)
```

- **setIdentityProviderUser**

```
void setIdentityProviderUser(com.moveatis.user.
IdentifiedUserEntity user)
```

- **setReturnUri**

```
void setReturnUri(java.lang.String uri)
```

- **setSessionObservations**

```
void setSessionObservations(java.util.SortedSet observationsIds)
```

- **setSessionTimeZone**

```
void setSessionTimeZone(java.util.TimeZone timeZone)
```

- **setTagUser**

```
void setTagUser(com.moveatis.user.TagUserEntity tagUser)
```

## 15.17 Interface TagUser

The interface to manage the tag user entity. A tag user is the user account for group keys, which are used to identify event groups.

### 15.17.1 Declaration

```
public interface TagUser
```

### 15.17.2 All known subinterfaces

TagUserBean (in 27.5, page 215)

### 15.17.3 All classes known to implement interface

TagUserBean (in 27.5, page 215)

### 15.17.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.user.TagUserEntity userEntity)
```

- **edit**

```
void edit(com.moveatis.user.TagUserEntity userEntity)
```

- **find**

```
com.moveatis.user.TagUserEntity find(java.lang.Object id)
```

- **findAll**

```
java.util.List findAll()
```

- **findByKey**

```
com.moveatis.user.TagUserEntity findByKey(com.moveatis.groupkey.
GroupKeyEntity groupkey)
```



- **findRange**

```
java.util.List findRange(int [] range)
```

- **remove**

```
void remove(com.moveatis.user.TagUserEntity userEntity)
```

## 15.18 Interface User

The interface to manage the user entity. A user is the identified user, which means that they are recognized by the identity provider service.

### 15.18.1 Declaration

```
public interface User
```

### 15.18.2 All known subinterfaces

UserBean (in [27.7](#), page [217](#))

### 15.18.3 All classes known to implement interface

UserBean (in [27.7](#), page [217](#))

### 15.18.4 Methods

- **count**

```
int count()
```

- **create**

```
void create(com.moveatis.user.IdentifiedUserEntity userEntity)
```

- **edit**

```
void edit(com.moveatis.user.IdentifiedUserEntity userEntity)
```

- **find**

```
com.moveatis.user.IdentifiedUserEntity find(java.lang.Object id)
```

- **findAll**

```
java.util.List findAll()
```

- **findRange**

```
java.util.List findRange(int [] range)
```

- **remove**

```
void remove(com.moveatis.user.IdentifiedUserEntity userEntity)
```

## Chapter 16

# Package com.moveatis.label

| <i>Package Contents</i>                                                         | <i>Page</i> |
|---------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                  |             |
| <b>LabelBean</b> ..... 114                                                      |             |
| The EJB manages the labels.                                                     |             |
| <b>LabelEntity</b> ..... 115                                                    |             |
| The entity represents the information for the category's label in the database. |             |

### 16.1 Class LabelBean

The EJB manages the labels.

#### 16.1.1 Declaration

```
public class LabelBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.Label
```

#### 16.1.2 Constructors

- **LabelBean**

```
public LabelBean()
```

#### 16.1.3 Methods

- **findByLabel**

```
public LabelEntity findByLabel(java.lang.String label)
```

- **Description**

Finds and returns the label entity with the given string as its value.

- **Parameters**
  - \* `label` – The string to search for.
- **Returns** – the `LabelEntity` or null.

- `getEntityManager`

```
protected abstract EntityManager getEntityManager()
```

### 16.1.4 Members inherited from class `AbstractBean`

`com.moveatis.abstracts.AbstractBean` (in 1.1, page 18)

- `public int count()`
- `public void create(BaseEntity entity)`
- `public void edit(BaseEntity entity)`
- `public BaseEntity find(java.lang.Object id)`
- `public List findAll()`
- `public List findRange(int[] range)`
- `protected abstract EntityManager getEntityManager()`
- `public void remove(BaseEntity entity)`

## 16.2 Class `LabelEntity`

The entity represents the information for the category's label in the database. If there are several categories with a similar name, like "Teaching", they can all have the same label entity.

### 16.2.1 Declaration

```
public class LabelEntity
 extends com.moveatis.abstracts.BaseEntity implements java.io.
 Serializable
```

### 16.2.2 Constructors

- `LabelEntity`

```
public LabelEntity()
```

- `LabelEntity`

```
public LabelEntity(java.lang.String text)
```

### 16.2.3 Methods

- **addCategoryEntity**

```
public void addCategoryEntity(com.moveatis.abstracts.
 AbstractCategoryEntity abstractCategoryEntity)
```

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getCategoryEntities**

```
public java.util.List getCategoryEntities()
```

- **getFeedbackAnalysisCategoryEntities**

```
public java.util.List getFeedbackAnalysisCategoryEntities()
```

- **getText**

```
public java.lang.String getText()
```

- **hashCode**

```
public native int hashCode()
```

- **setCategoryEntities**

```
public void setCategoryEntities(java.util.List categoryEntities)
```

- **setFeedbackAnalysisCategoryEntities**

```
public void setFeedbackAnalysisCategoryEntities(java.util.List
 feedbackAnalysisCategoryEntities)
```

- **setText**

```
public void setText(java.lang.String text)
```

- **toString**

```
public java.lang.String toString()
```

### 16.2.4 Members inherited from class BaseEntity

`com.moveatis.abstracts.BaseEntity` (in [1.6](#), page [28](#))

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

# Chapter 17

## Package com.moveatis.mail

| <i>Package Contents</i>                                                                                      | <i>Page</i> |
|--------------------------------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                                               |             |
| <b>MailerBean</b> .....                                                                                      | 118         |
| The class implements the Mailer interface, and takes care of mailing to the users the requested information. |             |

### 17.1 Class MailerBean

The class implements the Mailer interface, and takes care of mailing to the users the requested information.

#### 17.1.1 Declaration

```
public class MailerBean
 extends java.lang.Object implements com.moveatis.interfaces.Mailer
```

#### 17.1.2 Constructors

- MailerBean

```
public MailerBean()
```

#### 17.1.3 Methods

- sendEmail

```
public com.moveatis.enums.MailStatus sendEmail(java.lang.String
 [] recipients , java.lang.String subject , java.lang.String
 message)
```

- Description

Sends email to the recipients.

- **Parameters**
  - \* **recipients** – An array of the users to whom the mail is sent.
  - \* **subject** – The subject of the mail.
  - \* **message** – The message for the mail.
- **Returns** – enum that states if the mail was sent successfully or not.

- **sendEmailWithAttachment**

```
public com.moveatis.enums.MailStatus sendEmailWithAttachment(
 java.lang.String [] recipients ,java.lang.String subject ,java.
 lang.String message ,java.io.File [] attachmentFiles)
```

- **Description**

Sends email with the given attachment files.
- **Parameters**
  - \* **recipients** – An array of the users to whom the mail is sent.
  - \* **subject** – The subject of the mail.
  - \* **message** – The message for the mail.
  - \* **attachmentFiles** – An array of the files to be attached to the mail.
- **Returns** – enum that states if the mail was sent successfully or not.



# Chapter 18

## Package com.moveatis.managedbeans

| <i>Package Contents</i>                                                                                             | <i>Page</i> |
|---------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                                                      |             |
| <b>ApplicationManagedBean</b> .....                                                                                 | 121         |
| The bean that serves the application installation view.                                                             |             |
| <b>CategoryManagedBean</b> .....                                                                                    | 122         |
| The bean that serves category management in the appropriate views.                                                  |             |
| <b>CategorySelectionManagedBean</b> .....                                                                           | 123         |
| The bean that serves the category selection view.                                                                   |             |
| <b>CategorySetManagedBean</b> .....                                                                                 | 126         |
| The bean for managing category sets in the appropriate views.                                                       |             |
| <b>ControlManagedBean</b> .....                                                                                     | 127         |
| The bean class for managing the control page view.                                                                  |             |
| <b>EventGroupManagedBean</b> .....                                                                                  | 137         |
| The bean is used to manage event groups in the appropriate views.                                                   |             |
| <b>EventManagerManagedBean</b> .....                                                                                | 139         |
| The bean is used to manage events in the appropriate views.                                                         |             |
| <b>FeedbackAnalysisRecordTableManagedBean</b> .....                                                                 | 140         |
| The managed bean in control of the record table for feedback analysis                                               |             |
| <b>FeedbackAnalysisCategorySelectionManagedBean</b> .....                                                           | 142         |
| The managed bean in control of the category selection for feedback analysis                                         |             |
| <b>FeedbackAnalysisManagedBean</b> .....                                                                            | 146         |
| The managed bean controlling the feedbackanalysis in view                                                           |             |
| <b>FeedbackAnalysisSummaryManagedBean</b> .....                                                                     | 154         |
| The managed bean to control the summary page                                                                        |             |
| <b>FeedbackAnalysisSummaryManagedBean.TableInformation</b> .....                                                    | 158         |
| A helper class only useful in this view to hold the information used by the<br>summary table                        |             |
| <b>LoginManagedBean</b> .....                                                                                       | 159         |
| The bean that manages the login for three types of users: the public user,<br>the tag user and the identified user. |             |

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| <b>ObservationManagedBean</b> .....                               | 160 |
| The bean is used to manage observations in the appropriate views. |     |
| <b>SummaryManagedBean</b> .....                                   | 163 |
| The bean that serves the summary page.                            |     |
| <b>SuperUserManagedBean</b> .....                                 | 167 |
| The bean sets the superuser role for the identified users.        |     |
| <b>TimeManagedBean</b> .....                                      | 168 |
| Provides time related attributes like time zone.                  |     |
| <b>UserManagedBean</b> .....                                      | 169 |
| The bean manages user-related information in a session.           |     |
| <b>ValidationManagedBean</b> .....                                | 170 |
| The bean implements commonly used methods to validate user input. |     |

## 18.1 Class ApplicationManagedBean

The bean that serves the application installation view.

### 18.1.1 Declaration

```
public class ApplicationManagedBean
 extends java.lang.Object
```

### 18.1.2 Constructors

- **ApplicationManagedBean**

```
public ApplicationManagedBean ()
```

### 18.1.3 Methods

- **doInstall**

```
public java.lang.String doInstall ()
```

#### – Description

Redirects the user to the installation URI if the application has not been installed yet. If the application is running on localhost server it redirects to the localhost version of the installation URI.

- **getInstalled**

```
public java.lang.Boolean getInstalled ()
```

#### – Description

Returns true if the application has been installed, otherwise false.

## 18.2 Class CategoryManagedBean

The bean that serves category management in the appropriate views.

### 18.2.1 Declaration

```
public class CategoryManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.2.2 Constructors

- **CategoryManagedBean**

```
public CategoryManagedBean()
```

- **Description**

Creates a new instance of CategoryManagedBean.

### 18.2.3 Methods

- **addCategory**

```
public void addCategory(ActionEvent event)
```

- **createNewCategory**

```
public void createNewCategory(com.moveatis.category.
 CategorySetEntity categorySetEntity)
```

- **Description**

Creates a new category entity and adds it to the given category set.

- **getCanOverlap**

```
public java.lang.Boolean getCanOverlap()
```

- **getDescription**

```
public java.lang.String getDescription()
```

- **getLabel**

```
public java.lang.String getLabel()
```

- **setCanOverlap**

```
public void setCanOverlap(java.lang.Boolean canOverlap)
```

- **setDescription**

```
public void setDescription(java.lang.String description)
```

- **setLabel**

```
public void setLabel(java.lang.String label)
```

## 18.3 Class CategorySelectionManagedBean

The bean that serves the category selection view.

### 18.3.1 Declaration

```
public class CategorySelectionManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.3.2 Constructors

- **CategorySelectionManagedBean**

```
public CategorySelectionManagedBean()
```

- **Description**

Creates a new instance of CategorySelectionManagedBean.

### 18.3.3 Methods

- **addDefaultCategorySet**

```
public void addDefaultCategorySet()
```

- **Description**

Adds the selected default category set for the observation.

- **addNewCategorySet**

```
public void addNewCategorySet()
```

- **Description**

Adds a new category set for the observation if newCategorySetName isn't empty.

- **addPrivateCategorySet**

```
public void addPrivateCategorySet ()
```

- **Description**

Adds the selected private category set for the observation.

- **checkCategories**

```
public java.lang.String checkCategories ()
```

- **Description**

Checks the categories in use before letting the user continue to observation. The categories in the same category set should have different names. The categories shouldn't have empty names. At least one category should be selected for the observation. It shows an error message if the categories aren't ok.

- **Returns** – "categoriesok" if the categories were ok, otherwise an empty string.

- **getCategorySetsInUse**

```
public java.util.List getCategorySetsInUse ()
```

- **Description**

Gets the category sets in use.

- **getDefaultCategorySets**

```
public java.util.List getDefaultCategorySets ()
```

- **Description**

Gets the default category sets.

- **getEventGroup**

```
public com.moveatis.event.EventGroupEntity getEventGroup ()
```

- **Description**

Gets the event group.

- **getNewCategorySetName**

```
public java.lang.String getNewCategorySetName()
```

- **Description**

Gets the new category set name.

- **getPrivateCategorySets**

```
public java.util.List getPrivateCategorySets()
```

- **Description**

Gets the private category sets.

- **getSelectedDefaultCategorySet**

```
public java.lang.Long getSelectedDefaultCategorySet()
```

- **Description**

Gets the selected default category set.

- **getSelectedPrivateCategorySet**

```
public java.lang.Long getSelectedPrivateCategorySet()
```

- **Description**

Gets the selected private category set.

- **init**

```
public void init()
```

- **Description**

Initializes properly all the members needed for category selection.

- **isContinueDisabled**

```
public boolean isContinueDisabled()
```

- **Description**

Checks if the continue button should be disabled. The button is disabled if no category sets have been added for the observation or if some of the added category sets are empty.

- **Returns** – True if the continue button should be disabled.

- **removeCategorySet**

```
public void removeCategorySet (com.moveatis.observation.
 ObservationCategorySet categorySet)
```

- **Description**  
Removes the given category set from the observation.

- **setNewCategorySetName**

```
public void setNewCategorySetName (java.lang.String
 newCategorySetName)
```

- **Description**  
Sets the new category set name.

- **setSelectedDefaultCategorySet**

```
public void setSelectedDefaultCategorySet (java.lang.Long
 selectedDefaultCategorySet)
```

- **Description**  
Sets the selected default category set.

- **setSelectedPrivateCategorySet**

```
public void setSelectedPrivateCategorySet (java.lang.Long
 selectedPrivateCategorySet)
```

- **Description**  
Sets the selected private category set.

## 18.4 Class CategorySetManagedBean

The bean for managing category sets in the appropriate views.

### 18.4.1 Declaration

```
public class CategorySetManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.4.2 Constructors

- **CategorySetManagedBean**

```
public CategorySetManagedBean ()
```

– **Description**

Creates a new instance of CategorySetManagedBean.

### 18.4.3 Methods

- **createAndEditCategorySet**

```
public void createAndEditCategorySet (com.moveatis.event.
 EventGroupEntity eventGroupEntity , com.moveatis.abstracts.
 AbstractCategorySetEntity abstractCategorySetEntity , java.util
 .List abstractCategories2)
```

– **Description**

The method is used for creating and editing the category set. As it's fairly complex, see the comments in the code to get better understanding what it does.

– **Parameters**

- \* `eventGroupEntity` – The event group the category set belongs to.
- \* `abstractCategorySetEntity` – The category set to be created or edited.
- \* `abstractCategories2` – The categories belonging to the category set.

## 18.5 Class ControlManagedBean

The bean class for managing the control page view.

### 18.5.1 Declaration

```
public class ControlManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.5.2 Constructors

- **ControlManagedBean**

```
public ControlManagedBean ()
```



### 18.5.3 Methods

- **addEventGroup**

```
public void addEventGroup(com.moveatis.event.EventGroupEntity
 eventGroup)
```

- **Description**

- Adds a new event group to the event groups.

- **addNewCategory**

```
public void addNewCategory()
```

- **Description**

- Adds a new category in the view.

- **addNewCategorySet**

```
public void addNewCategorySet()
```

- **Description**

- Adds a new category set in the view.

- **addNewFeedbackAnalysisCategory**

```
public void addNewFeedbackAnalysisCategory()
```

- **Description**

- Adds a new feedback analysis category in the view.

- **addNewFeedbackAnalysisCategorySet**

```
public void addNewFeedbackAnalysisCategorySet()
```

- **Description**

- Adds a new feedbackanalysiscategory set in the view.

- **fetchEventGroups**

```
protected void fetchEventGroups()
```

- **Description**

Fetches the event groups of the user.

- **getAbstractObservationEventGroupName**

```
public java.lang.String getAbstractObservationEventGroupName(com
 .moveatis.abstracts.AbstractObservationEntity
 observationEntity)
```

- **Description**

Gets the name of the event group of the observation or analysis.

- **getAnalyses**

```
public java.util.Set getAnalyses(com.moveatis.event.
 EventGroupEntity eventGroup)
```

- **Description**

Gets the analyses for the given eventgroup

- **Parameters**

\* **eventGroup** – the eventgroup of which the analyses are being accessed

- **Returns** – the analyses of the given eventgroup

- **getAnalyzerName**

```
public java.lang.String getAnalyzerName()
```

- **getCategories**

```
public java.util.List getCategories()
```

- **Description**

Gets the categories.

- **getCategoryError**

```
public java.lang.String getCategoryError()
```

- **Description**

Checks if the categories have too long names, or invalid characters and returns the error message accordingly if no problems are present returns an empty string

- **Returns** –

- **getCategoryTypes**

```
public com.moveatis.category.CategoryType [] getCategoryTypes ()
```

- **Description**

- Gets the category types.

- **getEventGroups**

```
public java.util.List getEventGroups ()
```

- **Description**

- Gets the event groups.

- **getObservations**

```
public java.util.Set getObservations (com.moveatis.event.
EventGroupEntity eventGroup)
```

- **Description**

- Gets the observations of the event group.

- **getObserverName**

```
public java.lang.String getObserverName ()
```

- **Description**

- Gets the name of the observer of the selected observation entity.

- **getOtherAnalyses**

```
public java.util.List getOtherAnalyses ()
```

- **getOtherObservations**

```
public java.util.List getOtherObservations ()
```

- **Description**

- Gets the other observations.

- **getSelectedAnalysis**

```
public com.moveatis.feedbackanalysis.FeedbackAnalysisEntity
 getSelectedAnalysis()
```

- **getSelectedCategory**

```
public com.moveatis.abstracts.AbstractCategoryEntity
 getSelectedCategory()
```

- **Description**

- Gets the selected category.

- **getSelectedCategorySet**

```
public com.moveatis.abstracts.AbstractCategorySetEntity
 getSelectedCategorySet()
```

- **Description**

- Gets the selected category set.

- **getSelectedEventGroup**

```
public com.moveatis.event.EventGroupEntity getSelectedEventGroup
 ()
```

- **Description**

- Gets the selected event group.

- **getSelectedObservation**

```
public com.moveatis.observation.ObservationEntity
 getSelectedObservation()
```

- **Description**

- Gets the selected observation.

- **hasGroupKey**

```
public boolean hasGroupKey(com.moveatis.event.EventGroupEntity
 eventGroup)
```

- **Description**

- Checks if the event group entity has a group key.

- **init**

```
public void init()
```

- **Description**

- Initializes the bean appropriately.

- **isCreatingNewEventGroup**

```
public boolean isCreatingNewEventGroup()
```

- **Description**

- Returns true if a new event group is being created.

- **msToUnits**

```
public java.lang.String msToUnits(long ms)
```

- **Description**

- Converts milliseconds to string with time units h, m, s.

- **Parameters**

- \* **ms** – The time to be converted in milliseconds.

- **Returns** – String of the converted time units.

- **newAnalysis**

```
public java.lang.String newAnalysis()
```

- **Description**

- Initializes a new analysis and redirects to the category selection view.

- **Returns** – The navigation rule string that redirects to the category selection view.

- **newObservation**

```
public java.lang.String newObservation()
```

- **Description**

- Initializes a new observation and redirects to the category selection view.

- **Returns** – The navigation rule string that redirects to the category selection view.

- **onCategoryReorder**

```
public void onCategoryReorder(ReorderEvent event)
```

– **Description**

ReorderEvent listener for categories reorder.

• **onEditAnalysis**

```
public void onEditAnalysis()
```

– **Description**

Listener for analysis editing

• **onEditEventGroup**

```
public void onEditEventGroup(RowEditEvent event)
```

– **Description**

Listener for event group row edit.

• **onEditObservation**

```
public void onEditObservation()
```

– **Description**

Listener for observation editing.

• **redirectAnalyze**

```
public java.lang.String redirectAnalyze()
```

– **Description**

Starts a new analysis in the selected event

– **Returns** – navigation rule string to redirect to the categoryselection page

• **redirectObservation**

```
public java.lang.String redirectObservation()
```

• **removeAnalysis**

```
public void removeAnalysis()
```

- **Description**  
removes the currently selected analysis

- **removeCategory**

```
public void removeCategory ()
```

- **Description**  
Removes the selected category from the view, reorders the categories and selects a new category.

- **removeCategorySet**

```
public void removeCategorySet ()
```

- **Description**  
Removes the selected category set from the database.

- **removeEventGroup**

```
public void removeEventGroup(com.moveatis.event.EventGroupEntity
 eventGroup)
```

- **Description**  
Removes the event group from the database.

- **removeObservation**

```
public void removeObservation ()
```

- **Description**  
Removes the selected observation from the database.

- **saveCategorySet**

```
public void saveCategorySet ()
```

- **Description**  
Validates and saves the selected categoryset. Validation includes checking for invalid characters and duplicate categories and categorysets

- **setCategories**

```
public void setCategories(java.util.List categories)
```

– **Description**

Sets the categories.

• **setCreatingNewEventGroup**

```
public void setCreatingNewEventGroup(boolean
creatingNewEventGroup)
```

– **Description**

Sets whether a new event group is being created or not.

• **setEventGroups**

```
public void setEventGroups(java.util.List eventGroups)
```

– **Description**

Sets the event groups.

• **setOtherAnalyses**

```
public void setOtherAnalyses(java.util.List otherAnalyses)
```

• **setOtherObservations**

```
public void setOtherObservations(java.util.List
otherObservations)
```

– **Description**

Sets the other observations.

• **setSelectedAnalysis**

```
public void setSelectedAnalysis(com.moveatis.feedbackanalysis.
FeedbackAnalysisEntity selectedAnalysis)
```

• **setSelectedCategory**

```
public void setSelectedCategory(com.moveatis.abstracts.
AbstractCategoryEntity selectedCategory)
```



- **Description**  
Sets the selected category.

- **setSelectedCategorySet**

```
public void setSelectedCategorySet(com.moveatis.abstracts.
 AbstractCategorySetEntity selectedCategorySet)
```

- **Description**  
Sets the selected category set.

- **setSelectedEventGroup**

```
public void setSelectedEventGroup(com.moveatis.event.
 EventGroupEntity selectedEventGroup)
```

- **Description**  
Sets the selected event group.

- **setSelectedObservation**

```
public void setSelectedObservation(com.moveatis.observation.
 ObservationEntity selectedObservation)
```

- **Description**  
Sets the selected observation.

- **showAnalysisInSummaryPage**

```
public java.lang.String showAnalysisInSummaryPage()
```

- **Description**  
Sets the analysis for feedbackanalysismanagedbean and shows it in summary view
- **Returns** – navigation rule string to navigate to the summary page

- **showObservationInSummaryPage**

```
public java.lang.String showObservationInSummaryPage()
```

- **Description**  
Shows the selected observation in the summary page.
- **Returns** – The navigation rule string that redirects to the summary page

## 18.6 Class EventGroupManagedBean

The bean is used to manage event groups in the appropriate views.

### 18.6.1 Declaration

```
public class EventGroupManagedBean
 extends java.lang.Object
```

### 18.6.2 Constructors

- **EventGroupManagedBean**

```
public EventGroupManagedBean ()
```

### 18.6.3 Methods

- **addGroupKey**

```
public void addGroupKey ()
```

- **addGroupKey**

```
public void addGroupKey (com.moveatis.event.EventGroupEntity
 eventGroup)
```

- **Description**

Adds the group key to the specified event group. The group key is used to identify the event group.

- **Parameters**

\* **eventGroup** – The event group into which the the group key is added.

- **createNewEventGroup**

```
public void createNewEventGroup ()
```

- **Description**

Creates a new event group.

- **editGroupKey**

```
public void editGroupKey (com.moveatis.event.EventGroupEntity
 eventGroup, java.lang.String newGroupKey)
```

- **Description**

Sets a new group key for the event group.

- **Parameters**

- \* `eventGroup` – The event group to edit.
- \* `newGroupKey` – The new group key for the event group.

- **getEventGroupDescription**

```
public java.lang.String getEventGroupDescription()
```

- **getEventGroupKey**

```
public java.lang.String getEventGroupKey()
```

- **getEventGroupName**

```
public java.lang.String getEventGroupName()
```

- **getVisibility**

```
public java.lang.String getVisibility()
```

- **init**

```
public void init()
```

- **isGroupKeySelected**

```
public boolean isGroupKeySelected()
```

- **removeGroupKey**

```
public void removeGroupKey(com.moveatis.event.EventGroupEntity
 eventGroup)
```

- **Description**

Removes the group key from the given event group.

- **setEventGroupDescription**

```
public void setEventGroupDescription(java.lang.String
 eventGroupDescription)
```

- **setEventGroupKey**

```
public void setEventGroupKey(java.lang.String eventGroupKey)
```

- **setEventGroupName**

```
public void setEventGroupName(java.lang.String eventGroupName)
```

- **setGroupKeySelected**

```
public void setGroupKeySelected(boolean groupKeySelected)
```

- **setVisibility**

```
public void setVisibility(java.lang.String visibility)
```

## 18.7 Class EventManagedBean

The bean is used to manage events in the appropriate views.

### 18.7.1 Declaration

```
public class EventManagedBean
 extends java.lang.Object
```

### 18.7.2 Constructors

- **EventManagedBean**

```
public EventManagedBean()
```

- **Description**

- Creates a new instance of EventManagedBean.

### 18.7.3 Methods

- **createNewEvent**

```
public void createNewEvent(com.moveatis.event.EventGroupEntity
 eventGroupEntity)
```

- **Description**

- Creates a new event for the event group.

- **getDescription**

```
public java.lang.String getDescription()
```

- **getLabel**

```
public java.lang.String getLabel()
```

- **setDescription**

```
public void setDescription(java.lang.String description)
```

- **setLabel**

```
public void setLabel(java.lang.String label)
```

## 18.8 Class FeedbackAnalysisRecordTableManagedBean

The managed bean in control of the record table for feedback analysis

### 18.8.1 Declaration

```
public class FeedbackAnalysisRecordTableManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.8.2 Constructors

- **FeedbackAnalysisRecordTableManagedBean**

```
public FeedbackAnalysisRecordTableManagedBean()
```

### 18.8.3 Methods

- **downloadImage**

```
public void downloadImage()
```

- **Description**

Downloads the report-page table as an image.

- **edit**

```
public java.lang.String edit(java.lang.Integer orderNumber)
```

- **Description**  
Sends the user to the analyzer page with the selected record as main record.
- **Parameters**
  - \* `orderNumber` – order number of the selected record
- **Returns** – String that faces-config uses to control navigation

- **getConfirm**

```
public java.lang.String getConfirm(int orderNumber)
```

- **Description**  
Gets the confirmation message for deletion, includes the `orderNumber` of the row to be deleted
- **Parameters**
  - \* `orderNumber` –
- **Returns** –

- **getFileName**

```
public java.lang.String getFileName()
```

- **getSelectedCategory**

```
public com.moveatis.feedbackanalysiscategory.
FeedbackAnalysisCategoryEntity getSelectedCategory(java.util.
List selectedCategories ,com.moveatis.feedbackanalysiscategory.
.FeedbackAnalysisCategorySetEntity categorySet)
```

- **Description**  
Gets the selected category from current category set
- **Parameters**
  - \* `selectedCategories` – Users selected categories
  - \* `categorySet` – Category set in use
- **Returns** – the selected category, new category if the category is not selected

- **getSelectedCategorysName**

```
public java.lang.String getSelectedCategorysName(java.util.List
selectedCategories ,com.moveatis.feedbackanalysiscategory.
FeedbackAnalysisCategorySetEntity categorySet)
```

- **Description**  
Gets the name of selected category from current category set
- **Parameters**
  - \* `selectedCategories` – Users selected categories
  - \* `categorySet` – Category set in use
- **Returns** – name of the selected category, empty if no category is selected

- **getSelectedSaveOptions**

```
public java.util.List getSelectedSaveOptions()
```

- **initialize**

```
protected void initialize()
```

- **Description**  
The post constructor creates the feedback analysis

- **setFileName**

```
public void setFileName(java.lang.String fileName)
```

- **setSelectedSaveOptions**

```
public void setSelectedSaveOptions(java.util.List
selectedSaveOptions)
```

## 18.9 Class FeedbackAnalysisCategorySelectionManagedBean

The managed bean in control of the category selection for feedback analysis

### 18.9.1 Declaration

```
public class FeedbackAnalysisCategorySelectionManagedBean
extends java.lang.Object implements java.io.Serializable
```

### 18.9.2 Constructors

- **FeedbackAnalysisCategorySelectionManagedBean**

```
public FeedbackAnalysisCategorySelectionManagedBean()
```

### 18.9.3 Methods

- **addDefaultCategorySet**

```
public void addDefaultCategorySet ()
```

- **Description**

- Adds the selected default category set for the analysis.

- **addNewCategorySet**

```
public void addNewCategorySet ()
```

- **Description**

- Adds a new category set for the analysis if newFeedbackAnalysisCategorySetName isn't empty.

- **addNewCategoryToCategorySet**

```
public void addNewCategoryToCategorySet (com.moveatis.
feedbackanalysiscategory.FeedbackAnalysisCategorySetEntity
categorySet)
```

- **Description**

- Adds a new category to the given categoryset

- **Parameters**

- \* categorySet – the categoryset to which the new category is added

- **addPrivateCategorySet**

```
public void addPrivateCategorySet ()
```

- **Description**

- Adds the selected private category set for the analysis.

- **checkCategories**

```
public java.lang.String checkCategories ()
```

- **Description**

- Checks the categories in use before letting the user continue to observation. The categories in the same category set should have different names. The categories shouldn't have empty names. At least one category should be selected for the observation. It shows an error message if the categories aren't ok.



– **Returns** – "analysiscategoriesok" if the categories were ok, otherwise an empty string.

- **getDefaultFeedbackAnalysisCategorySets**

```
public java.util.List getDefaultFeedbackAnalysisCategorySets ()
```

- **getEventGroup**

```
public com.moveatis.event.EventGroupEntity getEventGroup ()
```

- **getFeedbackAnalysisCategorySetsInUse**

```
public java.util.List getFeedbackAnalysisCategorySetsInUse ()
```

- **getFeedbackAnalysisManagedBean**

```
public FeedbackAnalysisManagedBean
 getFeedbackAnalysisManagedBean ()
```

- **getIsTimerEnabled**

```
public boolean getIsTimerEnabled ()
```

- **getNewFeedbackAnalysisCategorySetName**

```
public java.lang.String getNewFeedbackAnalysisCategorySetName ()
```

- **getPrivateFeedbackAnalysisCategorySets**

```
public java.util.List getPrivateFeedbackAnalysisCategorySets ()
```

- **getSelectedDefaultFeedbackAnalysisCategorySet**

```
public long getSelectedDefaultFeedbackAnalysisCategorySet ()
```

- **getSelectedPrivateFeedbackAnalysisCategorySet**

```
public long getSelectedPrivateFeedbackAnalysisCategorySet ()
```

- **init**

```
public void init ()
```

– **Description**

Gets the categorysets from the given groupkey, and if the user is logged in their own categorysets

• **isContinueDisabled**

```
public boolean isContinueDisabled ()
```

– **Description**

Checks if the continue button should be disabled. The button is disabled if no category sets have been added for the observation or if some of the added category sets are empty.

– **Returns** – True if the continue button should be disabled.

• **removeCategoryFromCategorySet**

```
public void removeCategoryFromCategorySet (com.moveatis.
 feedbackanalysiscategory.FeedbackAnalysisCategorySetEntity
 categorySet ,com.moveatis.feedbackanalysiscategory.
 FeedbackAnalysisCategoryEntity category)
```

– **Description**

removes the given category from the given categoryset

– **Parameters**

- \* **categorySet** – the categoryset from which a category is to be removed
- \* **category** – the category to be removed

• **removeCategorySet**

```
public void removeCategorySet (int categorySet)
```

– **Description**

Removes the given categoryset from use

– **Parameters**

- \* **categorySet** – the categoryset to be removed

• **setDefaultFeedbackAnalysisCategorySets**

```
public void setDefaultFeedbackAnalysisCategorySets (java.util.
 List defaultFeedbackAnalysisCategorySets)
```

- **setEventGroup**

```
public void setEventGroup(com.moveatis.event.EventGroupEntity
 eventGroup)
```

- **setFeedbackAnalysisCategorySetsInUse**

```
public void setFeedbackAnalysisCategorySetsInUse(java.util.List
 feedbackAnalysisCategorySetsInUse)
```

- **setFeedbackAnalysisManagedBean**

```
public void setFeedbackAnalysisManagedBean(
 FeedbackAnalysisManagedBean feedbackAnalysisManagedBean)
```

- **setIsTimerEnabled**

```
public void setIsTimerEnabled(boolean timerEnabled)
```

- **setNewFeedbackAnalysisCategorySetName**

```
public void setNewFeedbackAnalysisCategorySetName(java.lang.
 String newFeedbackAnalysisCategorySetName)
```

- **setPrivateFeedbackAnalysisCategorySets**

```
public void setPrivateFeedbackAnalysisCategorySets(java.util.
 List privateFeedbackAnalysisCategorySets)
```

- **setSelectedDefaultFeedbackAnalysisCategorySet**

```
public void setSelectedDefaultFeedbackAnalysisCategorySet(long
 selectedDefaultFeedbackAnalysisCategorySet)
```

- **setSelectedPrivateFeedbackAnalysisCategorySet**

```
public void setSelectedPrivateFeedbackAnalysisCategorySet(long
 selectedPrivateFeedbackAnalysisCategorySet)
```

## 18.10 Class FeedbackAnalysisManagedBean

The managed bean controlling the feedbackanalysis in view

### 18.10.1 Declaration

```
public class FeedbackAnalysisManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.10.2 Constructors

- **FeedbackAnalysisManagedBean**

```
 public FeedbackAnalysisManagedBean()
```

### 18.10.3 Methods

- **addRecord**

```
 public void addRecord()
```

- **Description**

- saves the changes to the record currently in view and initializes a new record

- **checkNoCategoriesSelected**

```
 public boolean checkNoCategoriesSelected()
```

- **Description**

- Checks if the analysis has any categories selected, prevents the user from making empty analyses.

- **Returns** – True if there are no categories selected in any of the records, otherwise false

- **containsUnclassifiedRecords**

```
 public boolean containsUnclassifiedRecords()
```

- **Description**

- Checks if the analysis has records with no categories selected. The user is asked to confirm that they want to continue if that is the case

- **Returns** – True if there is at least one record that has not been classified based on at least one categoryset, false otherwise

- **delete**

```
 public void delete(int orderNumber)
```

- **Description**

Delete's the selected record from the datatable and the database, if the analysis has already been saved.

- **Parameters**

- \* `record` – selected row

- **getBarImage**

```
public byte[] getBarImage()
```

- **getCurrentRecord**

```
public com.moveatis.records.FeedbackAnalysisRecordEntity
 getCurrentRecord()
```

- **getCurrentRecordNumber**

```
public int getCurrentRecordNumber()
```

- **getDurationAsString**

```
public java.lang.String getDurationAsString()
```

- **getEventEntity**

```
public com.moveatis.event.EventEntity getEventEntity()
```

- **getFeedbackAnalysisCategorySetsInUse**

```
public java.util.List getFeedbackAnalysisCategorySetsInUse()
```

- **getFeedbackAnalysisEntity**

```
public com.moveatis.feedbackanalysis.FeedbackAnalysisEntity
 getFeedbackAnalysisEntity()
```

- **getIsTimerEnabled**

```
public boolean getIsTimerEnabled()
```

- **getIsTimerStopped**

```
public boolean getIsTimerStopped()
```

- **getLongAsTimeStamp**

```
public java.lang.String getLongAsTimeStamp(long seconds)
```

- **Description**

- Returns the given number of seconds in a string showing the minutes and seconds

- **Parameters**

- \* **seconds** – the value as seconds

- **Returns** – the timestamp as the amount of minutes and seconds in a string

- **getMaxTimeStampForCurrentRecord**

```
public long getMaxTimeStampForCurrentRecord()
```

- **Description**

- Finds the next record after the currently viewed one with timestamp set and returns its timestamp. If no such record exists returns currently elapsed time.

- **Returns** – The maximum value for the currently shown records timestamp

- **getMinTimeStampForCurrentRecord**

```
public long getMinTimeStampForCurrentRecord()
```

- **Description**

- Finds the previous record before the currently viewed one with timestamp set and returns its timestamp. If no such record exists returns 0.

- **Returns** – The minimum value for the currently shown records timestamp

- **getPieImage**

```
public byte[] getPieImage()
```

- **getReportCSV**

```
public java.lang.String getReportCSV()
```

- **getReportImage**

```
public byte[] getReportImage()
```

- **getSelectedCategory**

```
public com.moveatis.feedbackanalysiscategory.
FeedbackAnalysisCategoryEntity getSelectedCategory()
```

- **getTableImage**

```
public byte[] getTableImage()
```

- **increment**

```
public void increment()
```

- **Description**

increments the timer value every second if the timer is running

- **init**

```
public void init()
```

- **Description**

Initializes all the necessary information for the analysis

- **isNavigationDisabled**

```
public boolean isNavigationDisabled(boolean isLeft)
```

- **Description**

Tells whether there are records before or after the one currently shown based on the parameter.

- **Parameters**

\* **isLeft** – whether to check before or after the current record

- **Returns** – whether there are records before or after the one currently shown

- **pauseContinue**

```
public void pauseContinue()
```

- **resetCategorySetsInUse**

```
public void resetCategorySetsInUse()
```

- **Description**

Sets the categorysetsinuse to be null,

- **resetCurrentRecord**

```
public void resetCurrentRecord()
```

- **Description**

Resets the start time selected categories and the comment for the record currently in view

- **saveFeedbackAnalysis**

```
public void saveFeedbackAnalysis()
```

- **Description**

The method saves the analysis to the database. Copies are made of all the categorysets used by the analysis, so that later edits to the categorysets won't affect old analyses.

- **setBarImage**

```
public void setBarImage(byte[] img)
```

- **setCurrentRecord**

```
public void setCurrentRecord(com.moveatis.records.
FeedbackAnalysisRecordEntity currentRecord)
```

- **Description**

Sets the currently shown record to be the record given in the parameter

- **Parameters**

\* `currentRecord` – the record to be shown

- **setCurrentRecord**

```
public void setCurrentRecord(int recordNumber)
```

- **Description**

Saves the changes made to the current record if it exists, then sets record to be shown in the view based on the given ordernumber

- **Parameters**



\* `recordNumber` – The ordernumber of the record to be accessed

- `setCurrentRecordNumber`

```
public void setCurrentRecordNumber(int currentRecordNumber)
```

- `setDuration`

```
public void setDuration(long duration)
```

- `setEventEntity`

```
public void setEventEntity(com.moveatis.event.EventEntity
 eventEntity)
```

- `setFeedbackAnalysisCategorySetsInUse`

```
public void setFeedbackAnalysisCategorySetsInUse(java.util.List
 feedbackAnalysisCategorySetsInUse)
```

- `setFeedbackAnalysisDuration`

```
public void setFeedbackAnalysisDuration(long duration)
```

- `setFeedbackAnalysisEntity`

```
public void setFeedbackAnalysisEntity(com.moveatis.
 feedbackanalysis.FeedbackAnalysisEntity
 feedbackAnalysisEntity)
```

- `setFeedbackAnalysisName`

```
public void setFeedbackAnalysisName(java.lang.String name)
```

- `setIsTimerEnabled`

```
public void setIsTimerEnabled(boolean timerEnabled)
```

- `setIsTimerStopped`

```
public void setIsTimerStopped(boolean timerStopped)
```

- **setPieImage**

```
public void setPieImage(byte [] img)
```

- **setReportCSV**

```
public void setReportCSV(java.lang.String data)
```

- **setReportImage**

```
public void setReportImage(byte [] img)
```

- **setSelectedCategory**

```
public void setSelectedCategory(com.moveatis.
feedbackanalysiscategory.FeedbackAnalysisCategoryEntity
selectedCategory)
```

- **setTableImage**

```
public void setTableImage(byte [] img)
```

- **setTimeStamp**

```
public void setTimeStamp()
```

- **Description**

Sets the starttime of the currently viewed record based on the timer value if the record isn't in between other records and its starttime hasn't already been set

- **toRecordTable**

```
public java.lang.String toRecordTable()
```

- **Description**

Makes sure changes to the currently shown record are saved, stops the timer, sets the duration of the analysis and checks wheter there are some empty records and whether none of the records has any categories selected navigates to the recordtable page if not.

- **Returns** – the key string that is used by facesconfig.xml to navigate to the correct page

- **toSummary**

```
public java.lang.String toSummary()
```

- **Description**

navigates to the summary page

- **Returns** – the key string that is used by facesconfig.xml to navigate to the correct page

- **validateNonEmptyRecord**

```
public void validateNonEmptyRecord(FacesContext context,
 UIComponent component, java.lang.Object value)
```

- **Description**

Validates the current record, checks if it has no selected categories or no written feedback and throws an error if that is the case

- **Parameters**

- \* **context** –
- \* **component** –
- \* **value** –

## 18.11 Class FeedbackAnalysisSummaryManagedBean

The managed bean to control the summary page

### 18.11.1 Declaration

```
public class FeedbackAnalysisSummaryManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.11.2 Constructors

- **FeedbackAnalysisSummaryManagedBean**

```
public FeedbackAnalysisSummaryManagedBean()
```

### 18.11.3 Methods

- **countMaxCategories**

```
public int countMaxCategories()
```

- **Description**

Counts the maximum number of categories in a categoryset.

- **Returns** – The maximum number of categories in a categoryset.

- **downloadImage**

```
public void downloadImage(java.lang.String whichFile)
```

- **Description**

Downloads the right image based on the given keystore.

- **Parameters**

- \* **whichFile** – the keystore that tells which image to download

- **getBarModels**

```
public java.util.List getBarModels()
```

- **getCategorySetsInUse**

```
public java.util.List getCategorySetsInUse()
```

- **getEmailAddress**

```
public java.lang.String getEmailAddress()
```

- **getFeedbackAnalysis**

```
public com.moveatis.feedbackanalysis.FeedbackAnalysisEntity
getFeedbackAnalysis()
```

- **getPercentageAsString**

```
public java.lang.String getPercentageAsString(int count)
```

- **Description**

Returns the counted percentage as a formatted string

- **Parameters**

- \* **count** – number of records with a certain category selected

- **Returns** – formatted string containing the percentage

- **getPieModels**

```
public java.util.List getPieModels()
```

- **getSelectedSaveOperations**

```
public java.util.List getSelectedSaveOperations()
```

- **getTableInformations**

```
public java.util.List getTableInformations()
```

- **init**

```
public void init()
```

- **Description**

- calls the `initModels` function to build the summary table and the charts

- **isRenderBarChart**

```
public boolean isRenderBarChart()
```

- **isRenderPieChart**

```
public boolean isRenderPieChart()
```

- **isSelected**

```
public boolean isSelected(java.lang.String saveOperation)
```

- **Description**

- Tells whether the given keystack is in `selectedSaveOperations`.

- **Parameters**

- \* `saveOperation` – The keystack of the selected save operation

- **Returns** – whether the given operation is selected

- **save**

```
public void save() throws java.io.IOException
```

- **Description**

- Does the selected save operations, saves to database, sends email or downloads the csv

– **Throws**

\* `java.io.IOException` –

- **setBarModels**

```
public void setBarModels(java.util.List barModels)
```

- **setCategorySetsInUse**

```
public void setCategorySetsInUse(java.util.List
categorySetsInUse)
```

- **setEmailAddress**

```
public void setEmailAddress(java.lang.String emailAddress)
```

- **setFeedbackAnalysis**

```
public void setFeedbackAnalysis(com.moveatis.feedbackanalysis.
FeedbackAnalysisEntity feedbackAnalysis)
```

- **setPieModels**

```
public void setPieModels(java.util.List pieModels)
```

- **setRenderBarChart**

```
public void setRenderBarChart(boolean renderBarChart)
```

- **setRenderPieChart**

```
public void setRenderPieChart(boolean renderPieChart)
```

- **setSelectedSaveOperations**

```
public void setSelectedSaveOperations(java.util.List
selectedSaveOperations)
```

- **setTableInformations**

```
public void setTableInformations(java.util.List
tableInformations)
```

- **showObservationSavedMessage**

```
public void showObservationSavedMessage ()
```

- **Description**

Shows a dialog to tell that the analysis has been saved

## 18.12 Class **FeedbackAnalysisSummaryManagedBean.TableInformation**

A helper class only useful in this view to hold the information used by the summary table

### 18.12.1 Declaration

```
public class FeedbackAnalysisSummaryManagedBean.TableInformation
 extends java.lang.Object
```

### 18.12.2 Constructors

- **TableInformation**

```
public TableInformation (java.lang.String
 feedbackAnalysisCategorySet)
```

### 18.12.3 Methods

- **getCategories**

```
public java.util.List getCategories ()
```

- **getCounts**

```
public java.util.List getCounts ()
```

- **getFeedbackAnalysisCategorySet**

```
public java.lang.String getFeedbackAnalysisCategorySet ()
```

- **setCategories**

```
public void setCategories (java.util.List categories)
```

- **setCounts**

```
public void setCounts(java.util.List counts)
```

- **setFeedbackAnalysisCategorySet**

```
public void setFeedbackAnalysisCategorySet(java.lang.String
feedbackAnalysisCategorySet)
```

## 18.13 Class LoginManagedBean

The bean that manages the login for three types of users: the public user, the tag user and the identified user.

### 18.13.1 Declaration

```
public class LoginManagedBean
extends java.lang.Object
```

### 18.13.2 Constructors

- **LoginManagedBean**

```
public LoginManagedBean()
```

- **Description**

Creates a new instance of LoginManagedBean.

### 18.13.3 Methods

- **doAnonymityLogin**

```
public java.lang.String doAnonymityLogin()
```

- **Description**

Sets the session for a public user.

- **Returns** – The navigation rule string that redirects to the category selection view.

- **doIdentityLogin**

```
public void doIdentityLogin(ActionEvent actionEvent)
```



- **Description**

Allows users to login from different views. On May 2016, it's not working as supposed, since Shibboleth nulls the session on redirect.

- **Parameters**

- \* `actionEvent` – The action event that activated the login button.

- **doTagLogin**

```
public java.lang.String doTagLogin()
```

- **Description**

- Sets the session for a particular group key.

- **Returns** – The navigation rule string that redirects to the category selection view.

- **getLoginOutcome**

```
public java.lang.String getLoginOutcome()
```

- **getMessages**

```
public java.util.ResourceBundle getMessages()
```

- **getTag**

```
public java.lang.String getTag()
```

- **setLoginOutcome**

```
public void setLoginOutcome(java.lang.String loginOutcome)
```

- **setMessages**

```
public void setMessages(java.util.ResourceBundle messages)
```

- **setTag**

```
public void setTag(java.lang.String tag)
```

## 18.14 Class `ObservationManagedBean`

The bean is used to manage observations in the appropriate views.

### 18.14.1 Declaration

```
public class ObservationManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.14.2 Constructors

- **ObservationManagedBean**

```
 public ObservationManagedBean ()
```

### 18.14.3 Methods

- **addRecord**

```
 public void addRecord(com.moveatis.records.RecordEntity record)
```

- **Description**

- Adds a record to the observation.

- **Parameters**

- \* **record** – The record to be added to the observation.

- **destroy**

```
 public void destroy ()
```

- **Description**

- Removes the observations the user doesn't want to save to database when the session timeout happens and the bean is destroyed.

- **getCategorySetsInUse**

```
 public java.util.List getCategorySetsInUse ()
```

- **Description**

- Gets the observation categories to be used in the observation.

- **getEventEntity**

```
 public com.moveatis.event.EventEntity getEventEntity ()
```

- **getImage**

```
public byte [] getImage ()
```

- **getNextTag**

```
public java.lang.Long getNextTag ()
```

- **getObservationEntity**

```
public com.moveatis.observation.ObservationEntity
getObservationEntity ()
```

- **Description**

Returns the current observation entity.

- **init**

```
public void init ()
```

- **resetCategorySetsInUse**

```
public void resetCategorySetsInUse ()
```

- **saveObservation**

```
public void saveObservation ()
```

- **Description**

The method is called from REST API to save the records to the observation.

- **saveObservationToDatabase**

```
public void saveObservationToDatabase ()
```

- **Description**

The method saves the observation to the database.

- **setCategorySetsInUse**

```
public void setCategorySetsInUse (java.util.List
categorySetsInUse)
```

- **Description**

Sets the observation categories to be used in the observation.

- **setEventEntity**

```
public void setEventEntity(com.moveatis.event.EventEntity
 eventEntity)
```

- **setImage**

```
public void setImage(byte [] img)
```

- **setObservationDuration**

```
public void setObservationDuration(long duration)
```

- **setObservationEntity**

```
public void setObservationEntity(com.moveatis.observation.
 ObservationEntity observationEntity)
```

- **Description**

- Sets the current observation entity.

- **setObservationName**

```
public void setObservationName(java.lang.String name)
```

- **startObservation**

```
public void startObservation()
```

- **Description**

- Creates a new observation entity and initializes it to be used in a new observation.

## 18.15 Class SummaryManagedBean

The bean that serves the summary page. It is responsible for creating the timeline model and for getting the attributes of an observation for the summary.

### 18.15.1 Declaration

```
public class SummaryManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.15.2 Constructors

- **SummaryManagedBean**

```
public SummaryManagedBean()
```

- **Description**

The default constructor initializes the timeline options.

### 18.15.3 Methods

- **doSelectedSaveOperation**

```
public void doSelectedSaveOperation()
```

- **Description**

Do all the save operations selected by the user.

- **downloadCurrentObservation**

```
public void downloadCurrentObservation() throws java.io.
 IOException
```

- **downloadImage**

```
public void downloadImage()
```

- **getDuration**

```
public java.util.Date getDuration()
```

- **getMailOptionChecked**

```
public boolean getMailOptionChecked()
```

- **getMax**

```
public java.util.Date getMax()
```

- **Description**

Gets the maximum date of the timeline. The user cannot move the timeline after that date.

- **getMin**

```
public java.util.Date getMin()
```

- **Description**

Gets the minimum date of the timeline. The user cannot move the timeline before that date.

- **getObservation**

```
public com.moveatis.observation.ObservationEntity getObservation()
()
```

- **getRecipientEmail**

```
public java.lang.String getRecipientEmail()
```

- **getSelectedSaveOptions**

```
public java.util.List getSelectedSaveOptions()
```

- **getStart**

```
public java.util.Date getStart()
```

- **Description**

Gets the start date of the timeline.

- **getTimeline**

```
public TimelineModel getTimeline()
```

- **Description**

Gets the timeline model.

- **getZoomMax**

```
public long getZoomMax()
```

- **Description**

Gets the maximum zoom interval for the timeline in milliseconds.

- **getZoomMin**

```
public long getZoomMin()
```

- **Description**

Gets the minimum zoom interval for the timeline in milliseconds.

- **initialize**

```
protected void initialize()
```

- **Description**

The post constructor creates the timeline on request.

- **isObservationSaved**

```
public boolean isObservationSaved()
```

- **mailCurrentObservation**

```
public void mailCurrentObservation()
```

- **saveCurrentObservation**

```
public void saveCurrentObservation()
```

- **Description**

Saves the current observation to the database.

- **setObservation**

```
public void setObservation(com.moveatis.observation.
ObservationEntity observation)
```

- **setObservationSaved**

```
public void setObservationSaved(boolean observationSaved)
```

- **setRecipientEmail**

```
public void setRecipientEmail(java.lang.String recipientEmail)
```

- **setSelectedSaveOptions**

```
public void setSelectedSaveOptions(java.util.List
 selectedSaveOptions)
```

- **showObservationSavedMessage**

```
public void showObservationSavedMessage()
```

- **Description**

- Shows a message of the saved observation.

## 18.16 Class SuperUserManagedBean

The bean sets the superuser role for the identified users. It is not used in the current version of Moveatis.

### 18.16.1 Declaration

```
public class SuperUserManagedBean
 extends java.lang.Object
```

### 18.16.2 Constructors

- **SuperUserManagedBean**

```
public SuperUserManagedBean()
```

### 18.16.3 Methods

- **addSuperUserRights**

```
public void addSuperUserRights(com.moveatis.user.
 IdentifiedUserEntity userEntity)
```

- **Description**

- Adds the superuser role to the given identified user.

- **addSuperUserRights**



```
public void addSuperUserRights(com.moveatis.user.
 IdentifiedUserEntity userEntity ,java.util.Date startDate ,java
 .util.Date endDate)
```

– **Description**

Adds the superuser role for the given time period to the given identified user.

- **listSuperUsers**

```
public java.util.List listSuperUsers ()
```

- **removeSuperUserRights**

```
public void removeSuperUserRights(com.moveatis.user.
 IdentifiedUserEntity userEntity)
```

– **Description**

Removes the superuser role from the given identified user.

## 18.17 Class TimeManagedBean

Provides time related attributes like time zone.

### 18.17.1 Declaration

```
public class TimeManagedBean
 extends java.lang.Object
```

### 18.17.2 Constructors

- **TimeManagedBean**

```
public TimeManagedBean ()
```

### 18.17.3 Methods

- **getServerTimeZone**

```
public java.util.TimeZone getServerTimeZone ()
```

- **getUserTimeZone**

```
public java.util.TimeZone getUserTimeZone ()
```

## 18.18 Class UserManagedBean

The bean manages user-related information in a session.

### 18.18.1 Declaration

```
public class UserManagedBean
 extends java.lang.Object implements java.io.Serializable
```

### 18.18.2 Constructors

- **UserManagedBean**

```
public UserManagedBean()
```

- **Description**

Creates a new instance of UserManagedBean.

### 18.18.3 Methods

- **changeLocale**

```
public void changeLocale(ActionEvent event)
```

- **getLanguageString**

```
public java.lang.String getLanguageString()
```

- **getLocale**

```
public java.util.Locale getLocale()
```

- **Description**

Gets the locale to use in the user interface of the application.

- **getOptionLanguageString**

```
public java.lang.String getOptionLanguageString()
```

- **getTimeZone**

```
public java.util.TimeZone getTimeZone()
```

- **setLanguageString**

```
public void setLanguageString(java.lang.String languageString)
```

- **setLocale**

```
public void setLocale(java.util.Locale locale)
```

- **setLocale**

```
public void setLocale(java.lang.String language)
```

- **setOptionLanguageString**

```
public void setOptionLanguageString(java.lang.String
optionLanguageString)
```

- **setTimeZone**

```
public void setTimeZone(java.util.TimeZone timeZone)
```

## 18.19 Class ValidationManagedBean

The bean implements commonly used methods to validate user input.

### 18.19.1 Declaration

```
public class ValidationManagedBean
extends java.lang.Object
```

### 18.19.2 Constructors

- **ValidationManagedBean**

```
public ValidationManagedBean()
```

### 18.19.3 Methods

- **validateGroupKey**

```
public void validateGroupKey(FacesContext context, UIComponent
component, java.lang.Object value)
```

- **validateLongString**

```
public void validateLongString(FacesContext context, UIComponent
 component, java.lang.Object value)
```

- **validateShortString**

```
public void validateShortString(FacesContext context, UIComponent
 component, java.lang.Object value)
```

- **validateStringForJsAndHtml**

```
public void validateStringForJsAndHtml(FacesContext context,
 UIComponent component, java.lang.Object value)
```

## Chapter 19

# Package com.moveatis.observation

| <i>Package Contents</i>                                                                                                    | <i>Page</i> |
|----------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                                                             |             |
| <b>ObservationBean</b> .....                                                                                               | 172         |
| The EJB manages observations..                                                                                             |             |
| <b>ObservationCategory</b> .....                                                                                           | 175         |
| The observation has its own categories, so renaming the original category does not affect on old observations.             |             |
| <b>ObservationCategorySet</b> .....                                                                                        | 176         |
| The observation has its own category sets, so renaming or removing original category sets does not alter old observations. |             |
| <b>ObservationCategorySetList</b> .....                                                                                    | 178         |
| The observation has its own category sets, and this class has a list, which holds those category sets.                     |             |
| <b>ObservationEntity</b> .....                                                                                             | 179         |
| The entity represents the observation data, that is saved to the database.                                                 |             |

### 19.1 Class ObservationBean

The EJB manages observations..

#### 19.1.1 Declaration

```
public class ObservationBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.Observation , java.io.Serializable
```

#### 19.1.2 Constructors

- **ObservationBean**

```
public ObservationBean ()
```

### 19.1.3 Methods

- **create**

```
public void create(ObservationEntity observationEntity)
```

- **Description**

Persists the observations to the database.

- **Parameters**

- \* `observationEntity` – The observatio entity to be persisted.

- **findAllByObserver**

```
public java.util.List findAllByObserver(com.moveatis.user.
AbstractUser observer)
```

- **Description**

Finds and returns all observations for the specific user.

- **Parameters**

- \* `observer` – The user, whose observations are to be searched.

- **Returns** – A list of the observations for the user.

- **findByEventsNotOwned**

```
public java.util.List findByEventsNotOwned(com.moveatis.user.
AbstractUser observer)
```

- **Description**

Finds the observations that are made for events that the specified user does not own.

- **Parameters**

- \* `observer` – The user, whose observations are to be searched.

- **Returns** – A list of the observations.

- **findRecords**

```
public java.util.List findRecords(java.lang.Object id)
```

- **Description**

Finds a list of the records for the observation with the given id.

- **Parameters**

- \* `id` – The id of the observation.

- **Returns** – A list of the records.

- **findWithoutEvent**

```
public java.util.List findWithoutEvent(com.moveatis.user.
 AbstractUser observer)
```

- **Description**  
Finds the observations for the user, which have no event attached to them.
- **Parameters**
  - \* **observer** – The user, whose observations are to be searched.
- **Returns** – A list of the observations.

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```

- **remove**

```
public void remove(ObservationEntity observationEntity)
```

- **Description**  
Removes the observation and also removes the observation from the event it was associated with.
- **Parameters**
  - \* **observationEntity** – The observation to be removed.

- **removeUnsavedObservation**

```
public void removeUnsavedObservation(ObservationEntity
 observationEntity)
```

- **Description**  
Permanently removes the observation, which the user did not set to be saved into the database.
- **Parameters**
  - \* **observationEntity** – The observation to be removed.

### 19.1.4 Members inherited from class AbstractBean

`com.moveatis.abstracts.AbstractBean` (in 1.1, page 18)

- `public int count()`
- `public void create(BaseEntity entity)`
- `public void edit(BaseEntity entity)`
- `public BaseEntity find(java.lang.Object id)`
- `public List findAll()`
- `public List findRange(int[] range)`
- `protected abstract EntityManager getEntityManager()`
- `public void remove(BaseEntity entity)`

## 19.2 Class ObservationCategory

The observation has its own categories, so renaming the original category does not affect on old observations.

### 19.2.1 Declaration

```
public class ObservationCategory
 extends java.lang.Object implements java.io.Serializable
```

### 19.2.2 Constructors

- **ObservationCategory**

```
 public ObservationCategory()
```

- **ObservationCategory**

```
 public ObservationCategory(ObservationCategory other)
```

### 19.2.3 Methods

- **getName**

```
 public java.lang.String getName()
```

- **getTag**

```
 public java.lang.Long getTag()
```

- **getType**

```
 public com.moveatis.category.CategoryType getType()
```



- **getTypeAsBoolean**

```
public boolean getTypeAsBoolean()
```

- **Description**

- Returns true if the type of the category is COUNTED. The method is used with the PrimeFaces boolean button.

- **getTypeAsInt**

```
public int getTypeAsInt()
```

- **setName**

```
public final void setName(java.lang.String name)
```

- **setTag**

```
public void setTag(java.lang.Long tag)
```

- **setType**

```
public void setType(com.moveatis.category.CategoryType type)
```

- **setTypeAsBoolean**

```
public void setTypeAsBoolean(boolean value)
```

- **Description**

- Sets the type of the category based on the given boolean value. If the value is true, the type will be COUNTED. Otherwise the type will be TIMED. The method is used with the PrimeFaces boolean button.

### 19.3 Class ObservationCategorySet

The observation has its own category sets, so renaming or removing original category sets does not alter old observations.

### 19.3.1 Declaration

```
public class ObservationCategorySet
 extends java.lang.Object implements java.io.Serializable
```

### 19.3.2 Constructors

- **ObservationCategorySet**

```
public ObservationCategorySet(java.lang.Long id, java.lang.String
 name)
```

- **Description**

Creates a new instance of ObservationCategorySet with the given id and name.

### 19.3.3 Methods

- **add**

```
public void add(com.moveatis.category.CategoryType type, java.
 lang.Long tag, java.lang.String name)
```

- **Description**

Adds a new category to the list of the categories.

- **Parameters**

- \* **type** – The type of the new category.
- \* **tag** – The tag of the new category.
- \* **name** – The name of the new category.

- **add**

```
public void add(java.lang.Long tag, java.lang.String name)
```

- **add**

```
public void add(ObservationCategory category)
```

- **Description**

Adds the given category to the list of the categories.

- **Parameters**

- \* **category** – The category to be added.

- **addEmpty**

```
public void addEmpty()
```

– **Description**

Adds an empty category to the list of the categories.

• **getCategories**

```
public java.util.List getCategories()
```

– **Description**

Returns the list of the categories in the category set.

• **getId**

```
public java.lang.Long getId()
```

• **getName**

```
public java.lang.String getName()
```

• **remove**

```
public void remove(ObservationCategory category)
```

– **Description**

Removes the given category from the list of the categories.

– **Parameters**

\* `category` – The category to be removed.

## 19.4 Class ObservationCategorySetList

The observation has its own category sets, and this class has a list, which holds those category sets.

### 19.4.1 Declaration

```
public class ObservationCategorySetList
 extends java.lang.Object
```

### 19.4.2 Constructors

• **ObservationCategorySetList**

```
public ObservationCategorySetList()
```

### 19.4.3 Methods

- **add**

```
public void add(ObservationCategorySet categorySet)
```

- **Description**

Adds the given category set to the category set list.

- **addClone**

```
public void addClone(ObservationCategorySet categorySet)
```

- **Description**

Creates a clone of the given category set and adds it to the category set list.

- **find**

```
public ObservationCategorySet find(java.lang.Long id)
```

- **Description**

Searches for the category set with the given id from the category set list. Returns the category if it was found and null otherwise.

- **getCategorySets**

```
public java.util.List getCategorySets()
```

- **remove**

```
public void remove(ObservationCategorySet categorySet)
```

- **Description**

Removes the given category set from the category set list.

- **setCategorySets**

```
public void setCategorySets(java.util.List categorySets)
```

## 19.5 Class ObservationEntity

The entity represents the observation data, that is saved to the database.

### 19.5.1 Declaration

```
public class ObservationEntity
 extends com.moveatis.abstracts.AbstractObservationEntity implements
 java.io.Serializable
```

### 19.5.2 Constructors

- **ObservationEntity**

```
 public ObservationEntity()
```

### 19.5.3 Methods

- **addRecord**

```
 public void addRecord(com.moveatis.records.RecordEntity record)
```

- **equals**

```
 public boolean equals(java.lang.Object arg0)
```

- **getName**

```
 public java.lang.String getName()
```

- **getObservationCategorySets**

```
 public java.util.Set getObservationCategorySets()
```

- **getRecords**

```
 public java.util.List getRecords()
```

- **getTarget**

```
 public java.lang.String getTarget()
```

- **getUserWantsToSaveToDatabase**

```
 public java.lang.Boolean getUserWantsToSaveToDatabase()
```

- **hashCode**

```
public native int hashCode()
```

- **setName**

```
public void setName(java.lang.String name)
```

- **setObservationCategorySets**

```
public void setObservationCategorySets(java.util.Set
 observationCategorySets)
```

- **setRecords**

```
public void setRecords(java.util.List records)
```

- **setTarget**

```
public void setTarget(java.lang.String target)
```

- **setUserWantsToSaveToDatabase**

```
public void setUserWantsToSaveToDatabase(java.lang.Boolean
 userWantsToSaveToDatabase)
```

- **toString**

```
public java.lang.String toString()
```

#### 19.5.4 Members inherited from class `AbstractObservationEntity`

`com.moveatis.abstracts.AbstractObservationEntity` (in 1.4, page 25)

- `public boolean equals(java.lang.Object object)`
- `public String getDescription()`
- `public long getDuration()`
- `public EventEntity getEvent()`
- `public Long getId()`
- `public AbstractUser getObserver()`
- `public int hashCode()`
- `public void setDescription(java.lang.String description)`
- `public void setDuration(long duration)`
- `public void setEvent(com.moveatis.event.EventEntity event)`
- `public void setId(java.lang.Long id)`
- `public void setObserver(com.moveatis.user.AbstractUser observer)`
- `public String toString()`

### 19.5.5 Members inherited from class BaseEntity

`com.moveatis.abstracts.BaseEntity` (in [1.6](#), page [28](#))

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## Chapter 20

# Package com.moveatis.providers

| <i>Package Contents</i>                                              | <i>Page</i> |
|----------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                       |             |
| <b>MessageProvider</b> .....                                         | <b>183</b>  |
| The CDI bean produces a resource bundle for the transient CDI beans. |             |

### 20.1 Class MessageProvider

The CDI bean produces a resource bundle for the transient CDI beans.

#### 20.1.1 Declaration

```
public class MessageProvider
 extends java.lang.Object
```

#### 20.1.2 Constructors

- MessageProvider

```
public MessageProvider ()
```

#### 20.1.3 Methods

- getBundle

```
public java.util.ResourceBundle getBundle ()
```



# Chapter 21

## Package com.moveatis.records

| <i>Package Contents</i>                                                                                  | <i>Page</i> |
|----------------------------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                                           |             |
| <b>FeedbackAnalysisRecordBean</b> ..... 184                                                              |             |
| Controls the database connection for the feedbackanalysisrecords                                         |             |
| <b>FeedbackAnalysisRecordEntity</b> ..... 185                                                            |             |
| The entity for feedbackanalysis records, corresponds to the feedbackanalysisrecord table in the database |             |
| <b>RecordBean</b> ..... 187                                                                              |             |
| The EJB for managing records.                                                                            |             |
| <b>RecordEntity</b> ..... 187                                                                            |             |
| The entity represent the data of a record, which will be persisted to the database.                      |             |

### 21.1 Class FeedbackAnalysisRecordBean

Controls the database connection for the feedbackanalysisrecords

#### 21.1.1 Declaration

```
public class FeedbackAnalysisRecordBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.FeedbackAnalysisRecord
```

#### 21.1.2 Constructors

- **FeedbackAnalysisRecordBean**

```
public FeedbackAnalysisRecordBean ()
```

#### 21.1.3 Methods

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```

### 21.1.4 Members inherited from class AbstractBean

`com.moveatis.abstracts.AbstractBean` (in 1.1, page 18)

- `public int count()`
- `public void create(BaseEntity entity)`
- `public void edit(BaseEntity entity)`
- `public BaseEntity find(java.lang.Object id)`
- `public List findAll()`
- `public List findRange(int[] range)`
- `protected abstract EntityManager getEntityManager()`
- `public void remove(BaseEntity entity)`

## 21.2 Class FeedbackAnalysisRecordEntity

The entity for feedbackanalysis records, corresponds to the feedbackanalysisrecord table in the database

### 21.2.1 Declaration

```
public class FeedbackAnalysisRecordEntity
 extends com.moveatis.abstracts.AbstractRecordEntity
```

### 21.2.2 Constructors

- **FeedbackAnalysisRecordEntity**

```
public FeedbackAnalysisRecordEntity()
```

### 21.2.3 Methods

- **addSelectedCategory**

```
public void addSelectedCategory(com.moveatis.
 feedbackanalysiscategory.FeedbackAnalysisCategoryEntity
 category)
```

– **Description**

Adds the given category to this record, makes sure that referential integrity is maintained by also editing the recordscontainingthiscategory-list of the category to be added

– **Parameters**

- \* `category` – the category to be added

- **getFeedbackAnalysis**

```
public com.moveatis.feedbackanalysis.FeedbackAnalysisEntity
 getFeedbackAnalysis()
```

- **getOrderNumber**

```
public java.lang.Integer getOrderNumber()
```

- **getSelectedCategories**

```
public java.util.List getSelectedCategories()
```

- **removeSelectedCategory**

```
public void removeSelectedCategory(com.moveatis.
 feedbackanalysiscategory.FeedbackAnalysisCategoryEntity
 category)
```

- **setFeedbackAnalysis**

```
public void setFeedbackAnalysis(com.moveatis.feedbackanalysis.
 FeedbackAnalysisEntity feedbackAnalysis)
```

- **setOrderNumber**

```
public void setOrderNumber(java.lang.Integer orderNumber)
```

- **setSelectedCategories**

```
public void setSelectedCategories(java.util.List
 selectedCategories)
```

#### 21.2.4 Members inherited from class AbstractRecordEntity

com.moveatis.abstracts.AbstractRecordEntity (in 1.5, page 26)

- public boolean equals(java.lang.Object object)
- public String getComment()
- public Long getStartTime()
- public int hashCode()
- public void setComment(java.lang.String comment)
- public void setStartTime(java.lang.Long startTime)
- public String toString()

### 21.2.5 Members inherited from class BaseEntity

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## 21.3 Class RecordBean

The EJB for managing records. Holds the information for the analysis of an observation.

### 21.3.1 Declaration

```
public class RecordBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.Record
```

### 21.3.2 Constructors

- **RecordBean**

```
public RecordBean()
```

### 21.3.3 Methods

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```

### 21.3.4 Members inherited from class AbstractBean

`com.moveatis.abstracts.AbstractBean` (in 1.1, page 18)

- `public int count()`
- `public void create(BaseEntity entity)`
- `public void edit(BaseEntity entity)`
- `public BaseEntity find(java.lang.Object id)`
- `public List findAll()`
- `public List findRange(int[] range)`
- `protected abstract EntityManager getEntityManager()`
- `public void remove(BaseEntity entity)`

## 21.4 Class RecordEntity

The entity represent the data of a record, which will be persisted to the database.

### 21.4.1 Declaration

```
public class RecordEntity
 extends com.moveatis.abstracts.AbstractRecordEntity implements java
 .io.Serializable
```

### 21.4.2 Constructors

- **RecordEntity**

```
public RecordEntity()
```

### 21.4.3 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getCategory**

```
public com.moveatis.observation.ObservationCategory getCategory
 ()
```

- **getEndTime**

```
public java.lang.Long getEndTime()
```

- **getObservation**

```
public com.moveatis.observation.ObservationEntity getObservation
 ()
```

- **getVoiceComment**

```
public java.io.File getVoiceComment()
```

- **Description**

Not used in version 1.0.

- **Returns** – The file for the voice comment.

- **hashCode**

```
public native int hashCode()
```

- **setEndTime**

```
public void setEndTime(java.lang.Long endTime)
```

- **setObservation**

```
public void setObservation(com.moveatis.observation.
 ObservationEntity observation)
```

- **setObservationCategory**

```
public void setObservationCategory(com.moveatis.observation.
 ObservationCategory category)
```

- **setVoiceComment**

```
public void setVoiceComment(java.io.File voiceComment)
```

- **Description**

Not used in version 1.0.

- **Parameters**

\* `voiceComment` – The file that holds the voice comment.

- **toString**

```
public java.lang.String toString()
```

#### 21.4.4 Members inherited from class **AbstractRecordEntity**

`com.moveatis.abstracts.AbstractRecordEntity` (in 1.5, page 26)

- `public boolean equals(java.lang.Object object)`
- `public String getComment()`
- `public Long getStartTime()`
- `public int hashCode()`
- `public void setComment(java.lang.String comment)`
- `public void setStartTime(java.lang.Long startTime)`
- `public String toString()`

#### 21.4.5 Members inherited from class **BaseEntity**

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## Chapter 22

# Package com.moveatis.restful

| <i>Package Contents</i>                                                                                         | <i>Page</i> |
|-----------------------------------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                                                  |             |
| <b>DataReceiver</b> .....                                                                                       | 190         |
| Receives the images and csv-data created on the client side.                                                    |             |
| <b>MoveatisRestApplication</b> .....                                                                            | 191         |
| RestApplication for RESTfull actions in Moveatis.                                                               |             |
| <b>NotFoundExceptionHandler</b> .....                                                                           | 192         |
| Custom NotFound exception for those REST API calls, that are not to /webapi or RecordListenerBean.              |             |
| <b>RecordListenerBean</b> .....                                                                                 | 192         |
| The bean manages REST API for adding records to an observation as well as starting and stopping an observation. |             |

### 22.1 Class DataReceiver

Receives the images and csv-data created on the client side.

#### 22.1.1 Declaration

```
public class DataReceiver
 extends java.lang.Object implements java.io.Serializable
```

#### 22.1.2 Constructors

- **DataReceiver**

```
public DataReceiver ()
```

#### 22.1.3 Methods

- **receiveCSV**

```
public void receiveCSV(java.lang.String data)
```

- **Description**  
Receives csv-data as a string
- **Parameters**
  - \* `data` – the csv-data

- **receiveImage**

```
public void receiveImage(java.lang.String data) throws java.io.
 IOException
```

- **Description**  
Receives base64-encoded image file converts it to a byte array and stores it in the session.
- **Parameters**
  - \* `data` – The base64-encoded png-file
- **Throws**
  - \* `java.io.IOException` –

## 22.2 Class MoveatisRestApplication

RestApplication for RESTfull actions in Moveatis. Includes actions for adding records to an observation as well as starting and stopping an observation.

### 22.2.1 Declaration

```
public class MoveatisRestApplication
 extends Application
```

### 22.2.2 Constructors

- **MoveatisRestApplication**

```
public MoveatisRestApplication()
```

### 22.2.3 Methods

- **getClasses**

```
public java.util.Set getClasses()
```



## 22.3 Class NotFoundExceptionMapper

Custom NotFoundException for those REST API calls, that are not to /webapi or RecordListenerBean.

### 22.3.1 Declaration

```
public class NotFoundExceptionMapper
 extends java.lang.Object
```

### 22.3.2 Constructors

- **NotFoundExceptionMapper**

```
 public NotFoundExceptionMapper()
```

### 22.3.3 Methods

- **toResponse**

```
 public Response toResponse(NotFoundException exception)
```

## 22.4 Class RecordListenerBean

The bean manages REST API for adding records to an observation as well as starting and stopping an observation.

### 22.4.1 Declaration

```
public class RecordListenerBean
 extends java.lang.Object implements java.io.Serializable
```

### 22.4.2 Constructors

- **RecordListenerBean**

```
 public RecordListenerBean()
```

### 22.4.3 Methods

- **addObservationData**

```
 public java.lang.String addObservationData(java.lang.String data
)
```

- **Description**

Adds the observation data coming from the observation view. It could be used to take data from other clients, but not yet implemented or even planned.

- **Parameters**

- \* **data** – The JSON data containing the records of the observation.

- **Returns** – "success" if the action succeeded and "failed" if it failed.

- **keepAlive**

```
public java.lang.String keepAlive()
```

- **Description**

Keeps the session alive during the observation.

- **setTimezone**

```
public void setTimezone(java.lang.String data)
```

- **startObservation**

```
public java.lang.String startObservation(java.lang.String data)
```

- **Description**

Marks the observation as started.

## Chapter 23

# Package com.moveatis.roles

| <i>Package Contents</i>                                                                                                      | <i>Page</i> |
|------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                                                               |             |
| <b>AbstractRole</b> .....                                                                                                    | 194         |
| The entity is the base for the roles in Moveatis.                                                                            |             |
| <b>RoleBean</b> .....                                                                                                        | 196         |
| The EJB manages the roles, which can be added to the users to allow the access system to be more finegrained.                |             |
| <b>SuperUserRoleEntity</b> .....                                                                                             | 198         |
| The entity represents the superuser role, which can be added to the users, who should have the superuser rights to Moveatis. |             |

### 23.1 Class AbstractRole

The entity is the base for the roles in Moveatis. The roles can be used to make the access rights system more finegrained. The entity can be extended to add more roles.

#### 23.1.1 Declaration

```
public abstract class AbstractRole
 extends com.moveatis.abstracts.BaseEntity implements java.io.
 Serializable
```

#### 23.1.2 All known subclasses

SuperUserRoleEntity (in 23.3, page 198)

#### 23.1.3 Fields

- protected java.util.Date startDate
- protected java.util.Date endDate

### 23.1.4 Constructors

- **AbstractRole**

```
public AbstractRole()
```

### 23.1.5 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getEndDate**

```
public java.util.Date getEndDate()
```

- **getStartDate**

```
public java.util.Date getStartDate()
```

- **getUserEntity**

```
public abstract com.moveatis.user.IdentifiedUserEntity
 getUserEntity()
```

- **hashCode**

```
public native int hashCode()
```

- **setEndDate**

```
public void setEndDate(java.util.Date endDate)
```

- **setStartDate**

```
public void setStartDate(java.util.Date startDate)
```

- **setUserEntity**

```
public abstract void setUserEntity(com.moveatis.user.
 IdentifiedUserEntity user)
```

- **toString**

```
public java.lang.String toString()
```

### 23.1.6 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date `getCreated()`
- public Long `getId()`
- protected Date `getRemoved()`
- protected `id`
- public void `setCreated()`
- public void `setId(java.lang.Long id)`
- protected void `setRemoved()`

## 23.2 Class RoleBean

The EJB manages the roles, which can be added to the users to allow the access system to be more finegrained.

### 23.2.1 Declaration

```
public class RoleBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.Role
```

### 23.2.2 Constructors

- **RoleBean**

```
public RoleBean()
```

### 23.2.3 Methods

- **addSuperuserRoleToUser**

```
public void addSuperuserRoleToUser(com.moveatis.user.
 IdentifiedUserEntity user)
```

– **Description**

Adds the superuser rights to the user.

– **Parameters**

\* **user** – The user to whom the superuser rights are granted.

- **addSuperuserRoleToUser**

```
public void addSuperuserRoleToUser(com.moveatis.user.
 IdentifiedUserEntity user, java.util.Date startDate, java.util.
 Date endDate)
```

- **Description**  
Adds the superuser rights to the user with the start and end date.
- **Parameters**
  - \* **user** – The user to whom the superuser rights are granted.
  - \* **startDate** – The date when the role is activated.
  - \* **endDate** – The date when the role is deactivated.

- **checkIfUserIsSuperUser**

```
public boolean checkIfUserIsSuperUser (com.moveatis.user.
 IdentifiedUserEntity user)
```

- **Description**  
Checks if the user has the superuser rights.
- **Parameters**
  - \* **user** – The user to be checked for the superuser rights.
- **Returns** – true if the user had the superuser rights, false otherwise.

- **getEntityManager**

```
protected abstract EntityManager getEntityManager ()
```

- **listRoleUsers**

```
public java.util.List listRoleUsers (AbstractRole role)
```

- **Description**  
Finds and returns the users with the given role. Not implemented in version 1.0.
- **Parameters**
  - \* **role** – The role to be searched for.
- **Returns** – A list of the users with the role.

- **listSuperusers**

```
public java.util.List listSuperusers ()
```

- **Description**  
Finds and returns a list of the users with the superuser rights.
- **Returns** – A list of the users with the superuser rights.

- **removeSuperuserRoleFromUser**

```
public void removeSuperuserRoleFromUser (com.moveatis.user .
 IdentifiedUserEntity user)
```

– **Description**

Removes the superuser rights from the user.

– **Parameters**

\* **user** – The user whose superuser rights should be removed.

### 23.2.4 Members inherited from class AbstractBean

com.moveatis.abstracts.AbstractBean (in 1.1, page 18)

- public int count()
- public void create(BaseEntity entity)
- public void edit(BaseEntity entity)
- public BaseEntity find(java.lang.Object id)
- public List findAll()
- public List findRange(int[] range)
- protected abstract EntityManager getEntityManager()
- public void remove(BaseEntity entity)

## 23.3 Class SuperUserRoleEntity

The entity represents the superuser role, which can be added to the users, who should have the superuser rights to Moveatis. In version 1.0 doesn't include superuser tasks.

### 23.3.1 Declaration

```
public class SuperUserRoleEntity
 extends com.moveatis.roles.AbstractRole implements java.io .
 Serializable
```

### 23.3.2 Constructors

- **SuperUserRoleEntity**

```
public SuperUserRoleEntity()
```

### 23.3.3 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getUserEntity**

```
public abstract com.moveatis.user.IdentifiedUserEntity
 getUserEntity()
```

- hashCode

```
public native int hashCode()
```

- setUserEntity

```
public abstract void setUserEntity(com.moveatis.user.
 IdentifiedUserEntity user)
```

- toString

```
public java.lang.String toString()
```

### 23.3.4 Members inherited from class AbstractRole

com.moveatis.roles.AbstractRole (in 23.1, page 194)

- protected endDate
- public boolean equals(java.lang.Object object)
- public Date getEndDate()
- public Date getStartDate()
- public abstract IdentifiedUserEntity getUserEntity()
- public int hashCode()
- public void setEndDate(java.util.Date endDate)
- public void setStartDate(java.util.Date startDate)
- public abstract void setUserEntity(com.moveatis.user.IdentifiedUserEntity user)
- protected startDate
- public String toString()

### 23.3.5 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date getCreated()
- public Long getId()
- protected Date getRemoved()
- protected id
- public void setCreated()
- public void setId(java.lang.Long id)
- protected void setRemoved()



## Chapter 24

# Package `com.moveatis.servlet`

| <i>Package Contents</i>                                                                                | <i>Page</i> |
|--------------------------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                                         |             |
| <b>JyuIdentityServlet</b> .....                                                                        | <b>200</b>  |
| The servlet handles the identification of a user using the Shibboleth service of Jyväskylä University. |             |

### 24.1 Class `JyuIdentityServlet`

The servlet handles the identification of a user using the Shibboleth service of Jyväskylä University. If you are modifying Moveatis to your own organization, you need to implement your own identity provider service with the classes in the identity provider package.

#### 24.1.1 See also

- `com.moveatis.identityprovider.IdentityProviderInformationEntity` (in 14.3, page 87)
- `com.moveatis.identityprovider.IdentityProvider` (in 14.1, page 85)
- `com.moveatis.identityprovider.IdentityProviderBean` (in 14.2, page 86)
- `com.moveatis.identityprovider.IdentityProviderRegistrationBean` (in 14.4, page 88)

#### 24.1.2 Declaration

```
public class JyuIdentityServlet
 extends HttpServlet
```

#### 24.1.3 Constructors

- `JyuIdentityServlet`

```
 public JyuIdentityServlet()
```

#### 24.1.4 Methods

- **doGet**

```
protected void doGet(HttpServletRequest request ,
 HttpServletResponse response) throws ServletException , java.
 io.IOException
```

- **doPost**

```
protected void doPost(HttpServletRequest request ,
 HttpServletResponse response) throws ServletException , java.
 io.IOException
```

- **Description**

- Handles the HTTP POST method.

- **Throws**

- \* `ServletException` – if a servlet-specific error occurs.
    - \* `java.io.IOException` – if an I/O error occurs.

- **getServletInfo**

```
public java.lang.String getServletInfo ()
```

- **Description**

- Returns a short description of the servlet.

- **Returns** – a String containing servlet description.

- **processRequest**

```
protected void processRequest(HttpServletRequest request ,
 HttpServletResponse response) throws ServletException , java.
 io.IOException
```

- **Description**

- Processes requests for both HTTP GET and POST methods.

- **Throws**

- \* `ServletException` – if a servlet-specific error occurs.
    - \* `java.io.IOException` – if an I/O error occurs.

## Chapter 25

# Package `com.moveatis.session`

| <i>Package Contents</i>                                                                                                                  | <i>Page</i>         |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>Classes</b>                                                                                                                           |                     |
| <b>LogoutBean</b> .....                                                                                                                  | <a href="#">202</a> |
| The bean manages logging out of Moveatis, which includes invalidating the session and redirecting the user to the Shibboleth logout URI. |                     |
| <b>SessionBean</b> .....                                                                                                                 | <a href="#">203</a> |
| The bean manages actions the user needs in the usage of Moveatis.                                                                        |                     |

### 25.1 Class LogoutBean

The bean manages logging out of Moveatis, which includes invalidating the session and redirecting the user to the Shibboleth logout URI.

#### 25.1.1 Declaration

```
public class LogoutBean
 extends java.lang.Object
```

#### 25.1.2 Constructors

- LogoutBean

```
public LogoutBean()
```

#### 25.1.3 Methods

- logOut

```
public void logOut(ActionEvent event) throws java.io.IOException
```

- **Description**

Logs the user out by invalidating the session and redirecting the user to the Shibboleth logout URI.

## 25.2 Class SessionBean

The bean manages actions the user needs in the usage of Moveatis.

### 25.2.1 Declaration

```
public class SessionBean
 extends java.lang.Object implements java.io.Serializable , com.
 moveatis.interfaces.Session
```

### 25.2.2 Constructors

- **SessionBean**

```
public SessionBean ()
```

### 25.2.3 Methods

- **getCategorySetsInUse**

```
java.util.List getCategorySetsInUse ()
```

- **getFeedbackAnalysisCategorySetsInUse**

```
java.util.List getFeedbackAnalysisCategorySetsInUse ()
```

- **getGroupKey**

```
com.moveatis.groupkey.GroupKeyEntity getGroupKey ()
```

- **getIsLocalhost**

```
public boolean getIsLocalhost ()
```

- **Description**

Used in development of Moveatis to detect whether the application is running on the actual production server or on localhost.

- **Returns** – true if Moveatis is running in localhost, false otherwise.

- **getLoggedIdentifiedUser**

```
com.moveatis.user.IdentifiedUserEntity getLoggedIdentifiedUser()
```

- **getLoggedInUser**

```
com.moveatis.user.AbstractUser getLoggedInUser()
```

- **getReturnUri**

```
public java.lang.String getReturnUri()
```

- **Description**

Returns the URI in which the user was before he or she clicked the login button when not in the front page. Not implemented in version 1.0.

- **Returns** – the URI to return the user to.

- **getSessionObservationsIds**

```
java.util.SortedSet getSessionObservationsIds()
```

- **getSessionTimeZone**

```
java.util.TimeZone getSessionTimeZone()
```

- **isBackToCatEdAvailable**

```
public boolean isBackToCatEdAvailable()
```

- **Description**

Returns true if the button that redirects the user to the category selection view should be available to the user.

- **isIdentifiedUser**

```
boolean isIdentifiedUser()
```

- **isLoggedIn**

```
boolean isLoggedIn()
```

- **isResetObsAvailable**

```
public boolean isResetObsAvailable()
```

- **Description**

- Returns true if the button that resets the current observation should be available to the user.

- **isSaveable**

```
public boolean isSaveable()
```

- **Description**

- Checks if the observation is in saveable state. It is used in checking if the Save button can be displayed.

- **Returns** – true if the observation could be saved.

- **isToFrontPageAvailable**

```
public boolean isToFrontPageAvailable()
```

- **Description**

- Returns true if the button that redirects the user to the front page should be available to the user.

- **setAnonymityUser**

```
void setAnonymityUser()
```

- **setCategorySetsInUse**

```
void setCategorySetsInUse(java.util.List categorySets)
```

- **setFeedbackAnalysisCategorySetsInUse**

```
void setFeedbackAnalysisCategorySetsInUse(java.util.List
feedbackAnalysisCategorySets)
```

- **setIdentityProviderUser**

```
void setIdentityProviderUser(com.moveatis.user.
IdentifiedUserEntity user)
```

- **setReturnUri**

```
public void setReturnUri(java.lang.String returnUri)
```

- **Description**

Sets the URI into which the user will be returned when he or she clicks the login button outside of the front page. Not implemented in version 1.0.

- **Parameters**

- \* `returnUri` – The URI that is set as return URI.

- **setSessionObservations**

```
void setSessionObservations(java.util.SortedSet observationsIds)
```

- **setSessionTimeZone**

```
void setSessionTimeZone(java.util.TimeZone timeZone)
```

- **setTagUser**

```
void setTagUser(com.moveatis.user.TagUserEntity tagUser)
```

- **toString**

```
public java.lang.String toString()
```

## Chapter 26

# Package `com.moveatis.timezone`

| <i>Package Contents</i>                              | <i>Page</i> |
|------------------------------------------------------|-------------|
| <b>Classes</b>                                       |             |
| <b>TimeZoneInformation</b> .....                     | <b>207</b>  |
| The class to keep the default time zone of Moveatis. |             |

### 26.1 Class `TimeZoneInformation`

The class to keep the default time zone of Moveatis.

#### 26.1.1 Declaration

```
public class TimeZoneInformation
 extends java.lang.Object
```

#### 26.1.2 Constructors

- `TimeZoneInformation`

```
public TimeZoneInformation()
```

#### 26.1.3 Methods

- `getTimeZone`

```
public static java.util.TimeZone getTimeZone()
```

- `getTimeZoneFromOffset`

```
public static java.util.TimeZone getTimeZoneFromOffset(int
 offset ,int DSTSaving)
```



– **Description**

Gets a `TimeZone` from the time zone offset and the daylight saving time.

– **Parameters**

- \* `offset` – the time zone offset in milliseconds.
- \* `DSTSaving` – the daylight saving time in milliseconds.

## Chapter 27

# Package com.moveatis.user

| <i>Package Contents</i>                                                                                                      | <i>Page</i> |
|------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Classes</b>                                                                                                               |             |
| <b>AbstractUser</b> .....                                                                                                    | 209         |
| The base user entity for TagUser and IdentifiendUser.                                                                        |             |
| <b>AnonUserBean</b> .....                                                                                                    | 211         |
| The EJB manages the anonymity user, which represents the public user of Moveatis.                                            |             |
| <b>AnonUserEntity</b> .....                                                                                                  | 211         |
| The entity represents one public user account in Moveatis.                                                                   |             |
| <b>IdentifiedUserEntity</b> .....                                                                                            | 213         |
| The entity represents the individual user, which is identified using the Shibboleth identity system of Jyväskylä University. |             |
| <b>TagUserBean</b> .....                                                                                                     | 215         |
| The EJB is used in managing of TagUser, which represents the user account for accessing with a group key into Moveatis.      |             |
| <b>TagUserEntity</b> .....                                                                                                   | 216         |
| The entity represent the data for accessing with a group key into Moveatis.                                                  |             |
| <b>UserBean</b> .....                                                                                                        | 217         |
| The EJB manages an identified user.                                                                                          |             |

### 27.1 Class AbstractUser

The base user entity for TagUser and IdentifiendUser. TagUser is the user which provides access for group keys and the identified user is an individual user, who is identified using the Shibboleth identity system of Jyväskylä University.

#### 27.1.1 Declaration

```
public abstract class AbstractUser
 extends com.moveatis.abstracts.BaseEntity implements java.io.
 Serializable
```

### 27.1.2 All known subclasses

TagUserEntity (in 27.6, page 216), IdentifiedUserEntity (in 27.4, page 213), AnonUserEntity (in 27.3, page 211)

### 27.1.3 Constructors

- **AbstractUser**

```
public AbstractUser()
```

### 27.1.4 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getId**

```
public java.lang.Long getId()
```

- **hashCode**

```
public native int hashCode()
```

- **setId**

```
public void setId(java.lang.Long id)
```

- **toString**

```
public java.lang.String toString()
```

### 27.1.5 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date **getCreated()**
- public Long **getId()**
- protected Date **getRemoved()**
- protected **id**
- public void **setCreated()**
- public void **setId(java.lang.Long id)**
- protected void **setRemoved()**

## 27.2 Class AnonUserBean

The EJB manages the anonymity user, which represents the public user of Moveatis. The class is not used in version 1.0

### 27.2.1 Declaration

```
public class AnonUserBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.AnonUser
```

### 27.2.2 Constructors

- **AnonUserBean**

```
public AnonUserBean()
```

### 27.2.3 Methods

- **find**

```
AnonUserEntity find()
```

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```

### 27.2.4 Members inherited from class AbstractBean

com.moveatis.abstracts.AbstractBean (in [1.1](#), page [18](#))

- public int count()
- public void create(BaseEntity entity)
- public void edit(BaseEntity entity)
- public BaseEntity find(java.lang.Object id)
- public List findAll()
- public List findRange(int[] range)
- protected abstract EntityManager getEntityManager()
- public void remove(BaseEntity entity)

## 27.3 Class AnonUserEntity

The entity represents one public user account in Moveatis. It's used as bookkeeping purposes, as each session must have a user.

### 27.3.1 Declaration

```
public class AnonUserEntity
 extends com.moveatis.user.AbstractUser implements java.io.
 Serializable
```

### 27.3.2 Constructors

- **AnonUserEntity**

```
public AnonUserEntity()
```

### 27.3.3 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getCreator**

```
public IdentifiedUserEntity getCreator()
```

- **getLabel**

```
public java.lang.String getLabel()
```

- **hashCode**

```
public native int hashCode()
```

- **setCreator**

```
public void setCreator(IdentifiedUserEntity creator)
```

- **setLabel**

```
public void setLabel(java.lang.String label)
```

- **toString**

```
public java.lang.String toString()
```

### 27.3.4 Members inherited from class `AbstractUser`

`com.moveatis.user.AbstractUser` (in 27.1, page 209)

- `public boolean equals(java.lang.Object object)`
- `public Long getId()`
- `public int hashCode()`
- `public void setId(java.lang.Long id)`
- `public String toString()`

### 27.3.5 Members inherited from class `BaseEntity`

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

## 27.4 Class `IdentifiedUserEntity`

The entity represents the individual user, which is identified using the Shibboleth identity system of Jyväskylä University.

### 27.4.1 Declaration

```
public class IdentifiedUserEntity
 extends com.moveatis.user.AbstractUser implements java.io.
 Serializable
```

### 27.4.2 Constructors

- `IdentifiedUserEntity`

```
public IdentifiedUserEntity ()
```

### 27.4.3 Methods

- `equals`

```
public boolean equals(java.lang.Object arg0)
```

- `getEmail`

```
public java.lang.String getEmail ()
```

- **getGivenName**

```
public java.lang.String getGivenName()
```

- **getIdentityProviderInformation**

```
public com.moveatis.identityprovider.
 IdentityProviderInformationEntity
 getIdentityProviderInformation()
```

- **getIdentityProviderInformationEntity**

```
public com.moveatis.identityprovider.
 IdentityProviderInformationEntity
 getIdentityProviderInformationEntity()
```

- **hashCode**

```
public native int hashCode()
```

- **setEmail**

```
public void setEmail(java.lang.String email)
```

- **setGivenName**

```
public void setGivenName(java.lang.String givenName)
```

- **setIdentityProviderInformation**

```
public void setIdentityProviderInformation(com.moveatis.
 identityprovider.IdentityProviderInformationEntity
 identityProviderInformation)
```

- **setIdentityProviderInformationEntity**

```
public void setIdentityProviderInformationEntity(com.moveatis.
 identityprovider.IdentityProviderInformationEntity
 identityProviderInformation)
```

- **toString**

```
public java.lang.String toString()
```

#### 27.4.4 Members inherited from class AbstractUser

`com.moveatis.user.AbstractUser` (in 27.1, page 209)

- `public boolean equals(java.lang.Object object)`
- `public Long getId()`
- `public int hashCode()`
- `public void setId(java.lang.Long id)`
- `public String toString()`

#### 27.4.5 Members inherited from class BaseEntity

`com.moveatis.abstracts.BaseEntity` (in 1.6, page 28)

- `public Date getCreated()`
- `public Long getId()`
- `protected Date getRemoved()`
- `protected id`
- `public void setCreated()`
- `public void setId(java.lang.Long id)`
- `protected void setRemoved()`

### 27.5 Class TagUserBean

The EJB is used in managing of TagUser, which represents the user account for accessing with a group key into Moveatis.

#### 27.5.1 Declaration

```
public class TagUserBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.TagUser
```

#### 27.5.2 Constructors

- **TagUserBean**

```
public TagUserBean()
```

#### 27.5.3 Methods

- **findByKey**

```
TagUserEntity findByKey(com.moveatis.groupkey.GroupKeyEntity
 groupkey)
```

- **getEntityManager**

```
protected abstract EntityManager getEntityManager()
```



### 27.5.4 Members inherited from class AbstractBean

`com.moveatis.abstracts.AbstractBean` (in [1.1](#), page [18](#))

- `public int count()`
- `public void create(BaseEntity entity)`
- `public void edit(BaseEntity entity)`
- `public BaseEntity find(java.lang.Object id)`
- `public List findAll()`
- `public List findRange(int[] range)`
- `protected abstract EntityManager getEntityManager()`
- `public void remove(BaseEntity entity)`

## 27.6 Class TagUserEntity

The entity represent the data for accessing with a group key into Moveatis.

### 27.6.1 Declaration

```
public class TagUserEntity
 extends com.moveatis.user.AbstractUser implements java.io.
 Serializable
```

### 27.6.2 Constructors

- **TagUserEntity**

```
public TagUserEntity()
```

### 27.6.3 Methods

- **equals**

```
public boolean equals(java.lang.Object arg0)
```

- **getCreator**

```
public IdentifiedUserEntity getCreator()
```

- **getGroupKey**

```
public com.moveatis.groupkey.GroupKeyEntity getGroupKey()
```

- **getLabel**

```
public java.lang.String getLabel()
```

- **hashCode**

```
public native int hashCode()
```

- **setCreator**

```
public void setCreator(IdentifiedUserEntity creator)
```

- **setGroupKey**

```
public void setGroupKey(com.moveatis.groupkey.GroupKeyEntity
 groupKey)
```

- **setLabel**

```
public void setLabel(java.lang.String label)
```

- **toString**

```
public java.lang.String toString()
```

#### 27.6.4 Members inherited from class AbstractUser

com.moveatis.user.AbstractUser (in 27.1, page 209)

- public boolean equals(java.lang.Object object)
- public Long getId()
- public int hashCode()
- public void setId(java.lang.Long id)
- public String toString()

#### 27.6.5 Members inherited from class BaseEntity

com.moveatis.abstracts.BaseEntity (in 1.6, page 28)

- public Date getCreated()
- public Long getId()
- protected Date getRemoved()
- protected id
- public void setCreated()
- public void setId(java.lang.Long id)
- protected void setRemoved()

### 27.7 Class UserBean

The EJB manages an identified user. It is not used much in version 1.0

### 27.7.1 Declaration

```
public class UserBean
 extends com.moveatis.abstracts.AbstractBean implements com.moveatis
 .interfaces.User
```

### 27.7.2 Constructors

- UserBean

```
public UserBean()
```

### 27.7.3 Methods

- getEntityManager

```
protected abstract EntityManager getEntityManager()
```

### 27.7.4 Members inherited from class AbstractBean

com.moveatis.abstracts.AbstractBean (in [1.1](#), page [18](#))

- public int count()
- public void create(BaseEntity entity)
- public void edit(BaseEntity entity)
- public BaseEntity find(java.lang.Object id)
- public List findAll()
- public List findRange(int[] range)
- protected abstract EntityManager getEntityManager()
- public void remove(BaseEntity entity)

## Chapter 28

# Package `com.moveatis.validation`

| <i>Package Contents</i>                           | <i>Page</i> |
|---------------------------------------------------|-------------|
| <b>Classes</b>                                    |             |
| <b>EmailValidatorBean</b> .....                   | <b>219</b>  |
| The validator for user submitted email addresses. |             |

### 28.1 Class `EmailValidatorBean`

The validator for user submitted email addresses.

#### 28.1.1 Declaration

```
public class EmailValidatorBean
 extends java.lang.Object
```

#### 28.1.2 Constructors

- `EmailValidatorBean`

```
public EmailValidatorBean()
```

#### 28.1.3 Methods

- `getMetadata`

```
public java.util.Map getMetadata()
```

- `getValidatorId`

```
public java.lang.String getValidatorId()
```

- **validate**

```
public void validate(FacesContext context,UIComponent component,
 java.lang.Object value) throws ValidatorException
```

- **Description**

Validates the email address.

- **Parameters**

- \* **context** – The FacesContext for the session.
- \* **component** – The component to be validated.
- \* **value** – The value for the component.

- **Throws**

- \* **ValidatorException** – if the email address was not valid.