

Doxygen Protobuf File Documentation

Generated by Doxygen 1.8.17

1 Protobuf Files	1
2 File Index	3
2.1 File List	3
3 File Documentation	5
3.1 briar.proto File Reference	5
3.1.1 Enumeration Type Documentation	9
3.1.1.1 BatchPolicy	9
3.1.1.2 BriarDataType	9
3.1.1.3 BriarServiceStatus	9
3.1.1.4 DataType	10
3.1.1.5 DetectionPolicy	10
3.1.1.6 EnrollmentType	10
3.1.1.7 EntryType	10
3.1.1.8 ExtractFlags	10
3.1.1.9 FeatureVectorType	11
3.1.1.10 MediaType	11
3.1.1.11 VerifyFlags	11
3.1.2 Variable Documentation	11
3.1.2.1 access_records	11
3.1.2.2 AccessRecord	12
3.1.2.3 algorithm	12
3.1.2.4 Attribute	12
3.1.2.5 attributes	12
3.1.2.6 average_entry_size	12
3.1.2.7 batch_policy	12
3.1.2.8 best	12
3.1.2.9 body	13
3.1.2.10 body_min_height	13
3.1.2.11 body_threshold	13
3.1.2.12 BoolOption	13
3.1.2.13 briar	13
3.1.2.14 BriarDatabase	13
3.1.2.15 BriarDatabaseInfo	14
3.1.2.16 BriarDuration	14
3.1.2.17 BriarDurations	14
3.1.2.18 BriarDurationsList	14
3.1.2.19 BriarGalleryInfo	14
3.1.2.20 BriarGalleryList	15
3.1.2.21 BriarMatrix	15
3.1.2.22 BriarMedia	15
3.1.2.23 BriarPoint2D	15

3.1.2.24 BriarProgress	15
3.1.2.25 BriarRect	16
3.1.2.26 BriarTrack	16
3.1.2.27 BriarVector	16
3.1.2.28 buffer	16
3.1.2.29 channels	16
3.1.2.30 client_duration_frame_level	16
3.1.2.31 ClusterConfidence	17
3.1.2.32 ClusterIds	17
3.1.2.33 collection_date	17
3.1.2.34 confidences	17
3.1.2.35 count	17
3.1.2.36 credential	17
3.1.2.37 csharp_namespace	17
3.1.2.38 data	18
3.1.2.39 datetime	18
3.1.2.40 debug	18
3.1.2.41 description	18
3.1.2.42 detect_batch	18
3.1.2.43 Detection	18
3.1.2.44 detection	18
3.1.2.45 detection_class	19
3.1.2.46 detection_count	19
3.1.2.47 detection_duration	19
3.1.2.48 detection_id	19
3.1.2.49 DetectionOptions	19
3.1.2.50 detections	19
3.1.2.51 enable_metadata	19
3.1.2.52 end	20
3.1.2.53 enhance_batch	20
3.1.2.54 EnhanceOptions	20
3.1.2.55 ENROLL_AUTO_DETECTION	20
3.1.2.56 enroll_batch	20
3.1.2.57 enroll_flag	20
3.1.2.58 ENROLL_FULL_IMAGE	20
3.1.2.59 ENROLL_PROVIDED_DETECTION	21
3.1.2.60 ENROLL_PROVIDED_TEMPLATE	21
3.1.2.61 enrollment_date	21
3.1.2.62 EnrollmentInfo	21
3.1.2.63 EnrollOptions	21
3.1.2.64 entry_count	21
3.1.2.65 entry_type	21

3.1.2.66 EvalConfig	22
3.1.2.67 extract_batch	22
3.1.2.68 ExtractOptions	22
3.1.2.69 FACE	22
3.1.2.70 face	22
3.1.2.71 face_min_height	22
3.1.2.72 face_threshold	22
3.1.2.73 failed_enrollment_count	23
3.1.2.74 flag	23
3.1.2.75 FloatOption	23
3.1.2.76 frame	23
3.1.2.77 frame_count	23
3.1.2.78 frame_metadata	23
3.1.2.79 frame_number	23
3.1.2.80 frame_rate	24
3.1.2.81 FrameMetadata	24
3.1.2.82 full	24
3.1.2.83 fvalue	24
3.1.2.84 GAIT	24
3.1.2.85 gallery_key	24
3.1.2.86 gate	24
3.1.2.87 grpc_inbound_transfer_duration	25
3.1.2.88 grpc_outbound_transfer_duration	25
3.1.2.89 height	25
3.1.2.90 hint	25
3.1.2.91 id	25
3.1.2.92 ids	25
3.1.2.93 im	25
3.1.2.94 image_height	25
3.1.2.95 image_width	26
3.1.2.96 ImageDetectionList	26
3.1.2.97 ImageDetectionListGroup	26
3.1.2.98 internal_data	26
3.1.2.99 IntOption	26
3.1.2.100 ivalue	26
3.1.2.101 json	27
3.1.2.102 length	27
3.1.2.103 location	27
3.1.2.104 major	27
3.1.2.105 mask	27
3.1.2.106 match_score	27
3.1.2.107 MatchInfo	27

3.1.2.108 MatchList	28
3.1.2.109 matrix	28
3.1.2.110 max_results	28
3.1.2.111 max_returns	28
3.1.2.112 media	28
3.1.2.113 media_id	28
3.1.2.114 MediaMetadata	28
3.1.2.115 metadata	29
3.1.2.116 min_object_size	29
3.1.2.117 min_size_prcnt	29
3.1.2.118 minor	29
3.1.2.119 modalities	29
3.1.2.120 modality	29
3.1.2.121 name	29
3.1.2.122 notes	29
3.1.2.123 num_unique_templates	30
3.1.2.124 options	30
3.1.2.125 output_type	30
3.1.2.126 patch	30
3.1.2.127 pickle	30
3.1.2.128 point	30
3.1.2.129 probe_database	30
3.1.2.130 probe_id	30
3.1.2.131 Record	31
3.1.2.132 record	31
3.1.2.133 RecordList	31
3.1.2.134 rect	31
3.1.2.135 reference_id	31
3.1.2.136 return_matrix	31
3.1.2.137 return_media	31
3.1.2.138 role	32
3.1.2.139 row_headers	32
3.1.2.140 rows	32
3.1.2.141 SEARCH_AUTO_DETECTION	32
3.1.2.142 search_batch	32
3.1.2.143 search_database	32
3.1.2.144 SEARCH_FULL_IMAGE	32
3.1.2.145 SEARCH_PROVIDED_DETECTIONS	32
3.1.2.146 SEARCH_PROVIDED_TEMPLATES	33
3.1.2.147 search_results	33
3.1.2.148 search_threshold	33
3.1.2.149 SearchOptions	33

3.1.2.150 segment_id	33
3.1.2.151 segment_total	33
3.1.2.152 serverside_source	33
3.1.2.153 service_duration	34
3.1.2.154 source	34
3.1.2.155 source_type	34
3.1.2.156 store_media	34
3.1.2.157 StringOption	34
3.1.2.158 sub_durations	34
3.1.2.159 subject_id	34
3.1.2.160 subject_name	35
3.1.2.161 syntax	35
3.1.2.162 Template	35
3.1.2.163 template	35
3.1.2.164 template_count	35
3.1.2.165 template_id	35
3.1.2.166 TemplateIds	35
3.1.2.167 TemplateList	36
3.1.2.168 TemplateListGroup	36
3.1.2.169 text	36
3.1.2.170 threshold	36
3.1.2.171 total_database_size	36
3.1.2.172 total_duration	36
3.1.2.173 totalSteps	36
3.1.2.174 tracking_batch	37
3.1.2.175 tracking_disable	37
3.1.2.176 tracking_options	37
3.1.2.177 TrackingOptions	37
3.1.2.178 Tracklet	37
3.1.2.179 tracklet	37
3.1.2.180 tracklet_class	37
3.1.2.181 tracklet_id	38
3.1.2.182 type	38
3.1.2.183 UNSPECIFIED	38
3.1.2.184 use_detections	38
3.1.2.185 use_templates	38
3.1.2.186 value	38
3.1.2.187 vector	38
3.1.2.188 verification_id	38
3.1.2.189 view	39
3.1.2.190 WHOLE_BODY	39
3.1.2.191 width	39

3.1.2.192 xml	39
3.1.2.193 y	39
3.2 briar_error.proto File Reference	39
3.2.1 Enumeration Type Documentation	39
3.2.1.1 BriarError	39
3.2.2 Variable Documentation	40
3.2.2.1 briar	40
3.2.2.2 BriarErrorMessage	40
3.2.2.3 BriarErrors	40
3.2.2.4 csharp_namespace	40
3.2.2.5 error_message	40
3.2.2.6 length	41
3.2.2.7 syntax	41
3.3 briar_service.proto File Reference	41
3.3.1 Function Documentation	42
3.3.1.1 cluster()	42
3.3.1.2 database_compute_score_matrix()	42
3.3.1.3 database_create()	42
3.3.1.4 database_delete()	42
3.3.1.5 database_finalize()	42
3.3.1.6 database_info()	42
3.3.1.7 database_insert()	43
3.3.1.8 database_list()	43
3.3.1.9 database_list_entries()	43
3.3.1.10 database_load()	43
3.3.1.11 database_merge()	43
3.3.1.12 database_remove_templates()	43
3.3.1.13 database_rename()	43
3.3.1.14 database_retrieve()	44
3.3.1.15 detect()	44
3.3.1.16 enhance()	44
3.3.1.17 enroll()	44
3.3.1.18 extract()	44
3.3.1.19 search()	44
3.3.1.20 track()	44
3.3.1.21 verify()	45
3.3.2 Variable Documentation	45
3.3.2.1 briar	45
3.3.2.2 BRIARService	45
3.3.2.3 cluster_confidences	45
3.3.2.4 ClusterReply	45
3.3.2.5 csharp_namespace	45

3.3.2.6 DatabaseFinalizeReply	46
3.3.2.7 DatabaseFinalizeRequest	46
3.3.2.8 durations	46
3.3.2.9 Empty	46
3.3.2.10 enhance_options	46
3.3.2.11 EnhanceReply	46
3.3.2.12 EnhanceRequest	47
3.3.2.13 errors	47
3.3.2.14 frame_id	47
3.3.2.15 metadata	47
3.3.2.16 options	47
3.3.2.17 progress	47
3.3.2.18 proto	47
3.3.2.19 syntax	47
3.4 protofiles_readme.md File Reference	47
Index	49

Chapter 1

Protobuf Files

Primer From Google

The main gRPC webpage at <https://grpc.io> is a good resource for basic information about gRPC. As a primer, the link below talks about concepts relating to grpc, protobuf, and streaming.

<https://grpc.io/docs/what-is-grpc/core-concepts/>

Protobuf File Overview

The files in this folder are the 'uncompiled' protobuf files which define the messages and services which make up the BRIAR API. Using build-proto-stubs.sh in the repo's root folder, these .proto files can be compiled into stubs of multiple languages which will be used by both the BRIAR client and services which implement performer algorithms. Linked below are the three protobuf files defining the API

- briar.proto
- briar_service.proto
- briar_error.proto

briar.proto

This file defines the messages which represent objects such as detections, rectangles, and other pieces of information which need to be sent between clients and services. These objects will be contained inside the request and reply messages sent by the service and will not be sent between clients and services without an outer request or reply wrapper. Aside from those few details, these messages are not particularly remarkable and should be reasonably self documenting.

briar_service.proto

This file contains definitions for the BRIAR Service which defines the methods which the clients can invoke in services and the arguments they can pass between each other.

In BRIARService, you will notice multiple lines starting with 'rpc'. These define which methods are special 'gRPC methods' which can be invoked by the client. Upon compilation, the protobuf files will create BRIARServiceStub and BRIARServiceServicer classes, the former serves as the method calls for the client, and the latter which serves as the inheritable class for the service.

On the client side, after connecting a channel and initializing the stub, the stub can run a method on the service as simply as calling the method with an appropriate request as an argument. For example:

```
reply = stub.status(status_request)
```

where 'status_request' is an initialized StatusRequest class. This will run the code inside the status method in the service, which should return a 'StatusReply' which will then be assigned to the variable 'reply'

This will be different for rpc lines marked with the 'stream' argument in either the method field and/or the 'returns' field, which means the data will be streamed unilaterally or bi-laterally depending on which fields have the 'stream' declaration.

briar_error.proto

A simple error class for storing error information which can be returned as an argument in any of the reply messages. Used for telling the client that the service experienced a handled error and providing relevant details, especially since gRPC's error messages can be needlessly confounding at times

Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

briar.proto	5
briar_error.proto	39
briar_service.proto	41

Chapter 3

File Documentation

3.1 briar.proto File Reference

Enumerations

- enum [BriarServiceStatus](#) { [BUSY](#) = 3 }
- enum [ExtractFlags](#) { [EXTRACT_PROVIDED_DETECTION](#) = 2 }
- enum [VerifyFlags](#) { [VERIFY_PROVIDED_TEMPLATES](#) = 2 }
- enum [MediaType](#) { [MEDIA_VIDEO](#) = 1 }
- enum [DetectionPolicy](#) { [DetectBest](#) = 2 }
- enum [EnrollmentType](#) { [Cluster](#) = 4 }
- enum [BatchPolicy](#) { [FlagAndFinish](#) = 1 }
- enum [DataType](#) { [SOURCE_ONLY](#) = 13 }
- enum [EntryType](#) { [ENTRY_TYPE_MEDIA](#) = 2 }
- enum [BriarDataType](#) { [JSON](#) = 8 }
- enum [FeatureVectorType](#) { [BriarDouble](#) = 9 }

Variables

- [syntax](#) = "proto3"
- option [csharp_namespace](#) = "briar.BriarGrpc"
- package [briar](#)
- enum [ExtractFlags](#) [ENROLL_FULL_IMAGE](#) = 0
- [ENROLL_AUTO_DETECTION](#) = 1
- [ENROLL_PROVIDED_DETECTION](#) = 2
- [ENROLL_PROVIDED_TEMPLATE](#) = 3
- enum [VerifyFlags](#) [SEARCH_FULL_IMAGE](#) = 0
- [SEARCH_AUTO_DETECTION](#) = 1
- [SEARCH_PROVIDED_DETECTIONS](#) = 2
- [SEARCH_PROVIDED_TEMPLATES](#) = 3
- enum [MediaType](#) [major](#) = 1
- int32 [minor](#) = 2
- int32 [patch](#) = 3
- message [StringOption](#)
- string [value](#) = 2
- message [BoolOption](#)
- message [IntOption](#)

- message [FloatOption](#)
- message [EvalConfig](#)
- int32 [min_object_size](#) = 2
- [EnrollmentType](#) [role](#) = 3
- float [threshold](#) = 4
- int32 [max_returns](#) = 5
- float [hint](#) = 6
- float [min_size_prct](#) = 7
- [BatchPolicy](#) [batch_policy](#) = 8
- message [BriarMedia](#)
- int32 [height](#) = 2
- int32 [channels](#) = 3
- int32 [frame_count](#) = 4
- float [frame_rate](#) = 5
- int32 [segment_id](#) = 6
- int32 [segment_total](#) = 7
- int32 [frame_number](#) = 8
- [DataType](#) [type](#) = 9
- [DataType](#) [source_type](#) = 10
- bytes [data](#) = 11
- string [source](#) = 12
- string [serverside_source](#) = 13
- string [description](#) = 14
- string [datetime](#) = 15
- repeated [MediaMetadata](#) [metadata](#) = 16
- message [EnrollOptions](#)
- [BoolOption](#) [debug](#) = 2
- [EntryType](#) [entry_type](#) = 3
- string [subject_id](#) = 4
- string [media_id](#) = 5
- string [subject_name](#) = 6
- [IntOption](#) [enroll_batch](#) = 7
- [EnrollFlags](#) [enroll_flag](#) = 8
- [BiometricModality](#) [modality](#) = 9
- [BoolOption](#) [return_media](#) = 10
- [BoolOption](#) [store_media](#) = 11
- repeated [Attribute](#) [attributes](#) = 12
- message [SearchOptions](#)
- [StringOption](#) [output_type](#) = 2
- [StringOption](#) [search_database](#) = 3
- [StringOption](#) [probe_database](#) = 4
- [FloatOption](#) [search_threshold](#) = 5
- [IntOption](#) [max_results](#) = 6
- [IntOption](#) [search_batch](#) = 7
- [BoolOption](#) [use_detections](#) = 8
- [BoolOption](#) [use_templates](#) = 9
- [SearchFlags](#) [flag](#) = 10
- [BoolOption](#) [full](#) = 13
- [BoolOption](#) [return_matrix](#) = 14
- enum [EntryType](#) [UNSPECIFIED](#) = 0
- [WHOLE_BODY](#) = 1
- [FACE](#) = 2
- [GAIT](#) = 3
- message [EnrollmentInfo](#)
- string [name](#) = 5

- message [BriarRect](#)
- int32 [y](#) = 2
- int32 [width](#) = 3
- message [BriarPoint2D](#)
- message [BriarProgress](#)
- int64 [totalSteps](#) = 2
- message [BriarTrack](#)
- repeated float [confidences](#) = 2
- message [BriarVector](#)
- message [BriarMatrix](#)
- repeated string [row_headers](#) = 2
- repeated [BriarVector](#) [rows](#) = 3
- message [Attribute](#)
- bytes [buffer](#) = 3
- float [fvalue](#) = 4
- int32 [ivalue](#) = 5
- string [text](#) = 6
- bytes [pickle](#) = 7
- bytes [json](#) = 8
- [BriarMatrix](#) [matrix](#) = 9
- [BriarVector](#) [vector](#) = 10
- [BriarMedia](#) [media](#) = 11
- [BriarPoint2D](#) [point](#) = 12
- [BriarRect](#) [rect](#) = 13
- bytes [xml](#) = 14
- message [FrameMetadata](#)
- message [MediaMetadata](#)
- repeated [FrameMetadata](#) [frame_metadata](#) = 2
- message [Detection](#)
- [BriarRect](#) [location](#) = 2
- int32 [frame](#) = 3
- int64 [detection_id](#) = 4
- int64 [tracklet_id](#) = 5
- string [detection_class](#) = 6
- [BriarMedia](#) [mask](#) = 8
- message [Tracklet](#)
- string [tracklet_class](#) = 3
- [TrackingOptions](#) [options](#) = 5
- message [DetectionOptions](#)
- [BoolOption](#) [best](#) = 2
- [FloatOption](#) [face_threshold](#) = 3
- [FloatOption](#) [body_threshold](#) = 4
- [IntOption](#) [face_min_height](#) = 5
- [IntOption](#) [body_min_height](#) = 6
- [IntOption](#) [detect_batch](#) = 7
- [BoolOption](#) [enable_metadata](#) = 8
- [TrackingOptions](#) [tracking_options](#) = 11
- message [TrackingOptions](#)
- [BoolOption](#) [tracking_disable](#) = 2
- [IntOption](#) [tracking_batch](#) = 4
- message [EnhanceOptions](#)
- [IntOption](#) [enhance_batch](#) = 3
- message [ImageDetectionList](#)
- float [detection_duration](#) = 2
- int32 [image_width](#) = 3

- int32 [image_height](#) = 4
- int32 [detection_count](#) = 5
- message [ImageDetectionListGroup](#)
- int32 [length](#) = 2
- message [ExtractOptions](#)
- [IntOption](#) [extract_batch](#) = 4
- message [AccessRecord](#)
- string [notes](#) = 2
- string [credential](#) = 3
- enum [BriarDataType](#) [im](#) = 1
- repeated [BriarRect](#) [detections](#) = 2
- message [Template](#)
- string [algorithm](#) = 3
- string [id](#) = 4
- message [TemplateList](#)
- message [TemplateListGroup](#)
- message [Record](#)
- string [gallery_key](#) = 8
- float [collection_date](#) = 9
- float [enrollment_date](#) = 10
- repeated [AccessRecord](#) [access_records](#) = 12
- [BriarMedia](#) [view](#) = 13
- [Detection](#) [detection](#) = 14
- [Tracklet](#) [tracklet](#) = 15
- repeated [Attribute](#) [internal_data](#) = 17
- string [template_id](#) = 18
- [Template](#) [template](#) = 19
- float [match_score](#) = 20
- [Templatelds](#) [search_results](#) = 21
- message [RecordList](#)
- message [MatchInfo](#)
- string [probe_id](#) = 3
- string [reference_id](#) = 6
- string [verification_id](#) = 7
- [Record](#) [record](#) = 8
- [BriarMedia](#) [face](#) = 9
- [BriarMedia](#) [body](#) = 10
- [BriarMedia](#) [gate](#) = 11
- message [MatchList](#)
- message [BriarDatabase](#)
- message [BriarDatabaseInfo](#)
- int64 [entry_count](#) = 2
- int64 [template_count](#) = 3
- int64 [failed_enrollment_count](#) = 4
- int64 [total_database_size](#) = 5
- int64 [average_entry_size](#) = 6
- repeated [BiometricModality](#) [modalities](#) = 9
- message [Templatelds](#)
- message [BriarGalleryInfo](#)
- int64 [count](#) = 2
- repeated string [ids](#) = 3
- int32 [num_unique_templates](#) = 5
- message [BriarGalleryList](#)
- message [ClusterIds](#)
- message [ClusterConfidence](#)

- message [BriarDuration](#)
- double [end](#) = 2
- message [BriarDurations](#)
- [BriarDuration](#) [client_duration_frame_level](#) = 2
- [BriarDuration](#) [grpc_outbound_transfer_duration](#) = 3
- [BriarDuration](#) [grpc_inbound_transfer_duration](#) = 4
- [BriarDuration](#) [service_duration](#) = 5
- map< string, [BriarDuration](#) > [sub_durations](#) = 6
- [BriarDuration](#) [total_duration](#) = 7
- message [BriarDurationsList](#)

3.1.1 Enumeration Type Documentation

3.1.1.1 BatchPolicy

enum [BatchPolicy](#)

Enumerator

FlagAndFinish	
---------------	--

3.1.1.2 BriarDataType

enum [BriarDataType](#)

Enumerator

JSON	
------	--

3.1.1.3 BriarServiceStatus

enum [BriarServiceStatus](#)

Enumerator

BUSY	
------	--

3.1.1.4 DataType

enum `DataType`

Enumerator

SOURCE_ONLY	
-------------	--

3.1.1.5 DetectionPolicy

enum `DetectionPolicy`

Enumerator

DetectBest	
------------	--

3.1.1.6 EnrollmentType

enum `EnrollmentType`

Enumerator

Cluster	
---------	--

3.1.1.7 EntryType

enum `EntryType`

Enumerator

ENTRY_TYPE_MEDIA	
------------------	--

3.1.1.8 ExtractFlags

enum `ExtractFlags`

Enumerator

EXTRACT_PROVIDED_DETECTION	
----------------------------	--

3.1.1.9 FeatureVectorType

enum `FeatureVectorType`

Enumerator

BriarDouble	
-------------	--

3.1.1.10 MediaType

enum `MediaType`

Enumerator

MEDIA_VIDEO	
-------------	--

3.1.1.11 VerifyFlags

enum `VerifyFlags`

Enumerator

VERIFY_PROVIDED_TEMPLATES	
---------------------------	--

3.1.2 Variable Documentation**3.1.2.1 access_records**

repeated `AccessRecord` access_records = 12

3.1.2.2 AccessRecord

```
message AccessRecord
```

Initial value:

```
{  
    string datetime = 1
```

3.1.2.3 algorithm

```
string algorithm = 3
```

3.1.2.4 Attribute

```
message Attribute
```

Initial value:

```
{  
    string key = 1
```

3.1.2.5 attributes

```
repeated Attribute attributes = 12
```

3.1.2.6 average_entry_size

```
int64 average_entry_size = 6
```

3.1.2.7 batch_policy

```
BatchPolicy batch_policy = 8
```

3.1.2.8 best

```
BoolOption best = 2
```

3.1.2.9 body

```
BriarMedia body = 10
```

3.1.2.10 body_min_height

```
IntOption body_min_height = 6
```

3.1.2.11 body_threshold

```
FloatOption body_threshold = 4
```

3.1.2.12 BoolOption

```
message BoolOption
```

Initial value:

```
{  
    bool override_default = 1
```

3.1.2.13 briar

```
package briar
```

3.1.2.14 BriarDatabase

```
message BriarDatabase
```

Initial value:

```
{  
  
    string name = 1
```

3.1.2.15 BriarDatabaseInfo

message BriarDatabaseInfo

Initial value:

```
{  
    string name = 1
```

3.1.2.16 BriarDuration

message BriarDuration

Initial value:

```
{  
    double start = 1
```

3.1.2.17 BriarDurations

message BriarDurations

Initial value:

```
{  
    BriarDuration client_duration_file_level = 1
```

3.1.2.18 BriarDurationsList

message BriarDurationsList

Initial value:

```
{  
    repeated BriarDurations durations_list = 1
```

3.1.2.19 BriarGalleryInfo

message BriarGalleryInfo

Initial value:

```
{  
    string gallery_name = 1
```


3.1.2.20 BriarGalleryList

```
message BriarGalleryList
```

Initial value:

```
{  
    repeated BriarGalleryInfo galleries = 1
```

3.1.2.21 BriarMatrix

```
message BriarMatrix
```

Initial value:

```
{  
    repeated string column_headers = 1
```

3.1.2.22 BriarMedia

```
message BriarMedia
```

Initial value:

```
{  
    int32 width = 1
```

3.1.2.23 BriarPoint2D

```
message BriarPoint2D
```

Initial value:

```
{  
    float x = 1
```

3.1.2.24 BriarProgress

```
message BriarProgress
```

Initial value:

```
{  
    int64 currentStep = 1
```

3.1.2.25 BriarRect

```
message BriarRect
```

Initial value:

```
{  
    int32 x = 1
```

3.1.2.26 BriarTrack

```
message BriarTrack
```

Initial value:

```
{  
    repeated Tracklet tracklets = 1
```

3.1.2.27 BriarVector

```
message BriarVector
```

Initial value:

```
{  
    repeated float data = 1
```

3.1.2.28 buffer

```
bytes buffer = 3
```

3.1.2.29 channels

```
int32 channels = 3
```

3.1.2.30 client_duration_frame_level

```
BriarDuration client_duration_frame_level = 2
```

3.1.2.31 ClusterConfidence

```
message ClusterConfidence
```

Initial value:

```
{  
    double confidences = 1
```

3.1.2.32 ClusterIds

```
message ClusterIds
```

Initial value:

```
{  
    repeated string ids = 1
```

3.1.2.33 collection_date

```
float collection_date = 9
```

3.1.2.34 confidences

```
repeated float confidences = 2
```

3.1.2.35 count

```
int64 count = 2
```

3.1.2.36 credential

```
string credential = 3
```

3.1.2.37 csharp_namespace

```
option csharp_namespace = "briar.BriarGrpc"
```

3.1.2.38 data

```
bytes data = 11
```

3.1.2.39 datetime

```
string datetime = 15
```

3.1.2.40 debug

```
BoolOption debug = 2
```

3.1.2.41 description

```
string description = 14
```

3.1.2.42 detect_batch

```
IntOption detect_batch = 7
```

3.1.2.43 Detection

```
message Detection
```

Initial value:

```
{  
    float confidence = 1
```

3.1.2.44 detection

```
Detection detection = 14
```

3.1.2.45 detection_class

```
string detection_class = 6
```

3.1.2.46 detection_count

```
int32 detection_count = 5
```

3.1.2.47 detection_duration

```
float detection_duration = 2
```

3.1.2.48 detection_id

```
int64 detection_id = 4
```

3.1.2.49 DetectionOptions

```
message DetectionOptions
```

Initial value:

```
{  
    StringOption algorithm_id = 1
```

3.1.2.50 detections

```
repeated BriarRect detections = 2
```

3.1.2.51 enable_metadata

```
BoolOption enable_metadata = 8
```

3.1.2.52 end

```
double end = 2
```

3.1.2.53 enhance_batch

```
IntOption enhance_batch = 3
```

3.1.2.54 EnhanceOptions

```
message EnhanceOptions
```

Initial value:

```
{  
    StringOption algorithm_id = 1
```

3.1.2.55 ENROLL_AUTO_DETECTION

```
ENROLL_AUTO_DETECTION = 1
```

3.1.2.56 enroll_batch

```
IntOption enroll_batch = 7
```

3.1.2.57 enroll_flag

```
EnrollFlags enroll_flag = 8
```

3.1.2.58 ENROLL_FULL_IMAGE

```
enum ExtractFlags ENROLL_FULL_IMAGE = 0
```

3.1.2.59 ENROLL_PROVIDED_DETECTION

```
ENROLL_PROVIDED_DETECTION = 2
```

3.1.2.60 ENROLL_PROVIDED_TEMPLATE

```
ENROLL_PROVIDED_TEMPLATE = 3
```

3.1.2.61 enrollment_date

```
float enrollment_date = 10
```

3.1.2.62 EnrollmentInfo

```
message EnrollmentInfo
```

Initial value:

```
{  
    string database_id = 1
```

3.1.2.63 EnrollOptions

```
message EnrollOptions
```

Initial value:

```
{  
    BoolOption save_metadata = 1
```

3.1.2.64 entry_count

```
int64 entry_count = 2
```

3.1.2.65 entry_type

```
EntryType entry_type = 3
```

3.1.2.66 EvalConfig

message EvalConfig

Initial value:

```
{  
    DetectionPolicy policy = 1
```

3.1.2.67 extract_batch

```
IntOption extract_batch = 4
```

3.1.2.68 ExtractOptions

message ExtractOptions

Initial value:

```
{  
    StringOption algorithm_id = 1
```

3.1.2.69 FACE

```
FACE = 2
```

3.1.2.70 face

```
BriarMedia face = 9
```

3.1.2.71 face_min_height

```
IntOption face_min_height = 5
```

3.1.2.72 face_threshold

```
FloatOption face_threshold = 3
```


3.1.2.73 failed_enrollment_count

```
int64 failed_enrollment_count = 4
```

3.1.2.74 flag

```
ExtractFlags flag = 10
```

3.1.2.75 FloatOption

```
message FloatOption
```

Initial value:

```
{  
    bool override_default = 1
```

3.1.2.76 frame

```
int64 frame = 3
```

3.1.2.77 frame_count

```
int32 frame_count = 4
```

3.1.2.78 frame_metadata

```
repeated FrameMetadata frame_metadata = 2
```

3.1.2.79 frame_number

```
int32 frame_number = 8
```

3.1.2.80 frame_rate

```
float frame_rate = 5
```

3.1.2.81 FrameMetadata

```
message FrameMetadata
```

Initial value:

```
{  
    repeated Attribute attributes = 1
```

3.1.2.82 full

```
BoolOption full = 13
```

3.1.2.83 fvalue

```
float fvalue = 4
```

3.1.2.84 GAIT

```
GAIT = 3
```

3.1.2.85 gallery_key

```
string gallery_key = 8
```

3.1.2.86 gate

```
BriarMedia gate = 11
```

3.1.2.87 grpc_inbound_transfer_duration

```
BriarDuration grpc_inbound_transfer_duration = 4
```

3.1.2.88 grpc_outbound_transfer_duration

```
BriarDuration grpc_outbound_transfer_duration = 3
```

3.1.2.89 height

```
int32 height = 2
```

3.1.2.90 hint

```
float hint = 6
```

3.1.2.91 id

```
string id = 4
```

3.1.2.92 ids

```
repeated string ids = 3
```

3.1.2.93 im

```
enum BriarDataType im = 1
```

3.1.2.94 image_height

```
int32 image_height = 4
```

3.1.2.95 image_width

```
int32 image_width = 3
```

3.1.2.96 ImageDetectionList

```
message ImageDetectionList
```

Initial value:

```
{  
  repeated Detection detections = 1
```

3.1.2.97 ImageDetectionListGroup

```
message ImageDetectionListGroup
```

Initial value:

```
{  
  repeated ImageDetectionList group = 1
```

3.1.2.98 internal_data

```
repeated Attribute internal_data = 17
```

3.1.2.99 IntOption

```
message IntOption
```

Initial value:

```
{  
  bool override_default = 1
```

3.1.2.100 ivalue

```
int32 ivalue = 5
```

3.1.2.101 json

```
bytes json = 8
```

3.1.2.102 length

```
int32 length = 2
```

3.1.2.103 location

```
BriarRect location = 2
```

3.1.2.104 major

```
enum MediaType major = 1
```

3.1.2.105 mask

```
BriarMedia mask = 8
```

3.1.2.106 match_score

```
float match_score = 20
```

3.1.2.107 MatchInfo

```
message MatchInfo
```

Initial value:

```
{  
    float score = 1
```

3.1.2.108 MatchList

message MatchList

Initial value:

```
{  
  repeated MatchInfo match_list = 1
```

3.1.2.109 matrix

BriarMatrix matrix = 9

3.1.2.110 max_results

IntOption max_results = 6

3.1.2.111 max_returns

int32 max_returns = 5

3.1.2.112 media

BriarMedia media = 11

3.1.2.113 media_id

string media_id = 5

3.1.2.114 MediaMetadata

message MediaMetadata

Initial value:

```
{  
  repeated Attribute attributes = 1
```

3.1.2.115 metadata

```
repeated Attribute metadata = 16
```

3.1.2.116 min_object_size

```
int32 min_object_size = 2
```

3.1.2.117 min_size_prct

```
float min_size_prct = 7
```

3.1.2.118 minor

```
int32 minor = 2
```

3.1.2.119 modalities

```
repeated BiometricModality modalities = 9
```

3.1.2.120 modality

```
BiometricModality modality = 9
```

3.1.2.121 name

```
string name = 5
```

3.1.2.122 notes

```
string notes = 2
```

3.1.2.123 num_unique_templates

```
int32 num_unique_templates = 5
```

3.1.2.124 options

```
DetectionOptions options = 5
```

3.1.2.125 output_type

```
StringOption output_type = 2
```

3.1.2.126 patch

```
int32 patch = 3
```

3.1.2.127 pickle

```
bytes pickle = 7
```

3.1.2.128 point

```
BriarPoint2D point = 12
```

3.1.2.129 probe_database

```
StringOption probe_database = 4
```

3.1.2.130 probe_id

```
string probe_id = 3
```


3.1.2.131 Record

```
message Record
```

Initial value:

```
{  
  string subject_id = 1
```

3.1.2.132 record

```
Record record = 8
```

3.1.2.133 RecordList

```
message RecordList
```

Initial value:

```
{  
  repeated Record records = 1
```

3.1.2.134 rect

```
BriarRect rect = 13
```

3.1.2.135 reference_id

```
string reference_id = 6
```

3.1.2.136 return_matrix

```
BoolOption return_matrix = 14
```

3.1.2.137 return_media

```
BoolOption return_media = 10
```

3.1.2.138 role

```
EnrollmentType role = 3
```

3.1.2.139 row_headers

```
repeated string row_headers = 2
```

3.1.2.140 rows

```
repeated BriarVector rows = 3
```

3.1.2.141 SEARCH_AUTO_DETECTION

```
SEARCH_AUTO_DETECTION = 1
```

3.1.2.142 search_batch

```
IntOption search_batch = 7
```

3.1.2.143 search_database

```
StringOption search_database = 3
```

3.1.2.144 SEARCH_FULL_IMAGE

```
enum VerifyFlags SEARCH_FULL_IMAGE = 0
```

3.1.2.145 SEARCH_PROVIDED_DETECTIONS

```
SEARCH_PROVIDED_DETECTIONS = 2
```

3.1.2.146 SEARCH_PROVIDED_TEMPLATES

```
SEARCH_PROVIDED_TEMPLATES = 3
```

3.1.2.147 search_results

```
TemplateIds search_results = 21
```

3.1.2.148 search_threshold

```
FloatOption search_threshold = 5
```

3.1.2.149 SearchOptions

```
message SearchOptions
```

Initial value:

```
{  
    StringOption out_dir = 1
```

3.1.2.150 segment_id

```
int32 segment_id = 6
```

3.1.2.151 segment_total

```
int32 segment_total = 7
```

3.1.2.152 serverside_source

```
string serverside_source = 13
```

3.1.2.153 service_duration

```
BriarDuration service_duration = 5
```

3.1.2.154 source

```
string source = 12
```

3.1.2.155 source_type

```
DataType source_type = 10
```

3.1.2.156 store_media

```
BoolOption store_media = 11
```

3.1.2.157 StringOption

```
message StringOption
```

Initial value:

```
{  
    bool override_default = 1
```

3.1.2.158 sub_durations

```
map<string, BriarDuration> sub_durations = 6
```

3.1.2.159 subject_id

```
string subject_id = 4
```

3.1.2.160 subject_name

```
string subject_name = 6
```

3.1.2.161 syntax

```
syntax = "proto3"
```

3.1.2.162 Template

```
message Template
```

Initial value:

```
{  
    BriarVector data = 1
```

3.1.2.163 template

```
Template template = 19
```

3.1.2.164 template_count

```
int64 template_count = 3
```

3.1.2.165 template_id

```
string template_id = 18
```

3.1.2.166 TemplateIds

```
message TemplateIds
```

Initial value:

```
{  
    repeated string ids = 1
```

3.1.2.167 TemplateList

```
message TemplateList
```

Initial value:

```
{  
    repeated Template tmps = 1
```

3.1.2.168 TemplateListGroup

```
message TemplateListGroup
```

Initial value:

```
{  
    repeated TemplateList group = 1
```

3.1.2.169 text

```
string text = 6
```

3.1.2.170 threshold

```
FloatOption threshold = 4
```

3.1.2.171 total_database_size

```
int64 total_database_size = 5
```

3.1.2.172 total_duration

```
BriarDuration total_duration = 7
```

3.1.2.173 totalSteps

```
int64 totalSteps = 2
```

3.1.2.174 tracking_batch

```
IntOption tracking_batch = 4
```

3.1.2.175 tracking_disable

```
BoolOption tracking_disable = 2
```

3.1.2.176 tracking_options

```
TrackingOptions tracking_options = 11
```

3.1.2.177 TrackingOptions

```
message TrackingOptions
```

Initial value:

```
{  
    StringOption algorithm_id = 1
```

3.1.2.178 Tracklet

```
message Tracklet
```

Initial value:

```
{  
    repeated Detection detections = 1
```

3.1.2.179 tracklet

```
Tracklet tracklet = 15
```

3.1.2.180 tracklet_class

```
string tracklet_class = 3
```

3.1.2.181 tracklet_id

```
int64 tracklet_id = 5
```

3.1.2.182 type

```
EntryType type = 9
```

3.1.2.183 UNSPECIFIED

```
enum EntryType UNSPECIFIED = 0
```

3.1.2.184 use_detections

```
BoolOption use_detections = 8
```

3.1.2.185 use_templates

```
BoolOption use_templates = 9
```

3.1.2.186 value

```
float value = 2
```

3.1.2.187 vector

```
BriarVector vector = 10
```

3.1.2.188 verification_id

```
string verification_id = 7
```


3.1.2.189 view

`BriarMedia` view = 13

3.1.2.190 WHOLE_BODY

WHOLE_BODY = 1

3.1.2.191 width

int32 width = 3

3.1.2.192 xml

bytes xml = 14

3.1.2.193 y

float y = 2

3.2 briar_error.proto File Reference

Enumerations

- enum `BriarError` { `BRIAR_NUM_ERRORS` = 29 }

Variables

- `syntax` = "proto3"
- option `csharp_namespace` = "briar.BriarGrpc"
- package `briar`
- message `BriarErrors`
- int32 `length` = 2
- message `BriarErrorMessage`
- string `error_message` = 2

3.2.1 Enumeration Type Documentation

3.2.1.1 BriarError

enum `BriarError`

Enumerator

BRIAR_NUM_ERRORS	
------------------	--

3.2.2 Variable Documentation

3.2.2.1 briar

```
package briar
```

3.2.2.2 BriarErrorMessage

```
message BriarErrorMessage
```

Initial value:

```
{  
    int32 error_code = 1
```

3.2.2.3 BriarErrors

```
message BriarErrors
```

Initial value:

```
{  
    repeated BriarError errors = 1
```

3.2.2.4 csharp_namespace

```
option csharp_namespace = "briar.BriarGrpc"
```

3.2.2.5 error_message

```
string error_message = 2
```

3.2.2.6 length

int32 length = 2

3.2.2.7 syntax

syntax = "proto3"

3.3 briar_service.proto File Reference

Functions

- rpc [detect](#) (stream DetectRequest) returns(stream DetectReply)
- rpc [track](#) (stream TrackRequest) returns(stream TrackReply)
- rpc [extract](#) (stream ExtractRequest) returns(stream ExtractReply)
- rpc [enroll](#) (stream EnrollRequest) returns(stream EnrollReply)
- rpc [verify](#) (VerifyRequest) returns(VerifyReply)
- rpc [search](#) (stream SearchRequest) returns(stream SearchReply)
- rpc [cluster](#) (ClusterRequest) returns([ClusterReply](#))
- rpc [enhance](#) (stream [EnhanceRequest](#)) returns(stream [EnhanceReply](#))
- rpc [database_create](#) (DatabaseCreateRequest) returns(DatabaseCreateReply)
- rpc [database_merge](#) (DatabaseMergeRequest) returns(DatabaseMergeReply)
- rpc [database_rename](#) (DatabaseRenameRequest) returns(DatabaseRenameReply)
- rpc [database_delete](#) (DatabaseDeleteRequest) returns(DatabaseDeleteReply)
- rpc [database_load](#) (DatabaseLoadRequest) returns(DatabaseLoadReply)
- rpc [database_retrieve](#) (stream DatabaseRetrieveRequest) returns(stream DatabaseRetrieveReply)
- rpc [database_insert](#) (DatabaseInsertRequest) returns(DatabaseInsertReply)
- rpc [database_list](#) (DatabaseListRequest) returns(DatabaseListReply)
- rpc [database_list_entries](#) (DatabaseListEntriesRequest) returns(DatabaseListentriesReply)
- rpc [database_info](#) (DatabaseInfoRequest) returns(DatabaseInfoReply)
- rpc [database_remove_templates](#) (DatabaseRemoveTmplsRequest) returns(DatabaseRemoveTmplsReply)
- rpc [database_finalize](#) ([DatabaseFinalizeRequest](#)) returns([DatabaseFinalizeReply](#))
- rpc [database_compute_score_matrix](#) ([Empty](#)) returns([BriarMatrix](#))

Variables

- [syntax](#) = "proto3"
- option [csharp_namespace](#) ="briar.BriarGrpc"
- package [briar](#)
- import [briar](#) [briar_grpc](#) [briar_error](#) [proto](#)
- service [BRIARService](#)
- message [Empty](#)
- message [ClusterReply](#)
- repeated [ClusterConfidence](#) [cluster_confidences](#) = 2
- [BriarDurations](#) [durations](#) = 3
- [BriarErrors](#) [errors](#) = 4
- [BriarProgress](#) [progress](#) = 5
- message [EnhanceRequest](#)
- repeated [Attribute](#) [metadata](#) = 2
- repeated [Attribute](#) [options](#) = 3
- int64 [frame_id](#) = 4
- [EnhanceOptions](#) [enhance_options](#) = 6
- message [EnhanceReply](#)
- message [DatabaseFinalizeRequest](#)
- message [DatabaseFinalizeReply](#)

3.3.1 Function Documentation

3.3.1.1 cluster()

```
rpc cluster (  
    ClusterRequest )
```

3.3.1.2 database_compute_score_matrix()

```
rpc database_compute_score_matrix (  
    Empty )
```

3.3.1.3 database_create()

```
rpc database_create (  
    DatabaseCreateRequest )
```

3.3.1.4 database_delete()

```
rpc database_delete (  
    DatabaseDeleteRequest )
```

3.3.1.5 database_finalize()

```
rpc database_finalize (  
    DatabaseFinalizeRequest )
```

3.3.1.6 database_info()

```
rpc database_info (  
    DatabaseInfoRequest )
```

3.3.1.7 database_insert()

```
rpc database_insert (
    DatabaseInsertRequest )
```

3.3.1.8 database_list()

```
rpc database_list (
    DatabaseListRequest )
```

3.3.1.9 database_list_entries()

```
rpc database_list_entries (
    DatabaseListEntriesRequest )
```

3.3.1.10 database_load()

```
rpc database_load (
    DatabaseLoadRequest )
```

3.3.1.11 database_merge()

```
rpc database_merge (
    DatabaseMergeRequest )
```

3.3.1.12 database_remove_templates()

```
rpc database_remove_templates (
    DatabaseRemoveImplsRequest )
```

3.3.1.13 database_rename()

```
rpc database_rename (
    DatabaseRenameRequest )
```

3.3.1.14 database_retrieve()

```
rpc database_retrieve (
    stream DatabaseRetrieveRequest )
```

3.3.1.15 detect()

```
rpc detect (
    stream DetectRequest )
```

3.3.1.16 enhance()

```
rpc enhance (
    stream EnhanceRequest )
```

3.3.1.17 enroll()

```
rpc enroll (
    stream EnrollRequest )
```

3.3.1.18 extract()

```
rpc extract (
    stream ExtractRequest )
```

3.3.1.19 search()

```
rpc search (
    stream SearchRequest )
```

3.3.1.20 track()

```
rpc track (
    stream TrackRequest )
```

3.3.1.21 verify()

```
rpc verify (
    VerifyRequest )
```

3.3.2 Variable Documentation

3.3.2.1 briar

```
package briar
```

3.3.2.2 BRIARService

```
service BRIARService
```

Initial value:

```
{

    rpc status(StatusRequest) returns (StatusReply){}
```

3.3.2.3 cluster_confidences

```
repeated ClusterConfidence cluster_confidences = 2
```

3.3.2.4 ClusterReply

```
message ClusterReply
```

Initial value:

```
{
    repeated ClusterIds cluster_ids = 1
```

3.3.2.5 csharp_namespace

```
option csharp_namespace ="briar.BriarGrpc"
```

3.3.2.6 DatabaseFinalizeReply

message DatabaseFinalizeReply

Initial value:

```
{  
    BriarDurations durations = 1
```

3.3.2.7 DatabaseFinalizeRequest

message DatabaseFinalizeRequest

Initial value:

```
{  
    BriarDatabase database = 1
```

3.3.2.8 durations

```
BriarDurations durations = 3
```

3.3.2.9 Empty

message Empty

3.3.2.10 enhance_options

```
EnhanceOptions enhance_options = 6
```

3.3.2.11 EnhanceReply

message EnhanceReply

Initial value:

```
{  
    BriarMedia media = 1
```


3.3.2.12 EnhanceRequest

message EnhanceRequest

Initial value:

```
{  
    BriarMedia media = 1
```

3.3.2.13 errors

```
BriarErrors errors = 4
```

3.3.2.14 frame_id

```
int64 frame_id = 4
```

3.3.2.15 metadata

```
repeated Attribute metadata = 2
```

3.3.2.16 options

```
repeated Attribute options = 3
```

3.3.2.17 progress

```
BriarProgress progress = 5
```

3.3.2.18 proto

```
import briar briar_grpc briar proto
```

3.3.2.19 syntax

```
syntax = "proto3"
```

3.4 protofiles_readme.md File Reference

Index

- access_records
 - [briar.proto](#), [11](#)
- AccessRecord
 - [briar.proto](#), [11](#)
- algorithm
 - [briar.proto](#), [12](#)
- Attribute
 - [briar.proto](#), [12](#)
- attributes
 - [briar.proto](#), [12](#)
- average_entry_size
 - [briar.proto](#), [12](#)
- batch_policy
 - [briar.proto](#), [12](#)
- BatchPolicy
 - [briar.proto](#), [9](#)
- best
 - [briar.proto](#), [12](#)
- body
 - [briar.proto](#), [12](#)
- body_min_height
 - [briar.proto](#), [13](#)
- body_threshold
 - [briar.proto](#), [13](#)
- BoolOption
 - [briar.proto](#), [13](#)
- briar
 - [briar.proto](#), [13](#)
 - [briar_error.proto](#), [40](#)
 - [briar_service.proto](#), [45](#)
- [briar.proto](#), [5](#)
 - [access_records](#), [11](#)
 - [AccessRecord](#), [11](#)
 - [algorithm](#), [12](#)
 - [Attribute](#), [12](#)
 - [attributes](#), [12](#)
 - [average_entry_size](#), [12](#)
 - [batch_policy](#), [12](#)
 - [BatchPolicy](#), [9](#)
 - [best](#), [12](#)
 - [body](#), [12](#)
 - [body_min_height](#), [13](#)
 - [body_threshold](#), [13](#)
 - [BoolOption](#), [13](#)
 - [briar](#), [13](#)
 - [BriarDatabase](#), [13](#)
 - [BriarDatabaseInfo](#), [13](#)
 - [BriarDataType](#), [9](#)
 - [BriarDouble](#), [11](#)
 - [BriarDuration](#), [14](#)
 - [BriarDurations](#), [14](#)
 - [BriarDurationsList](#), [14](#)
 - [BriarGalleryInfo](#), [14](#)
 - [BriarGalleryList](#), [14](#)
 - [BriarMatrix](#), [15](#)
 - [BriarMedia](#), [15](#)
 - [BriarPoint2D](#), [15](#)
 - [BriarProgress](#), [15](#)
 - [BriarRect](#), [15](#)
 - [BriarServiceStatus](#), [9](#)
 - [BriarTrack](#), [16](#)
 - [BriarVector](#), [16](#)
 - [buffer](#), [16](#)
 - [BUSY](#), [9](#)
 - [channels](#), [16](#)
 - [client_duration_frame_level](#), [16](#)
 - [Cluster](#), [10](#)
 - [ClusterConfidence](#), [16](#)
 - [ClusterIds](#), [17](#)
 - [collection_date](#), [17](#)
 - [confidences](#), [17](#)
 - [count](#), [17](#)
 - [credential](#), [17](#)
 - [csharp_namespace](#), [17](#)
 - [data](#), [17](#)
 - [DataType](#), [9](#)
 - [datetime](#), [18](#)
 - [debug](#), [18](#)
 - [description](#), [18](#)
 - [detect_batch](#), [18](#)
 - [DetectBest](#), [10](#)
 - [Detection](#), [18](#)
 - [detection](#), [18](#)
 - [detection_class](#), [18](#)
 - [detection_count](#), [19](#)
 - [detection_duration](#), [19](#)
 - [detection_id](#), [19](#)
 - [DetectionOptions](#), [19](#)
 - [DetectionPolicy](#), [10](#)
 - [detections](#), [19](#)
 - [enable_metadata](#), [19](#)
 - [end](#), [19](#)
 - [enhance_batch](#), [20](#)
 - [EnhanceOptions](#), [20](#)
 - [ENROLL_AUTO_DETECTION](#), [20](#)
 - [enroll_batch](#), [20](#)
 - [enroll_flag](#), [20](#)
 - [ENROLL_FULL_IMAGE](#), [20](#)

ENROLL_PROVIDED_DETECTION, 20
ENROLL_PROVIDED_TEMPLATE, 21
enrollment_date, 21
EnrollmentInfo, 21
EnrollmentType, 10
EnrollOptions, 21
entry_count, 21
entry_type, 21
ENTRY_TYPE_MEDIA, 10
EntryType, 10
EvalConfig, 21
extract_batch, 22
EXTRACT_PROVIDED_DETECTION, 11
ExtractFlags, 10
ExtractOptions, 22
FACE, 22
face, 22
face_min_height, 22
face_threshold, 22
failed_enrollment_count, 22
FeatureVectorType, 11
flag, 23
FlagAndFinish, 9
FloatOption, 23
frame, 23
frame_count, 23
frame_metadata, 23
frame_number, 23
frame_rate, 23
FrameMetadata, 24
full, 24
fvalue, 24
GAIT, 24
gallery_key, 24
gate, 24
grpc_inbound_transfer_duration, 24
grpc_outbound_transfer_duration, 25
height, 25
hint, 25
id, 25
ids, 25
im, 25
image_height, 25
image_width, 25
ImageDetectionList, 26
ImageDetectionListGroup, 26
internal_data, 26
IntOption, 26
ivalue, 26
JSON, 9
json, 26
length, 27
location, 27
major, 27
mask, 27
match_score, 27
MatchInfo, 27
MatchList, 27
matrix, 28
max_results, 28
max_returns, 28
media, 28
media_id, 28
MEDIA_VIDEO, 11
MediaMetadata, 28
MediaType, 11
metadata, 28
min_object_size, 29
min_size_prct, 29
minor, 29
modalities, 29
modality, 29
name, 29
notes, 29
num_unique_templates, 29
options, 30
output_type, 30
patch, 30
pickle, 30
point, 30
probe_database, 30
probe_id, 30
Record, 30
record, 31
RecordList, 31
rect, 31
reference_id, 31
return_matrix, 31
return_media, 31
role, 31
row_headers, 32
rows, 32
SEARCH_AUTO_DETECTION, 32
search_batch, 32
search_database, 32
SEARCH_FULL_IMAGE, 32
SEARCH_PROVIDED_DETECTIONS, 32
SEARCH_PROVIDED_TEMPLATES, 32
search_results, 33
search_threshold, 33
SearchOptions, 33
segment_id, 33
segment_total, 33
serverside_source, 33
service_duration, 33
source, 34
SOURCE_ONLY, 10
source_type, 34
store_media, 34
StringOption, 34
sub_durations, 34
subject_id, 34
subject_name, 34
syntax, 35
Template, 35
template, 35

- template_count, 35
- template_id, 35
- TemplateIds, 35
- TemplateList, 35
- TemplateListGroup, 36
- text, 36
- threshold, 36
- total_database_size, 36
- total_duration, 36
- totalSteps, 36
- tracking_batch, 36
- tracking_disable, 37
- tracking_options, 37
- TrackingOptions, 37
- Tracklet, 37
- tracklet, 37
- tracklet_class, 37
- tracklet_id, 37
- type, 38
- UNSPECIFIED, 38
- use_detections, 38
- use_templates, 38
- value, 38
- vector, 38
- verification_id, 38
- VERIFY_PROVIDED_TEMPLATES, 11
- VerifyFlags, 11
- view, 38
- WHOLE_BODY, 39
- width, 39
- xml, 39
- y, 39
- briar_error.proto, 39
 - briar, 40
 - BRIAR_NUM_ERRORS, 40
 - BriarError, 39
 - BriarErrorMessage, 40
 - BriarErrors, 40
 - csharp_namespace, 40
 - error_message, 40
 - length, 40
 - syntax, 41
- BRIAR_NUM_ERRORS
 - briar_error.proto, 40
- briar_service.proto, 41
 - briar, 45
 - BRIARService, 45
 - cluster, 42
 - cluster_confidences, 45
 - ClusterReply, 45
 - csharp_namespace, 45
 - database_compute_score_matrix, 42
 - database_create, 42
 - database_delete, 42
 - database_finalize, 42
 - database_info, 42
 - database_insert, 42
 - database_list, 43
 - database_list_entries, 43
 - database_load, 43
 - database_merge, 43
 - database_remove_templates, 43
 - database_rename, 43
 - database_retrieve, 43
 - DatabaseFinalizeReply, 45
 - DatabaseFinalizeRequest, 46
 - detect, 44
 - durations, 46
 - Empty, 46
 - enhance, 44
 - enhance_options, 46
 - EnhanceReply, 46
 - EnhanceRequest, 46
 - enroll, 44
 - errors, 47
 - extract, 44
 - frame_id, 47
 - metadata, 47
 - options, 47
 - progress, 47
 - proto, 47
 - search, 44
 - syntax, 47
 - track, 44
 - verify, 44
- BriarDatabase
 - briar.proto, 13
- BriarDatabaseInfo
 - briar.proto, 13
- BriarDataType
 - briar.proto, 9
- BriarDouble
 - briar.proto, 11
- BriarDuration
 - briar.proto, 14
- BriarDurations
 - briar.proto, 14
- BriarDurationsList
 - briar.proto, 14
- BriarError
 - briar_error.proto, 39
- BriarErrorMessage
 - briar_error.proto, 40
- BriarErrors
 - briar_error.proto, 40
- BriarGalleryInfo
 - briar.proto, 14
- BriarGalleryList
 - briar.proto, 14
- BriarMatrix
 - briar.proto, 15
- BriarMedia
 - briar.proto, 15
- BriarPoint2D
 - briar.proto, 15
- BriarProgress

- briar.proto, 15
- BriarRect
 - briar.proto, 15
- BRIARService
 - briar_service.proto, 45
- BriarServiceStatus
 - briar.proto, 9
- BriarTrack
 - briar.proto, 16
- BriarVector
 - briar.proto, 16
- buffer
 - briar.proto, 16
- BUSY
 - briar.proto, 9
- channels
 - briar.proto, 16
- client_duration_frame_level
 - briar.proto, 16
- Cluster
 - briar.proto, 10
- cluster
 - briar_service.proto, 42
- cluster_confidences
 - briar_service.proto, 45
- ClusterConfidence
 - briar.proto, 16
- ClusterIds
 - briar.proto, 17
- ClusterReply
 - briar_service.proto, 45
- collection_date
 - briar.proto, 17
- confidences
 - briar.proto, 17
- count
 - briar.proto, 17
- credential
 - briar.proto, 17
- csharp_namespace
 - briar.proto, 17
 - briar_error.proto, 40
 - briar_service.proto, 45
- data
 - briar.proto, 17
- database_compute_score_matrix
 - briar_service.proto, 42
- database_create
 - briar_service.proto, 42
- database_delete
 - briar_service.proto, 42
- database_finalize
 - briar_service.proto, 42
- database_info
 - briar_service.proto, 42
- database_insert
 - briar_service.proto, 42
- database_list
 - briar_service.proto, 43
- database_list_entries
 - briar_service.proto, 43
- database_load
 - briar_service.proto, 43
- database_merge
 - briar_service.proto, 43
- database_remove_templates
 - briar_service.proto, 43
- database_rename
 - briar_service.proto, 43
- database_retrieve
 - briar_service.proto, 43
- DatabaseFinalizeReply
 - briar_service.proto, 45
- DatabaseFinalizeRequest
 - briar_service.proto, 46
- DataType
 - briar.proto, 9
- datetime
 - briar.proto, 18
- debug
 - briar.proto, 18
- description
 - briar.proto, 18
- detect
 - briar_service.proto, 44
- detect_batch
 - briar.proto, 18
- DetectBest
 - briar.proto, 10
- Detection
 - briar.proto, 18
- detection
 - briar.proto, 18
- detection_class
 - briar.proto, 18
- detection_count
 - briar.proto, 19
- detection_duration
 - briar.proto, 19
- detection_id
 - briar.proto, 19
- DetectionOptions
 - briar.proto, 19
- DetectionPolicy
 - briar.proto, 10
- detections
 - briar.proto, 19
- durations
 - briar_service.proto, 46
- Empty
 - briar_service.proto, 46
- enable_metadata
 - briar.proto, 19
- end
 - briar.proto, 19

- enhance
 - briar_service.proto, 44
- enhance_batch
 - briar.proto, 20
- enhance_options
 - briar_service.proto, 46
- EnhanceOptions
 - briar.proto, 20
- EnhanceReply
 - briar_service.proto, 46
- EnhanceRequest
 - briar_service.proto, 46
- enroll
 - briar_service.proto, 44
- ENROLL_AUTO_DETECTION
 - briar.proto, 20
- enroll_batch
 - briar.proto, 20
- enroll_flag
 - briar.proto, 20
- ENROLL_FULL_IMAGE
 - briar.proto, 20
- ENROLL_PROVIDED_DETECTION
 - briar.proto, 20
- ENROLL_PROVIDED_TEMPLATE
 - briar.proto, 21
- enrollment_date
 - briar.proto, 21
- EnrollmentInfo
 - briar.proto, 21
- EnrollmentType
 - briar.proto, 10
- EnrollOptions
 - briar.proto, 21
- entry_count
 - briar.proto, 21
- entry_type
 - briar.proto, 21
- ENTRY_TYPE_MEDIA
 - briar.proto, 10
- EntryType
 - briar.proto, 10
- error_message
 - briar_error.proto, 40
- errors
 - briar_service.proto, 47
- EvalConfig
 - briar.proto, 21
- extract
 - briar_service.proto, 44
- extract_batch
 - briar.proto, 22
- EXTRACT_PROVIDED_DETECTION
 - briar.proto, 11
- ExtractFlags
 - briar.proto, 10
- ExtractOptions
 - briar.proto, 22
- FACE
 - briar.proto, 22
- face
 - briar.proto, 22
- face_min_height
 - briar.proto, 22
- face_threshold
 - briar.proto, 22
- failed_enrollment_count
 - briar.proto, 22
- FeatureVectorType
 - briar.proto, 11
- flag
 - briar.proto, 23
- FlagAndFinish
 - briar.proto, 9
- FloatOption
 - briar.proto, 23
- frame
 - briar.proto, 23
- frame_count
 - briar.proto, 23
- frame_id
 - briar_service.proto, 47
- frame_metadata
 - briar.proto, 23
- frame_number
 - briar.proto, 23
- frame_rate
 - briar.proto, 23
- FrameMetadata
 - briar.proto, 24
- full
 - briar.proto, 24
- fvalue
 - briar.proto, 24
- GAIT
 - briar.proto, 24
- gallery_key
 - briar.proto, 24
- gate
 - briar.proto, 24
- grpc_inbound_transfer_duration
 - briar.proto, 24
- grpc_outbound_transfer_duration
 - briar.proto, 25
- height
 - briar.proto, 25
- hint
 - briar.proto, 25
- id
 - briar.proto, 25
- ids
 - briar.proto, 25
- im
 - briar.proto, 25

- image_height
 - briar.proto, [25](#)
- image_width
 - briar.proto, [25](#)
- ImageDetectionList
 - briar.proto, [26](#)
- ImageDetectionListGroup
 - briar.proto, [26](#)
- internal_data
 - briar.proto, [26](#)
- IntOption
 - briar.proto, [26](#)
- ivalue
 - briar.proto, [26](#)
- JSON
 - briar.proto, [9](#)
- json
 - briar.proto, [26](#)
- length
 - briar.proto, [27](#)
 - briar_error.proto, [40](#)
- location
 - briar.proto, [27](#)
- major
 - briar.proto, [27](#)
- mask
 - briar.proto, [27](#)
- match_score
 - briar.proto, [27](#)
- MatchInfo
 - briar.proto, [27](#)
- MatchList
 - briar.proto, [27](#)
- matrix
 - briar.proto, [28](#)
- max_results
 - briar.proto, [28](#)
- max_returns
 - briar.proto, [28](#)
- media
 - briar.proto, [28](#)
- media_id
 - briar.proto, [28](#)
- MEDIA_VIDEO
 - briar.proto, [11](#)
- MediaMetadata
 - briar.proto, [28](#)
- MediaType
 - briar.proto, [11](#)
- metadata
 - briar.proto, [28](#)
 - briar_service.proto, [47](#)
- min_object_size
 - briar.proto, [29](#)
- min_size_prct
 - briar.proto, [29](#)
- minor
 - briar.proto, [29](#)
- modalities
 - briar.proto, [29](#)
- modality
 - briar.proto, [29](#)
- name
 - briar.proto, [29](#)
- notes
 - briar.proto, [29](#)
- num_unique_templates
 - briar.proto, [29](#)
- options
 - briar.proto, [30](#)
 - briar_service.proto, [47](#)
- output_type
 - briar.proto, [30](#)
- patch
 - briar.proto, [30](#)
- pickle
 - briar.proto, [30](#)
- point
 - briar.proto, [30](#)
- probe_database
 - briar.proto, [30](#)
- probe_id
 - briar.proto, [30](#)
- progress
 - briar_service.proto, [47](#)
- proto
 - briar_service.proto, [47](#)
- protofiles_readme.md, [47](#)
- Record
 - briar.proto, [30](#)
- record
 - briar.proto, [31](#)
- RecordList
 - briar.proto, [31](#)
- rect
 - briar.proto, [31](#)
- reference_id
 - briar.proto, [31](#)
- return_matrix
 - briar.proto, [31](#)
- return_media
 - briar.proto, [31](#)
- role
 - briar.proto, [31](#)
- row_headers
 - briar.proto, [32](#)
- rows
 - briar.proto, [32](#)
- search
 - briar_service.proto, [44](#)

SEARCH_AUTO_DETECTION
 briar.proto, [32](#)
search_batch
 briar.proto, [32](#)
search_database
 briar.proto, [32](#)
SEARCH_FULL_IMAGE
 briar.proto, [32](#)
SEARCH_PROVIDED_DETECTIONS
 briar.proto, [32](#)
SEARCH_PROVIDED_TEMPLATES
 briar.proto, [32](#)
search_results
 briar.proto, [33](#)
search_threshold
 briar.proto, [33](#)
SearchOptions
 briar.proto, [33](#)
segment_id
 briar.proto, [33](#)
segment_total
 briar.proto, [33](#)
serverside_source
 briar.proto, [33](#)
service_duration
 briar.proto, [33](#)
source
 briar.proto, [34](#)
SOURCE_ONLY
 briar.proto, [10](#)
source_type
 briar.proto, [34](#)
store_media
 briar.proto, [34](#)
StringOption
 briar.proto, [34](#)
sub_durations
 briar.proto, [34](#)
subject_id
 briar.proto, [34](#)
subject_name
 briar.proto, [34](#)
syntax
 briar.proto, [35](#)
 briar_error.proto, [41](#)
 briar_service.proto, [47](#)

Template
 briar.proto, [35](#)
template
 briar.proto, [35](#)
template_count
 briar.proto, [35](#)
template_id
 briar.proto, [35](#)
TemplateIds
 briar.proto, [35](#)
TemplateList
 briar.proto, [35](#)

TemplateListGroup
 briar.proto, [36](#)
text
 briar.proto, [36](#)
threshold
 briar.proto, [36](#)
total_database_size
 briar.proto, [36](#)
total_duration
 briar.proto, [36](#)
totalSteps
 briar.proto, [36](#)
track
 briar_service.proto, [44](#)
tracking_batch
 briar.proto, [36](#)
tracking_disable
 briar.proto, [37](#)
tracking_options
 briar.proto, [37](#)
TrackingOptions
 briar.proto, [37](#)
Tracklet
 briar.proto, [37](#)
tracklet
 briar.proto, [37](#)
tracklet_class
 briar.proto, [37](#)
tracklet_id
 briar.proto, [37](#)
type
 briar.proto, [38](#)

UNSPECIFIED
 briar.proto, [38](#)
use_detections
 briar.proto, [38](#)
use_templates
 briar.proto, [38](#)

value
 briar.proto, [38](#)
vector
 briar.proto, [38](#)
verification_id
 briar.proto, [38](#)
verify
 briar_service.proto, [44](#)
VERIFY_PROVIDED_TEMPLATES
 briar.proto, [11](#)
VerifyFlags
 briar.proto, [11](#)
view
 briar.proto, [38](#)

WHOLE_BODY
 briar.proto, [39](#)
width
 briar.proto, [39](#)

xml

briar.proto, [39](#)

y

briar.proto, [39](#)