

GstTypeFind

GstTypeFind — Stream type detection

Functions

```
void      (*GstTypeFindFunction) ()
const guint8 *  gst_type_find_peek ()
void      gst_type_find_suggest ()
void      gst_type_find_suggest_simple ()
guint64  gst_type_find_get_length ()
gboolean  gst_type_find_register ()
```

Types and Values

```
struct  GstTypeFind
enum    GstTypeFindProbability
```

Includes

```
#include <gst/gst.h>
```

Description

The following functions allow you to detect the media type of an unknown stream.

Functions

GstTypeFindFunction ()

```
void
(*GstTypeFindFunction) (GstTypeFind *find,
                        gpointer user_data);
```

A function that will be called by typefinding.

Parameters

find	A GstTypeFind structure
user_data	optional data to pass to the function

gst_type_find_peek ()

```
const guint8 *  
gst_type_find_peek (GstTypeFind *find,  
                   gint64 offset,  
                   guint size);
```

Returns the `size` bytes of the stream to identify beginning at `offset`. If `offset` is a positive number, the offset is relative to the beginning of the stream, if `offset` is a negative number the offset is relative to the end of the stream. The returned memory is valid until the typefinding function returns and must not be freed.

Parameters

<code>find</code>	The GstTypeFind object the function was called with
<code>offset</code>	The offset
<code>size</code>	The number of bytes to return

Returns

the requested data, or [NULL](#) if that data is not available.

[\[transfer none\]](#)[\[array length=size\]](#)[\[nullable\]](#)

gst_type_find_suggest ()

```
void  
gst_type_find_suggest (GstTypeFind *find,  
                      guint probability,  
                      GstCaps *caps);
```

If a [GstTypeFindFunction](#) calls this function it suggests the caps with the given probability. A [GstTypeFindFunction](#) may supply different suggestions in one call. It is up to the caller of the [GstTypeFindFunction](#) to interpret these values.

Parameters

<code>find</code>	The GstTypeFind object the function was called with
<code>probability</code>	The probability in percent that the suggestion is right
<code>caps</code>	The fixed GstCaps to suggest

gst_type_find_suggest_simple ()

```
void
gst_type_find_suggest_simple (GstTypeFind *find,
                             guint probability,
                             const char *media_type,
                             const char *fieldname,
                             ...);
```

If a [GstTypeFindFunction](#) calls this function it suggests the caps with the given probability. A [GstTypeFindFunction](#) may supply different suggestions in one call. It is up to the caller of the [GstTypeFindFunction](#) to interpret these values.

This function is similar to [gst_type_find_suggest\(\)](#), only that instead of passing a [GstCaps](#) argument you can create the caps on the fly in the same way as you can with [gst_caps_new_simple\(\)](#).

Make sure you terminate the list of arguments with a [NULL](#) argument and that the values passed have the correct type (in terms of width in bytes when passed to the vararg function - this applies particularly to [gdouble](#) and [guint64](#) arguments).

Parameters

find	The GstTypeFind object the function was called with	
probability	The probability in percent that the suggestion is right	
media_type	the media type of the suggested caps	
fieldname	first field of the suggested caps, or NULL .	[allow-none]
...	additional arguments to the suggested caps in the same format as the arguments passed to gst_structure_new() (ie. triplets of field name, field GType and field value)	

gst_type_find_get_length ()

```
guint64
gst_type_find_get_length (GstTypeFind *find);
```

Get the length of the data stream.

Parameters

find	The GstTypeFind the function was called with
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Returns

The length of the data stream, or 0 if it is not available.

gst_type_find_register ()

```
gboolean
gst_type_find_register (GstPlugin *plugin,
                        const gchar *name,
                        guint rank,
                        GstTypeFindFunction func,
                        const gchar *extensions,
                        GstCaps *possible_caps,
                        gpointer data,
                        GDestroyNotify data_notify);
```

Registers a new typefind function to be used for typefinding. After registering this function will be available for typefinding. This function is typically called during an element's plugin initialization.

Parameters

plugin	A GstPlugin , or <code>NULL</code> for a static typefind function.	[allow-none]
name	The name for registering	
rank	The rank (or importance) of this typefind function	
func	The GstTypeFindFunction to use	
extensions	Optional comma-separated list of extensions that could belong to this type.	[allow-none]
possible_caps	Optionally the caps that could be returned when typefinding succeeds	
data	Optional user data. This user data must be available until the plugin is unloaded.	
data_notify	a GDestroyNotify that will be called on data when the plugin is unloaded.	

Returns

`TRUE` on success, `FALSE` otherwise

Types and Values

struct GstTypeFind

```
struct GstTypeFind {
    /* private to the caller of the typefind function */
    const guint8 * (* peek)      (gpointer      data,
```

```

        guint64 offset,
        guint size);

void (* suggest) (gpointer data,
                  guint probability,
                  GstCaps *caps);

gpointer data;

/* optional */
guint64 (* get_length) (gpointer data);
};

```

Object that stores typefind callbacks. To use with [GstTypeFindFactory](#).

Members

<code>peek ()</code>	Method to peek data.
<code>suggest ()</code>	Method to suggest GstCaps with a given probability.
<code>gpointer data;</code>	The data used by the caller of the typefinding function.
<code>get_length ()</code>	Returns the length of current data.

enum GstTypeFindProbability

The probability of the typefind function. Higher values have more certainty in doing a reliable typefind.

Members

<code>GST_TYPE_FIND_NONE</code>	type undetected.
<code>GST_TYPE_FIND_MINIMUM</code>	unlikely typefind.
<code>GST_TYPE_FIND_POSSIBLE</code>	possible type detected.
<code>GST_TYPE_FIND_LIKELY</code>	likely a type was detected.
<code>GST_TYPE_FIND_NEARLY_CERTAIN</code>	nearly certain that a type was detected.
<code>GST_TYPE_FIND_MAXIMUM</code>	very certain a type was detected.

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