

Syndication Developer Guidelines

Transport for London XML Feeds

Important: When using a TfL feed (or feeds) you agree to follow the appropriate Terms and Conditions and the implementation rules within this User Guide. You should not charge the public, either directly or indirectly, to use the information provided to you by TfL.

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Technical Description

Transport for London feeds are supplied as XML and provided at a URL. The XML is predominantly element-based.

The feed is supplied with an XSD schema that may be used for validation purposes.

The feed consists of a header section and at least one data_container section. The common pattern is:

```
<feed_identifier>
  <header>
    <element></element>
    ...
  </header>
  <data_container>
    <data_item>
      <element></element>
      ...
    </data_item>
    ...
  </data_container>
  ...
</feed_identifier>
```

Feed header

The header section of the feeds contains the following elements:

Name	Description	Notes
Identifier	String	Name of feed.
DisplayTitle	String	Optionally displayed as a title and/or link label.
PublishDateTime	String representing UTC in the following format: YYYY-MM-DD HH:MM:SS:sss (Year-Month-Day<space>Hour:Minutes:Seconds:Milliseconds)	Timestamp of the feed publication. Used to calculate refresh rates and error conditions. It must be displayed with the feed content.
Author	String representing an email address	Email address of author - please use this for any support queries.
Owner	String	Denotes Transport for London as the feed owner.
RefreshRate	String	representing an integer value in minutes Period of feed publishing. This is how often TfL publishes a fresh copy of the feed.
Max_Latency	String representing an integer value in minutes	Maximum time permitted between capturing the feed and displaying the feed.
TimeToError	String representing an integer value in minutes	If Now is greater than PublishDateTime plus TimeToError then the feed is invalid and ErrorMessage (see

		below) should be displayed.
Schedule	String	Publishing schedule of the feed. Indicates when it should be polled.
OverrideMessage	String	Emergency message to be displayed instead of the feed content.
ErrorMessage	String	To be displayed in the case of an error condition.
FeedInfo	String	Developer information regarding the current state of the feed. Not to be displayed.
Attribution	Container	Copyright information, or similar, which must be displayed with the feed. Child elements are Url, Text and Logo.
Attribution..Url	String representing a URL.	TfL attribution link back to the TfL website.
Attribution..Text	String.	TfL attribution text.
Attribution..Logo	String representing a URL pointing to an image file.	Address of logo to be used as attribution.
Language	String	Two character language code.

Feed implementation

Findaride

The data_item tags should be iterated to extract the data in each data_container. The following is an example from the **Findaride** feed, which has one data_container ('Operators'):

```
<FindARide>
  <Header>
    <Identifier></Identifier>
    ...
  </Header>
  <Operators>
    <Operator>
      <Url></ Url >
      <TradingName></ TradingName >
      ...
    </Operator>
  </Operators>
</FindARide>
```

Findaride - implementation rules

Presentation

In order to provide a unified and easy to understand presentation of TfL data across multiple channels, official TfL branding must be used to display certain information.

- It is recommended that you use the text in the <DisplayTitle> tag if you show a title for the feed or refer to the feed in your content with either plain text or hyperlinks.
- The contents of the <PublishDateTime> tag must be displayed on-screen with the feed content. It can be simplified and displayed in any date format as long as it contains the minimum of Year, Month, Day, Hour and Seconds.
- Attribution information must be displayed with the feed and can be found in the <Attribution> tag. At least one of the <Logo> or <Text> tags content must

be shown. Optionally, attribution information can be linked back to TfL using the URL in the <Url> tag.

Timeliness

In order to provide the public with the most accurate information possible, feeds must be obtained and displayed in a timely fashion. In the **Findaride** feed, we provide the information necessary to do this appropriately according to the feed content. All dates and times are UTC.

- Feeds must be grabbed and displayed with the same frequency as that in the <RefreshRate> tag.
- Feeds should be grabbed and displayed in synchronicity with the <Schedule> tag. For example, if the publishing schedule is "Every quarter", please grab the feed a short time after that.
- Feeds must be displayed by you within a certain period after being grabbed, represented by the <Max_Latency> tag. The pseudocode is as follows:

```
If FeedDisplayDateTime > (FeedCapture DateTime + Max_Latency)
Then hide feed And display "This information is not currently
available".
```

- A feed must not be displayed when it is grabbed and the period allowed in the <TimeToError> tag has been exceeded. The pseudocode is as follows:

```
If Now > (PublishDateTime + TimeToError) Then hide feed.
```

```
If ErrorMessage exists Then display ErrorMessage Else display
"This information is not currently available".
```

- A feed must not be displayed when it contains an override message. The pseudocode is as follows:

If OverrideMessage Exists Then hide feed And display
OverrideMessage.

Live traffic cameras

The `data_item` tags should be iterated to extract the data in each `data_container`. The following is an example from the **Live Traffic Cameras** feed, which has one `data_container` ('Cameras'):

```
<TrafficCameraUpdate>
  <Header>
    <Identifier></Identifier>
    ...
  </Header>
  <Cameras>
    <Camera>
      <Title></ Title >
      ...
    </Camera>
  </Cameras>
</TrafficCameraUpdate>
```

Live traffic cameras - implementation rules

Presentation

In order to provide a unified and easy to understand presentation of TfL data across multiple channels, official TfL branding must be used to display certain information.

- The Live Traffic Cameras feed is supplied with branding. The branding must not be removed. Camera images must not be cropped.
- It is recommended that you use the text in the `<DisplayTitle>` tag if you show a title for the feed or refer to the feed in your content with either plain text or hyperlinks.
- The contents of the `<PublishDateTime>` tag must be displayed on-screen with the feed content. It can be simplified and displayed in any date format as long as it contains the minimum of Year, Month, Day, Hour and Seconds.
- Attribution information must be displayed with the feed and can be found in the `<Attribution>` tag. At least one of the `<Logo>` or `<Text>` tags content must be shown. Optionally, attribution information can be linked back to TfL using the URL in the `<Url>` tag.

Timeliness

In order to provide the public with the most accurate information possible, feeds must be obtained and displayed in a timely fashion. In the **Live Traffic Cameras** feed, we provide the information necessary to do this appropriately according the feed content. All dates and times are UTC.

- Feeds must be grabbed and displayed with the same frequency as that in the `<RefreshRate>` tag.
- Feeds should be grabbed and displayed in synchronicity with the `<Schedule>` tag. For example, if the publishing schedule is "Every quarter", please grab the feed a short time after that.
- Feeds must be displayed by you within a certain period after being grabbed, represented by the `<Max_Latency>` tag. The pseudocode is as follows:

```
If FeedDisplayDateTime > (FeedCapture DateTime + Max_Latency) Then  
hide feed And display "This information is not currently available".
```

- A feed must not be displayed when it is grabbed and the period allowed in the `<TimeToError>` tag has been exceeded. The pseudocode is as follows:

```
If Now > (PublishDateTime + TimeToError) Then hide feed.
```

```
If ErrorMessage exists Then display ErrorMessage Else display "This  
information is not currently available".
```

- A feed must not be displayed when it contains an override message. The pseudocode is as follows:

```
If OverrideMessage Exists Then hide feed And display OverrideMessage.
```

Station locations

The `data_item` tags should be iterated to extract the data in each `data_container`. The following is an example from the **Station locations** feed, which has two `data_containers` ('stations' and 'lines'):

```
<Document>
  <Header>
    <Identifier></Identifier>
    ...
  </Header>
  <stations>
    <station>
      <name></ name >
      ...
    </station>
    ...
  </stations>
  <lines>
    <line>
      <Style></ Style >
      ...
    </line>
    ...
  </lines>
</Document>
```

Station locations - implementation rules

Presentation

In order to provide a unified and easy to understand presentation of TfL data across multiple channels, official TfL branding must be used to display certain information.

- If colour is used to represent Tube lines, the appropriate colour value included in the feed must be used. In feeds that contain Tube line-related data we will provide a `<BgColour>` tag that represents the line and a `<Colour>` tag to be used for text that overlays `<BgColour>`.
- The Tube roundel must be used to denote Tube stations.

- The Docklands Light Railway (DLR) roundel must be used to denote DLR stations.
- The London Overground roundel must be used to denote London Overground stations.
- It is recommended that you use the text in the <DisplayTitle> tag if you show a title for the feed or refer to the feed in your content with either plain text or hyperlinks.
- The contents of the <PublishDateTime> tag must be displayed on-screen with the feed content. It can be simplified and displayed in any date format as long as it contains the minimum of Year, Month, Day, Hour and Seconds.
- Attribution information must be displayed with the feed and can be found in the <Attribution> tag. At least one of the <Logo> or <Text> tags content must be shown. Optionally, attribution information can be linked back to TfL using the URL in the <Url> tag.

Timeliness

In order to provide the public with the most accurate information possible, feeds must be obtained and displayed in a timely fashion. In the **Station locations** feed, we provide the information necessary to do this appropriately according the feed content. All dates and times are UTC.

- Feeds must be grabbed and displayed with the same frequency as that in the <RefreshRate> tag.
- Feeds should be grabbed and displayed in synchronicity with the <Schedule> tag. For example, if the publishing schedule is "Every Wednesday at 03:00", please grab the feed a short time after that.
- Feeds must be displayed by you within a certain period after being grabbed, represented by the <Max_Latency> tag. The pseudocode is as follows:

```
If FeedDisplayDateTime > (FeedCapture DateTime + Max_Latency) Then
hide feed And display "This information is not currently available".
```

- A feed must not be displayed when it is grabbed and the period allowed in the <TimeToError> tag has been exceeded. The pseudocode is as follows:

If Now > (PublishDateTime + TimeToError) Then hide feed.

If ErrorMessage exists Then display ErrorMessage Else display "This information is not currently available".

- A feed must not be displayed when it contains an override message. The pseudocode is as follows:

If OverrideMessage Exists Then hide feed And display OverrideMessage.

Tube this weekend

The `data_item` tags should be iterated to extract the data in each `data_container`. The following is an example from the **Tube This Weekend** feed, which has two `data_containers` ('Lines' and 'Stations'):

```
<TubeThisWeekend>
  <Header>
    <Identifier></Identifier>
    ...
  </Header>
  <Lines>
    <Line>
      <Name></ Name >
      ...
    </Line>
    ...
  </Lines>
  <Stations>
    <Station>
      <Name></ Name >
      ...
    </Station>
    ...
  </Stations>
</TubeThisWeekend>
```

Tube this weekend - implementation rules

Presentation

In order to provide a unified and easy to understand presentation of TfL data across multiple channels, official TfL branding must be used to display certain information.

- If colour is used to represent Tube lines, the appropriate colour value included in the feed must be used. In feeds that contain Tube line-related data we will provide a `<BgColour>` tag that represents the line and a `<Colour>` tag to be used for text that overlays `<BgColour>`.

- If service status messages are used, the appropriate colour value included in the feed must be used. In feeds that contain service status messages data we will provide a <BgColour> tag that represents the significance of the message and a <Colour> tag to be used for text that overlays <BgColour>.
- It is recommended that you use the text in the <DisplayTitle> tag if you show a title for the feed or refer to the feed in your content with either plain text or hyperlinks.
- The contents of the <PublishDateTime> tag must be displayed on-screen with the feed content. It can be simplified and displayed in any date format as long as it contains the minimum of Year, Month, Day, Hour and Seconds.
- Attribution information must be displayed with the feed and can be found in the <Attribution> tag. At least one of the <Logo> or <Text> tags content must be shown. Optionally, attribution information can be linked back to TfL using the URL in the <Url> tag.

Timeliness

In order to provide the public with the most accurate information possible, feeds must be obtained and displayed in a timely fashion. In the **Tube This Weekend** feed, we provide the information necessary to do this appropriately according the feed content. All dates and times are UTC.

- Feeds must be grabbed and displayed with the same frequency as that in the <RefreshRate> tag.
- Feeds should be grabbed and displayed in synchronicity with the <Schedule> tag. For example, if the publishing schedule is "Every Wednesday at 03:00", please grab the feed a short time after that.
- Feeds must be displayed by you within a certain period after being grabbed, represented by the <Max_Latency> tag. The pseudocode is as follows:

```
If FeedDisplayDateTime > (FeedCapture DateTime + Max_Latency) Then
hide feed And display "This information is not currently available".
```

- A feed must not be displayed when it is grabbed and the period allowed in the <TimeToError> tag has been exceeded. The pseudocode is as follows:

If Now > (PublishDateTime + TimeToError) Then hide feed.

If ErrorMessage exists Then display ErrorMessage Else display "This information is not currently available".

- A feed must not be displayed when it contains an override message. The pseudocode is as follows:

If OverrideMessage Exists Then hide feed And display OverrideMessage.

Advertising Guidelines

Clause 2.1.5. in the related terms and conditions states you shall not include any advertisements in the Transport Information. Advertisements, including pop-ups, can be run alongside, above and below the Transport Information. You are not permitted to include in-line advertising within the Transport Information. In addition, you must not run advertisements on your website, or digital application, which interact with the Transport Information in such a way as to make it appear as if TfL is supporting the brand advertised.

Support

If you require technical support when implementing a TfL feed, please refer to our frequently asked questions which are available on our website.

If an answer to your support issue is not provided, contact us through our support form also available on the website.