

What is it?

The Live Departure Boards Staff Web Service (LDBSVWS) provides a request-response web service to access real time train information from Darwin. This is the same information that powers the staff version of the Live Departure Boards, provided in JSON format.

Where is it?

The LDBSVWS OpenAPI JSON Spec file may be found under 'Reference Material' in the 'Documentation' tab of any API data product for the Live Departure Boards Web Service - Staff Version.

To make this JSON specification more human friendly to read download the file, open it in a text editor, and copy 'n paste into, for example, the online Swagger Editor, found here <https://editor.swagger.io>.

Parameter passing of Date/Time data

There are some operations that take a Date/Time format such as 'GetDepBoardwithDetails'.

In this case the date/time format should be 'yyyyMMddTHH:mm:ss'

Where only a Time is required such as 'GetArrivalDepartureBoardByCRS', in this case the format should be formatted as 'HH:mm:ss'.

PLEASE NOTE: When using passing CRS data

Please note that any crs value passed as a parameter should be fully UPPERCASE

Whether it as a single parameter, or part of a List

How is it accessed?

LDBWS is as an OpenAPI web service that is now accessible via the Rail Data Marketplace in the form of an API data product. More information on consuming an API product can be found [here](#).

Users who subscribe to an API data product in the Rail Data Marketplace will be given credentials and can use these to call the API and retrieve data from the Live Arrival and Departure Boards.

For those operations requiring a CRS code or codes to function, a list may be obtained either by calling the GetStationList method on the reference service, or from the following [link](#).

Supported Operations - Main Endpoint

Click to expand any of the options below for more details. Some operations may only be available in specific versions of the service. Check the individual operation descriptions for more information.

» GetArrBoardWithDetails**Version**

2015-05-14 and above.

Description

Returns all public arrivals and departures for the supplied CRS code within a defined time window, including service details.

Parameters

numRows (integer, between 0 and 10 exclusive): The number of services to return in the resulting station board.

crs (string, 3 characters, alphabetic): The CRS code (see above) of the location for which the request is being made.

filterCrs (string, 3 characters, alphabetic): The CRS code of either an origin or destination location to filter in.

filterType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterCrs location.

time (DateTime): Start time of the arrival board.

timeWindow (integer, between -120 and 120 exclusive): How far into the future in minutes, relative to timeOffset, to return services for.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string, 1 character): P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `StationBoardWithDetails` object containing the requested details.

» `GetArrDepBoardWithDetails`

Version

2015-05-14 and above.

Description

Returns all public arrivals and departures for the supplied CRS code within a defined time window, including service details.

Parameters

numRows (integer, between 0 and 10 exclusive): The number of services to return in the resulting station board.

crs (string, 3 characters, alphabetic): The CRS code (see above) of the location for which the request is being made.

filterCrs (string, 3 characters, alphabetic): The CRS code of either an origin or destination location to filter in. Optional.

filterType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterCrs location.

time (DateTime): Start time of the departure board.

timeWindow (integer, between -120 and 120 exclusive): How far into the future in minutes, relative to timeOffset, to return services for.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string, 1 character): P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `StationBoardWithDetails` object containing the requested details.

» `GetArrivalBoardByCRS`

Version

2014-02-20 and above.

Description

Returns arrivals for the supplied CRS code within a defined time window.

Parameters

numRows (integer, between 0 and 150 exclusive): The number of services to return in the resulting station board.

crs (string, 3 characters, alphabetic): The CRS code of the location for which the request is being made.

time (DateTime): Start time of the departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for.

filterCrs (string, 3 characters, alphabetic): The CRS code of either an origin or destination location to filter in. Optional.

filterType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterTiploc location.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string, 1 character): P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `StationBoard` object containing the requested details.

» `GetArrivalBoardByTIPLOC`

Version

2014-02-20 and above.

Description

Returns arrivals for the supplied TIPLOC code within a defined time window.

Parameters

numRows (integer, between 0 and 150 exclusive): The number of services to return in the resulting station board.

tiploc (string): The TIPLOC code of the location for which the request is being made.

time (DateTime): Start time of the departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for.

filterTiploc (string): The TIPLOC code of a station the returned board is to be filtered by. Optional.

filterType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterTiploc location.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string, 1 character): P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `StationBoard` object containing the requested details.

» `GetArrivalDepartureBoardByCRS`

Version

2014-02-20 and above.

Description

Returns arrivals and departures for the supplied CRS code within a defined time window.

Parameters

numRows (integer, between 0 and 150 exclusive): The number of services to return in the resulting station board.

crs (string, 3 characters, alphabetic): The CRS code of the location for which the request is being made.

time (DateTime): Start time of the departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for. Optional.

filterCrs (string, 3 characters, alphabetic): The CRS code of either an origin or destination location to filter in. Optional.

filterType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterTiploc location.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string, 1 character): P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `StationBoard` object containing the requested details.

» `GetArrivalDepartureBoardByTIPLOC`

Version

2014-02-20 and above.

Description

Returns arrivals and departures for the supplied TIPLOC code within a defined time window.

Parameters

numRows (integer, between 0 and 150 exclusive): The number of services to return in the resulting station board.

tiploc (string): The TIPLOC code of the location for which the request is being made.

time (DateTime): Start time of the departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for.

filterTiploc (string): The TIPLOC code of a station the returned board is to be filtered by. Optional.

filterType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterTiploc location.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string, 1 character): P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `StationBoard` object containing the requested details.

» GetDepartureBoardByCRS

Version

2014-02-20 and above.

Description

Returns departures for the supplied CRS code within a defined time window.

Parameters

numRows (integer, between 0 and 150 exclusive): The number of services to return in the resulting station board.

crs (string, 3 characters, alphabetic): The CRS code of the location for which the request is being made.

time (DateTime): Start time of the departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for.

filterCrs (string, 3 characters, alphabetic): The CRS code of either an origin or destination location to filter in. Optional.

filterType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterTiploc location.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string, 1 character): P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `StationBoard` object containing the requested details.

» GetDepartureBoardByTIPLOC

Version

2014-02-20 and above.

Description

Returns departures for the supplied TIPLOC code within a defined time window.

Parameters

numRows (integer, between 0 and 150 exclusive): The number of services to return in the resulting station board.

tiploc (string): The TIPLOC code of the location for which the request is being made.

time (DateTime): Start time of the departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for.

filterTiploc (string): The TIPLOC code of a station the returned board is to be filtered by. Optional.

filterType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterTiploc location.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string, 1 character): P for train Services, B for bus services, S for ship services. Defaults to

"P". Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `StationBoard` object containing the requested details.

» GetDepBoardWithDetails

Version

2015-05-14 and above.

Description

Returns all public departures for the supplied CRS code within a defined time window, including service details.

numRows (integer, between 0 and 10 exclusive): The number of services to return in the resulting station board.

crs (string, 3 characters, alphabetic): The CRS code (see above) of the location for which the request is being made.

time (DateTime): Start time of the departure board.

filterCrs (string, 3 characters, alphabetic): The CRS code of either an origin or destination location to filter in. Optional.

timeWindow (integer, between -120 and 120 exclusive): How far into the future in minutes, relative to timeOffset, to return services for.

filterType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterCrs location.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string, 1 character): P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `StationBoardWithDetails` object containing the requested details.

» GetDisruptionList

Version

2007-10-10 and above.

Description

Returns disruptions for the specified CRS codes.

Parameters

crsList (string[]): Collection of CRS codes to get disruptions for.

Response

A `DisruptionItem` collection containing the requested details.

» GetFastestDepartures

Version

2015-05-14 and above.

Description

Returns the next services to depart from the current location and arrive at the requested locations(s), based on the forecast arrival time at the requested location. If there are no services to a requested destination the response contains the CRS code and an empty `ServiceItem`.

Parameters

crs (string, 3 characters, alphabetic): The CRS code of a requested station origin.

filterList (string[], 3 characters, alphabetic): A collection of CRS codes that are the destinations from the above CRS. There must be at least one item in the collection.

time (DateTime): Time of departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string) : P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

Response

A `DeparturesBoard` object containing the requested details.

» `GetFastestDeparturesWithDetails`

Version

2015-05-14 and above.

Description

Returns the next services to depart, with details, from the current location and arrive at the requested location(s), based on the forecast arrival time at the requested location. If there are no services to a requested destination the response contains the CRS code and an empty `ServiceItem`.

Parameters

crs (string, 3 characters, alphabetic): The CRS code of a requested station origin.

filterList (string[], 3 characters, alphabetic): A collection of CRS codes that are the destinations from the above CRS. There must be at least one item in the collection.

time (DateTime): Time of departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for. Optional.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string) : P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

Response

A `DeparturesBoardWithDetails` object containing the requested details.

» `GetHistoricDepartureBoard`

Version

2014-02-20 and above.

Description

Returns historic departures for the supplied criteria.

Parameters

numRows (integer, between 0 and 150 exclusive): The number of services to return in the resulting station board.

crs (string, 3 characters, alphabetic): The CRS code of the location for which the request is being made.

historicDateTime (DateTime): Start time of the departure board. Optional.

historicDateTimeSpecified (bool): Flag which indicates whether the historic date has been specified.

depBoardDate (DepBoardDateType): The date relative to the historic date. It is an enumeration of "Previous Day", "Same Day", and "Next Day" Defaults to "Same Day". Optional.

depBoardDateSpecified (bool): Flag which indicates whether the departure board date has been specified.

depBoardTime (DateTime): If specified, use this departure time instead of historic time of day. Optional.

depBoardTimeSpecified (bool): Flag which indicates whether the departure board time has been specified.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for.

filterCrs (string, 3 characters, alphabetic): The CRS code of either an origin or destination location to filter in. Optional.

filterCRSType (string, either "from" or "to"): The type of filter to apply. Filters services to include only those originating or terminating at the filterTiploc location. Default to "to". Optional.

filterCRSSpecified (bool): Flag which indicates whether the Filter CRS was specified

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string) : No function. Optional.

getNonPassengerServices (bool): Flag which indicates whether to get non-passenger services.

Response

A `HistoricDepartureBoard` object containing the requested details.

» `GetHistoricServiceDetails`

Version

2010-07-07 and above.

Description

Returns historic service details for the specified service.

Parameters

serviceUID (string): The unique Id of the service to return details for.

scheduleStartDate (DepBoardDateType): The date relative to the historic date. It is an enumeration of "PreviousDay", "SameDay", and "NextDay" Defaults to "SameDay". Optional.

scheduleStartDateSpecified (bool): Flag which indicates whether the schedule start date has been specified.

historicDateTime (DateTime): The start date and time of the required historic service.

historicDateTimeSpecified (bool): Flag which indicates whether the historic date time has been specified.

Response

A `HistoricServiceDetails` object containing the requested details.

» GetHistoricTimeLine

Version

2010-07-07 and above.

Description

Get a historic timeline for the specified criteria.

Parameters

serviceUID (string): The unique Id of the service to return details for.

scheduleStartDate (DepBoardDateType): The date relative to the historic date. It is an enumeration of "PreviousDay", "SameDay", and "NextDay".

historicDateTime (datetime): The start date and time of the required historic timeline.

fullTiploc (string): The TIPLOC of the location for which the timeline is required.

Response

A `HistoricTimeLine` object containing the requested details.

» GetNextDepartures

Version

2015-05-14 and above.

Description

Returns the next services to depart from the current location and arrive at the requested locations(s), based on the forecast departure time at the requested location. If there are no services to a requested destination the response contains the CRS code and an empty `ServiceItem`.

Parameters

crs (string, 3 characters, alphabetic): The CRS code of a requested station origin.

filterList (string[], 3 characters, alphabetic): A collection of CRS codes that are the destinations from the above CRS.

time (DateTime): Time of departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for.

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string) : P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

Response

A `DeparturesBoard` object containing the requested details.

» GetNextDeparturesWithDetails

Version

2015-05-14 and above.

Description

Returns the next services to depart, with details, from the current location and arrive at the requested locations(s), based on the departure arrival time at the requested location. If there are no services to a requested destination the response contains the CRS code and an empty ServiceItem.

Parameters

crs (string, 3 characters, alphabetic): The CRS code of a requested station origin.

filterList (string[], 3 characters, alphabetic): A collection of CRS codes that are the destinations from the above CRS.

time (DateTime): Time of departure board.

timeWindow (integer between 0 and 1440): How far into the future in minutes, relative to the time, to return services for.90

filterTOC (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

services (string) : P for train Services, B for bus services, S for ship services. Defaults to "P". Optional.

Response

A `DeparturesBoardWithDetails` object containing the requested details.

» `GetReasonCode` [Deprecated]

Version

2007-10-10 and above.

Description

Returns the reason description for the specified code. This operation should now be called from the reference data endpoint. At some future time this operation may be removed from this endpoint.

Parameters

reasonCode (integer): The reason code for which the reason description is requested.

Response

A `ReasonDescription` object containing the requested details.

» `GetReasonCodeList` [Deprecated]

Version

2007-10-10 and above.

Description

Returns a collection of reason description objects, from which the reason code can be extracted. This operation should now be called from the reference data endpoint. At some future time this operation may be removed from this endpoint.

Parameters

N/A

Response

A `ReasonDescription` collection containing the requested details.

» `GetServiceDetailsByRID`

Version

2007-10-10 and above.

Description

Operation that can be used with a unique RID returned by `QueryServices` to get full details for a single service.

Parameters

rid (string): The unique RID to get full service details for.

Response

A `ServiceDetails` object containing the requested details.

» `GetSourceInstanceNames` [Deprecated]

Version

2010-07-07 and above.

Description

Returns a collection of objects containing CIS source instance details. This operation should now be called from the reference data endpoint. At some future time this operation may be removed from this endpoint.

Parameters

N/A

Response

A `SourceInstanceName` collection containing the requested details.

» QueryHistoricServices

Version

2010-07-07 and above.

Description

Queries historic services and returns a service list for the specified criteria.

Parameters

serviceID (string): The Id of the service. Must be a valid UID, Headcode, or RSID.

historicDateTime (DateTime): The start date and time of the required historic data. Optional.

historicDateTimeSpecified (bool): Flag which indicates whether the historic date time has been specified.

scheduleStartDate (DepBoardDateType): The schedule start date of the service. It is an enumeration of "PreviousDay", "SameDay", and "NextDay" Defaults to "SameDay". Optional.

scheduleStartDateSpecified (bool): Flag which indicates whether the schedule start date has been specified.

timeFilter (DateTime): A time filter for when the service is scheduled to be running. Optional.

routeCrsFilter (string): CRS filter. Only applies to Headcode based queries. Optional.

tocFilter (string): TOC filter. Only applies to Headcode based queries. Optional.

Response

A `ServiceList` object containing the requested details.

» QueryServices

Version

2011-10-31 and above.

Description

Queries services and returns a service list for the specified criteria.

Parameters

serviceID (string): The Id of the service. Must be a valid UID, Headcode, or RSID.

sdd (DateTime): Schedule start date.

filterTime (DateTime): A time filter for when the services are scheduled to be running. Optional.

filterTimeSpecified (bool): Flag which indicates whether the filter time has been specified.

filterCrs (string, 3 characters, alphabetic): The CRS code of either an origin or destination location to filter in. Optional.

tocFilter (string): The TOC code to apply to the filter. Filters services to include only those belonging to the specified TOC. Optional.

Response

A `ServiceList` object containing the requested details.

Supported Operations - Reference Data Endpoint

Click to expand any of the options below for more details.

» GetLoadingCategoryList

Version

2021-11-01 and above.

Description

Returns a collection of objects containing Train Loading category details.

Parameters

N/A

Response

A `LoadingCategoryRefData` collection containing the requested details.

» *GetTOCList*

Version

2015-05-14 and above.

Description

Gets a TOC List

Parameters

currentVersion (string): The schema version to get the TOC List for

Response

A `TOCRefData` object containing the requested details.

» *GetStationList*

Version

2015-05-14 and above.

Description

Gets a Station List

Parameters

currentVersion (string): The schema version to get the Station List for

Response

A `StationRefData` object containing the requested details.

» *GetReasonCode*

Version

2015-05-14 and above.

Description

Returns the reason description for the specified code. This operation should now be called from the reference data endpoint. At some future time this operation may be removed from this endpoint.

Parameters

reasonCode (integer): The reason code for which the reason description is requested.

Response

A `ReasonDescription` object containing the requested details.

» *GetReasonCodeList*

Version

2015-05-14 and above.

Description

Returns a collection of reason description objects, from which the reason code can be extracted. This operation should now be called from the reference data endpoint. At some future time this operation may be removed from this endpoint.

Parameters

N/A

Response

A `ReasonDescription` collection containing the requested details.

» *getSourceInstanceNames*

Version

2015-05-14 and above.

Description

Returns a collection of objects containing CIS source instance details. This operation should now be called from the reference data endpoint. At some future time this operation may be removed from this endpoint.

Parameters

N/A

Response

A `SourceInstanceName` collection containing the requested details.

If an error occurs during execution of an operation (including detection of invalid parameter values, or the unavailability of the underlying LDB service), it will be communicated back to the client by means of a SOAP Fault. This will usually be translated by the user's proxy generation tools to an exception in the generated language code.

Objects

Click to expand any of the options below for more details.

» *Association*

Object Member Name	Object Member Description
category	The association category. Join, Divide, Linked-From or Linked-To.
rid	A unique RTTI ID for this service that can be used to obtain full details of the service.
uid	The TSDB Train UID value for this service, or if one is not available, then an RTTI allocated replacement.
trainid	The Train ID value (headcode) for this service.
rsid	The Retail Service ID for this service, if known.
sdd	The Scheduled Departure Date of this service.
origin	The origin location of the associated service.
originCRS	The origin CRS code of the associated service.
originTiploc	The origin Tiploc code of the associated service.
destination	The destination location of the associated service.
destCRS	The destination CRS code of the associated service.
destTiploc	The destination Tiploc code of the associated service.
isCancelled	If present with the value "true" then this association is cancelled and will no longer happen.

» *BaseStationBoard*

Object Member Name	Object Member Description
generatedAt	The time at which the station board was generated.
locationName	The name of the location that the station board is for.
crs	The CRS code of the location that the station board is for.
filterLocationName	If a filter was requested, the location name of the filter location.
filtercrs	If a filter was requested, the CRS code of the filter location.
filterType	If a filter was requested, the type of filter.
stationManager	The name of the TOC that manages this station, or a generic name (e.g. "Bus Station") where there is no manager.
stationManagerCode	The code of the TOC that manages this station.
nrccMessages	An optional list of textual messages that should be displayed with the station board. The message may include embedded and xml encoded HTML-like hyperlinks and paragraphs. The messages are typically used

Object Member Name	Object Member Description
	to display important disruption information that applies to the location that the station board was for. Any embedded <p> tags are used to force a new-line in the output. Embedded <a> tags allow links to external web pages that may provide more information. Output channels that do not support HTML should strip out the <a> tags and just leave the enclosed text.
platformsAreHidden	If this flag is present with the value true, then Darwin is configured never to show platforms at this location and any platforms supplied should not be used for public display.
servicesAreUnavailable	If this flag is present with the value of "true" then service data shall not be displayed to the public and the service lists will not be returned on public channels. This may happen for example if access to a station has been closed to the public at short notice, even though the scheduled services are still running.

» CategoryData

Object Member Name	Object Member Description
toc	Train Operating Company identifier.
image	Train Loading Image to be used by the TOC for this Category Code.
colour	Train Loading Colour to be used by the TOC for this Category Code.
definition	Train Loading Definition to be used by the TOC for this Category Code.
typicalDescription	Train Loading typical loading description to be used by the TOC for this Category Code.
expectedDescription	Train Loading expected loading description to be used by the TOC for this Category Code.

» CoachData

Object Member Name	Object Member Description
coachClass	The class of coach, where known. First, Mixed or Standard. Other classes may be introduced in the future.
loading	The loading data for the coach, represented by a <code>CoachDataLoading</code> object.
number	The number/identifier for this coach, e.g. "A" or "12". Maximum of two characters.
toilet	A <code>ToiletAvailabilityType</code> object representing toilet data. (2017-10-01 schema onwards)

» CoachDataLoading

Object Member Name	Object Member Description
source	The source of the loading data.
sourceInstance	The source instance of the loading data.
value	The currently estimated passenger loading value for this coach, where known. Integer value between 0 - 100.

» DeparturesBoard

Object Member Name	Object Member Description
departures	A collection of <code>DepartureItem</code> .
baseStationBoard	The remaining fields are inherited from <code>BaseStationBoard</code> .

» DepartureItem

Object Member Name	Object Member Description
service	A <code>ServiceItem</code> object.
crs	The CRS code of the associated service.

» *DisruptionItem*

Object Member Name	Object Member Description
crs	The CRS code of a requested station.
disruptions	A list of the DisruptionMessages active at this station.
generatedAt	A timestamp of the time this item was generated.

» *DisruptionMessage*

Object Member Name	Object Member Description
id	The unique identifier for this message.
category	The DisruptionMessageCategory of the message. (Train service, Connecting services, System related, Prior (trains), Prior (other))
severity	The DisruptionMessageSeverity of the message. (Normal, Minor, Major, Severe)
isSuppressed	Boolean flag which indicates whether the departure board at this station is suppressed.
xhtmlMessage	The message text, which may include embedded and xml encoded HTML-like hyperlinks and paragraphs.
description	A short description of the message content.

» *FormationData*

Object Member Name	Object Member Description
serviceLoading	The FormationDataServiceLoading for this formation.
coaches	A collection of CoachData objects related to this formation.
source	Specifies the source of the formation data.
sourceInstance	Specifies the source instance of the formation data.

» *FormationDataServiceLoading*

Object Member Name	Object Member Description
loadingCategory	The FormationDataServiceLoadingCategory for this formation.
loadingPercentage	The FormationDataServiceLoadingPercentage for this formation.

» *FormationDataServiceLoadingCategory*

Object Member Name	Object Member Description
type	The loading value type (Typical or Expected) of this loading category.
src	Specifies the source of the loading category.
srcInst	Specifies the source instance of the loading category.
value	Specifies the loading Category Code.

» *FormationDataServiceLoadingPercentage*

Object Member Name	Object Member Description
type	The loading value type (Typical or Expected) of this loading percentage.
src	Specifies the source of the loading percentage.
srcInst	Specifies the source instance of the loading percentage.
value	Specifies the loading percentage.

» *HistoricDepartureBoard*

Object Member Name	Object Member Description
historicDateTime	The dateTime of the historic departure board.
departureDatetime	The departure datetime of the historic departure board.
busServices	Collection of HistoricServiceItem objects pertaining to bus services.
ferryServices	Collection of HistoricServiceItem objects pertaining to ferry services.

Object Member Name	Object Member Description
trainServices	Collection of <code>HistoricServiceItem</code> objects pertaining to ferry services.
generatedAt	A timestamp of the time this station departure board was generated.
locationName	The display name of the location that this departure board is for.
crs	The CRS code of the location that this departure board is for.
filterLocationName	If a filter was specified in the request, the display name of the location that was specified as the filter.
filtercrs	If a filter was specified in the request, the CRS code of the filter location.
filterType	If a filter was specified in the request, the type of filter that was requested.
stationManager	The name of the TOC that manages this station, or a generic name (e.g. "Bus Station") where there is no manager.
stationManagerCode	The code of the TOC that manages this station.
nrccMessages	A collection of <code>NRCCMessages</code> that apply to this departure board.
platformsAreHidden	If this flag is present with the value <code>true</code> , then Darwin is configured never to show platforms at this location and any platforms supplied should not be used for public display.
servicesAreUnavailable	If this flag is present with the value of <code>"true"</code> then service data shall not be displayed to the public and the service lists will not be returned on public channels. This may happen for example if access to a station has been closed to the public at short notice, even though the scheduled services are still running.

» *HistoricServiceDetails*

Object Member Name	Object Member Description
generatedAt	A timestamp of the time these service details were generated.
historicDateTime	The start date and time of the required historic service details.
uid	The TSDB Train UID value for this service, or if one is not available, then an RTTI allocated replacement.
rid	A unique RTTI ID for this service.
trainid	The Train ID value (headcode) for this service.
rsid	The Retail Service ID for this service, if known.
sdd	The Scheduled Departure Date of the service.
operator	The display name of the Train Operating Company that operates this service.
operatorCode	The code of the Train Operating Company that operates this service.
serviceType	The service type (Train, Bus, Ferry). Note that real-time information (e.g. eta, etd, ata, atd, etc.) is only available and present for train services.
isPassengerService	If present with the value <code>"false"</code> then this is not a passenger service and it shall not be published to the public. Note that non-passenger services are only supplied to clients that have been configured to receive them.
isCharter	If present with the value <code>"true"</code> then this is a charter service.
isDeleted	If present and <code>"true"</code> then the service is deleted.
locations	A collection of <code>HistoricServiceLocation</code> .
formation	A collection of <code>LocFormationData</code> objects containing location formation data (version 2017-02-02 and above).
cancelReason	The reason code that corresponds to the reason the service was cancelled, if specified.
delayReason	The reason code that corresponds to the reason the service was delayed, if specified.

» *HistoricServiceItem*

Object Member Name	Object Member Description
rid	A unique RTTI ID for this service that can be used to obtain full details of the service.

Object Member Name	Object Member Description
uid	The TSDB Train UID value for this service, or if one is not available, then an RTTI allocated replacement.
trainid	The Train ID value (headcode) for this service.
rsid	The Retail Service ID for this service, if known.
sdd	The Scheduled Departure Date of this service.
operator	The Train Operating Company of this service.
operatorCode	The Train Operating Company code of this service.
isPassengerService	If present with the value "false" then this is not a passenger service and it shall not be published to the public. Note that non-passenger services are only supplied to clients that have been configured to receive them.
isCharter	If present with the value "true" then this is a charter service.
origin	A collection of <code>EndPointLocations</code> denoting the origins of this service. Note that a service may have more than one origin.
destination	A collection of <code>EndPointLocations</code> denoting the destinations of this service. Note that a service may have more than one destination.
currentOrigins	A collection of <code>EndPointLocations</code> denoting the origins of this service. Note that a service may have more than one origin.
currentDestinations	A collection of <code>EndPointLocations</code> denoting the destinations of this service. Note that a service may have more than one destination.
ata	The actual time of arrival. Will only be present if sta is also present and arrivalType has the value "Actual".
ataSpecified	Whether ata was specified.
atd	The actual time of departure. Will only be present if std is also present and departureType has the value "Actual".
atdSpecified	Whether atd was specified.
sta	The scheduled time of arrival of this service.
staSpecified	Whether sta has been specified.
eta	The expected time of arrival of this service.
etaSpecified	Whether the eta has been specified.
arrivalType	The type of arrival forecast at this location.
arrivalTypeSpecified	Whether the arrival type was specified.
std	The scheduled time of departure of this service.
stdSpecified	Whether std was specified.
etd	The expected time of departure of this service.
etdSpecified	Whether the etd was specified.
departureType	The type of departure forecast at this location. (Forecast, Actual, NoLog, Delayed)
departureTypeSpecified	Whether the departure type has been specified.
isCancelled	If present and "true" then the service is cancelled at this location.
isLateReinstated	A boolean to indicate this train is late reinstated at this location.
platform	The platform number (if known).
platformIsHidden	Whether the platform is hidden.
servicelsSupressed	If present with the value "true" then the service has been suppressed at this location and will not be displayed at the station.
isDeleted	If present and "true" then the service is deleted.
isCircularRoute	A flag to indicate if this service is running as part of a circular route and will call at this location again later in its journey.
isOperationalCall	If present with the value "true" then this is an operational call at the location and the service shall not be published to the public.
filterLocationCancelled	A boolean to indicate whether for any filter location whether it is cancelled or not.
filterLocationOperational	A boolean to indicate that the filter location (if any) is an operational call. This will only be set if "isOperationalCall" is not present or has a "false"

Object Member Name	Object Member Description
	value.
adhocAlerts	A collection of active Adhoc Alert texts for to this location.
arrivalSource	The source code of the forecast/movement of expected time of arrival.
arrivalSourceInstance	The source description of the forecast/movement of expected time of arrival.
departureSource	The source code of the forecast/movement of expected time of departure.
departureSourceInstance	The source description of the forecast/movement of expected time of departure.
cancelReason	The reason code that corresponds to the reason the service was cancelled, if specified.
cancelReasonSpecified	Whether the cancel reason was specified.
delayReason	The reason code that corresponds to the reason the service was delayed, if specified.
delayReasonSpecified	Whether the delay reason was specified.
formation	A <code>formationData</code> object representing the formation data of the train at this location (if known)

» *HistoricServiceLocation*

Object Member Name	Object Member Description
locationName	The display name of this location.
locationCrs	The CRS code of this location, if available.
fullTiploc	The FullTiploc code of this location.
isPass	If present and "true" then this is a passing location.
isCancelled	Indicates that the service is cancelled at this location.
isLateReinstated	Indicate this train is late reinstated at this location.
falseDest	A False Destination that should be displayed for this location.
fdTiploc	The Tiploc code of a False Destination.
platform	The platform number that the service is expected to use at this location, if known.
platformIsHidden	If present with the value "true" then the platform number should be treated as advisory only and is not displayed to the public.
serviceIsSuppressed	If present with the value "true" then the service has been suppressed at this location and will not be displayed at the station.
sta	The scheduled time of arrival of this service at this location.
staSpecified	Whether sta has been specified.
ata	The actual time of arrival.
ataSpecified	Whether ata has been specified.
eta	The estimated time of arrival.
etaSpecified	Whether eta was specified.
arrivalType	The type of arrival forecast at this location.
arrivalTypeSpecified	Whether the arrival type was specified..
std	The scheduled time of departure of this service at this location.
stdSpecified	Whether std was specified.
atd	The actual time of departure.
atdSpecified	Whether atd was specified.
etd	The estimated time of departure.
etdSpecified	Whether etd was specified.
departureType	The type of departure forecast at this location.
departureTypeSpecified	Whether the departure type was specified.
lateness	A number to indicate the value of lateness if the train is overdue.
hasAdhocAlert	A boolean to inform there is any adhoc alert attached to this location.

Object Member Name	Object Member Description
hasAdhocAlertSpecified	Whether has adhoc alert has been specified.
isOperational	If present with the value "true" then this is an operational calling location. Any scheduled arrival and departure times supplied will be working times, rather than the usual public times. Note that operational locations are only supplied to clients that have been configured to receive them.
arrivalSource	The source code of the forecast/movement of expected time of arrival.
arrivalSourceInstance	The source description of the forecast/movement of expected time of arrival.
departureSource	The source code of the forecast/movement of expected time of departure.
departureSourceInstance	The source description of the forecast/movement of expected time of departure.
associations	A list of <code>Associations</code> that occur at this location

» *HistoricTimeLine*

Object Member Name	Object Member Description
historicDateTime	The start date and time of the required historic service details.
departureDateTime	The date and time of the train departure.
rid	A unique RTTI ID for this service.
uid	The TSDB Train UID value for this service, or if one is not available, then an RTTI allocated replacement.
trainid	The Train ID value (headcode) for this service.
rsid	The Retail Service ID for this service, if known.
operatorName	The Train Operating Company of this service.
originName	The display name of the origin station of this historic service timeline.
originCRS	The CRS code of the origin station of this historic service timeline.
destinationName	The display name of the destination of this historic service timeline.
destinationCRS	The CRS code of the destination of this historic service timeline.
currentLocationName	The display name of the current station of this historic timeline.
currentLocationCRS	The CRS code of the current station of this historic timeline.
currentLocationTiploc	The Tiploc code code of the current station of this historic timeline.
currentLocationOperator	The current staion operating company of this historic timeline.
prevLocationName	The display name of the previous station of this historic timeline.
prevLocationCRS	The CRS code of the previous station of this historic timeline.
prevLocationTiploc	The Tiploc code of the previous station of this historic timeline.
prevLocationIsFirst	A boolean to indicate the previous location is the first location in the journey.
nextLocationName	The display name of the next station on this historic timeline.
nextLocationCRS	The CRS code of the next station on this historic timeline.
nextLocationTiploc	The Tiploc code of the next station of this historic timeline.
nextLocationIsLast	A boolean to indicate the next location is the last location in the journey.
timelineEvents	A collection of <code>TimelineEvent</code> objects.

» *LoadingCategoryRefData*

Object Member Name	Object Member Description
version	Schema version to which the data relates.
LoadingCategoryRefDataList	Collection of <code>LoadingCategoryRefDataCategory</code> objects containing category code and associated reference data.

» *LoadingCategoryRefDataCategory*

Object Member Name	Object Member Description
code	Category code.
name	Category name.
data	Collection of <i>CategoryData</i> objects containing category codes reference data relating to the TOC.

» *LocFormationData*

Object Member Name	Object Member Description
tiploc	TIPLOC code for this set of formation data.
serviceLoading	The FormationDataServiceLoading for this formation.
coaches	A collection of <i>CoachData</i> objects related to this formation.
source	Specifies the source of the formation data.
sourceInstance	Specifies the source instance of the formation data.

» *NRCCMessage*

Object Member Name	Object Member Description
category	The Category of the message, as defined by one of the enumerated values.
severity	The Severity of the message, as defined by one of the enumerated values.
xhtmlMessage	The message text, which may include embedded and xml encoded HTML-like hyperlinks and paragraphs.

» *Overdue*

Object Member Name	Object Member Description
odtime	The time at which RTTI expected the service to make a report.
isOverdueAt	True if the service is Overdue at a station location (station1). If the value is false then the service has become Overdue at a non-station point between two station locations (station1 and station2). Note that these station locations might be passing locations and will not necessarily appear in the service's Locations list.
odStation1	The name of the station where the report should have been received, or immediately before the location where the report should have been received.
odStation1CRS	The CRS code of the station where the report should have been received, or immediately before the location where the report should have been received.
odStation1Tiploc	The Tiploc code of the station where the report should have been received, or immediately before the location where the report should have been received.
odStation2	The name of the station immediately after the location where the report should have been received.
odStation2CRS	The CRS code of the station immediately after the location where the report should have been received.
odStation2Tiploc	The Tiploc code of the station immediately after the location where the report should have been received.

» *ReasonDescription*

Object Member Name	Object Member Description
code	The unique reason code.
lateReason	The late reason associated with the code.
cancReason	The cancellation reason associated with the code.

» *ServiceDetails*

Object Member Name	Object Member Description
generatedAt	The time at which the service details were generated.

Object Member Name	Object Member Description
rid	A unique RTTI ID for this service.
uid	The TSDB Train UID value for this service, or if one is not available, then an RTTI allocated replacement.
rsid	The Retail Service ID of the service, if known.
sdd	The Scheduled Departure Date of the service.
trainid	The Train ID value (headcode) for this service.
serviceType	The type of service (train, bus, ferry) that these details represent. Note that real-time information (e.g. eta, etd, ata, atd, isCancelled, etc.) is only available and present for train services.
isPassengerService	If present with the value "false" then this is not a passenger service and it shall not be published to the public. Note that non-passenger services are only supplied to clients that have been configured to receive them.
isCharter	If present with the value "true" then this is a charter service.
category	The category of the service.
operator	The display name of the Train Operating Company that operates this service.
operatorCode	The code of the Train Operating Company that operates this service.
cancelReason	A cancellation reason for this service.
delayReason	A delay reason for this service.
isReverseFormation	True if the service is operating in the reverse of its normal formation.
locations	A collection of <code>ServiceLocation</code> objects which contains a list of the locations in the schedule. This may, or may not, contain passing locations, depending on the permissions granted to the caller.
formation	A collection of <code>LocFormationData</code> objects containing location formation data (version 2017-02-02 and above).

The calling point lists in the `ServiceDetails` object need further explanation. It is possible for certain trains to be formed from multiple separate trains, or to split into multiple trains, at certain points in their schedule. In such circumstances, some trains may have multiple origins or destinations and therefore, there may be multiple lists of calling points in the `previousCallingPoints` or `subsequentCallingPoints` properties. The first list of calling points will be for the "through" train and will hold all of the locations from the origin (for `previousCallingPoints`) or to the destination (for `subsequentCallingPoints`). The remaining lists will hold the locations of joining/splitting trains from/to their respective origins/destinations. The point at which the association is made is determined by examining the last location in the `previousCallingPoints` list, or the first location in the `subsequentCallingPoints` list. To get a better idea of how this works, look at a Train Details page on the LDB web site for a train that has an association. A good station to look for such trains would be [Gatwick Airport \[GTW\]](#).

» *ServiceItem*

Object Member Name	Object Member Description
rid	A unique RTTI ID for this service that can be used to obtain full details of the service.
uid	The TSDB Train UID value for this service, or if one is not available, then an RTTI allocated replacement.
trainid	The Train ID value (headcode) for this service.
rsid	The Retail Service ID of the service, if known.
origin	A collection of <code>EndPointLocations</code> denoting the origins of this service. Note that a service may have more than one origin.
destination	A collection of <code>EndPointLocations</code> denoting the destinations of this service. Note that a service may have more than one destination.
currentOrigins	A collection of <code>EndPointLocations</code> denoting the origins of this service. Note that a service may have more than one origin.
currentDestinations	A collection of <code>EndPointLocations</code> denoting the destinations of this service. Note that a service may have more than one destination.
sdd	The Scheduled Departure Date of this service.

Object Member Name	Object Member Description
operator	The name of the Train Operating Company that operates the service.
operatorCode	The code of the Train Operating Company that operates the service.
isPassengerService	If present with the value "false" then this is not a passenger service and it shall not be published to the public.
isCharter	If present with the value "true" then this is a charter service.
isCancelled	A flag to indicate that this service is cancelled at this location.
isCircularRoute	A flag to indicate if this service is running as part of a circular route and will call at this location again later in its journey.
filterLocationCancelled	A boolean to indicate that the filter location (if any) is cancelled.
filterLocationOperational	A boolean to indicate that the filter location (if any) is an operational call. This will only be set if "isOperationalCall" is not present or has a "false" value.
isOperationalCall	If present with the value "true" then this is an operational call at the location and the service shall not be published to the public.
sta	The scheduled time of arrival of this service. If no sta is present then this is the origin of this service or it does not set down passengers at this location.
staSpecified	Whether sta was specified.
ata	The actual time of arrival. Will only be present if sta is also present and arrivalType has the value "Actual".
ataSpecified	Whether ata was specified.
eta	The estimated time of arrival. Will only be present if sta is also present and arrivalType has the value "Forecast".
etaSpecified	Whether the eta was specified.
arrivalType	The type of arrival forecast at this location. Will only be present if sta is also present.
arrivalTypeSpecified	Whether arrival type was specified.
arrivalSource	The source code of the forecast/movement of expected time of arrival.
arrivalSourceInstance	The source description of the forecast/movement of expected time of arrival.
std	The scheduled time of departure of this service. If no std is present then this is the destination of this service or it does not pick up passengers at this location.
stdSpecified	Whether std was specified.
atd	The actual time of departure. Will only be present if std is also present and departureType has the value "Actual".
atdSpecified	Whether atd was specified.
etd	The estimated time of departure. Will only be present if std is also present and departureType has the value "Forecast".
etdSpecified	Whether etd was specified.
departureType	The type of departure forecast at this location. Will only be present if std is also present.
departureTypeSpecified	Whether the departure type was specified.
departureSource	The source code of the forecast/movement of expected time of departure.
departureSourceInstance	The source description of the forecast/movement of expected time of departure.
platform	The platform number (if known).
platformIsHidden	If present with the value "true" then the platform number should be treated as advisory only and is not displayed to the public.
serviceIsSuppressed	If present with the value "true" then the service has been suppressed and will not be displayed at the station.
adhocAlerts	A list of Adhoc Alerts related to this location for this service. This list contains an object called <code>AdhocAlertTextType</code> which contains a string to show the Adhoc Alert Text for the location.

Object Member Name	Object Member Description
cancelReason	The cancellation reason for this service (if any).
delayReason	The delay reason for this service (if any).
category	The ITPS Train Category code for this service.
activities	The ITPS activity codes for this location.
length	The train length (number of units) at this location. If not supplied, or zero, the length is unknown.
isReverseFormation	True if the service is operating in the reverse of its normal formation.
detachFront	True if the service detaches units from the front at this location.
formation	FormationData object containing the formation for this item, if any.
uncertainty	UncertaintyType for this ServiceItem, if any.
affectedBy	The NRE incident number

» ServiceItemWithLocations

Object Member Name	Object Member Description
previousLocations	A collection of ServiceLocation objects.
subsequentLocations	A collection of ServiceLocation objects.
serviceItem	The remaining fields are inherited from ServiceItem.

» ServiceList

Object Member Name	Object Member Description
scheduleStartDate	Scheduled departure date of the services.
serviceList	A collection of ServiceListItem objects.

» ServiceListItem

Object Member Name	Object Member Description
rid	A unique RTTI ID for this service that can be used to obtain full details of the service.
uid	The TSDB Train UID value for this service, or if one is not available, then an RTTI allocated replacement.
trainid	The Train ID value (headcode) for this service.
rsid	The Retail Service ID for this service, if known.
originName	The display name of the origin station of this historic service timeline.
originCrs	The CRS code of the origin station of this historic service timeline.
destinationName	The display name of the destination of this historic service timeline.
destinationCrs	The CRS code of the destination of this historic service timeline.
scheduledDeparture	A timestamp of the time that this service is scheduled to departure from origin.
scheduledArrival	A timestamp of the time that this service is scheduled to arrive at destination.

» ServiceLocation

Object Member Name	Object Member Description
locationName	The display name of this location.
tiploc	The Tiploc code of this location.
crs	The CRS code of this location, if available.
associations	A list of associations that occur at this location
adhocAlerts	A list of active Adhoc Alert texts for to this location.
activities	The ITPS activity codes for this location.
length	The train length (number of units) at this location. If not supplied, or zero, the length is unknown.
detachFront	The Tiploc code of this location.

Object Member Name	Object Member Description
isOperational	If present with the value "true" then this is an operational calling location. Any scheduled arrival and departure times supplied will be working times, rather than the usual public times. Note that operational locations are only supplied to clients that have been configured to receive them.
isPass	If present with the value "true" then this is a passing location. There will be no arrival times supplied and the departure times should be interpreted as working pass times. Note that passing locations are only supplied to clients that have been configured to receive them.
isCancelled	Indicates that the service is cancelled at this location. Note that if this value is set to "true" then no eta/etd will be supplied, but an ata/atd may be present.
falseDest	A False Destination that should be displayed for this location, if exists.
fdTiploc	The Tiploc code of a False Destination.
platform	The platform number that the service is expected to use at this location, if known.
platformIsHidden	If present with the value "true" then the platform number should be treated as advisory only and is not displayed to the public.
serviceIsSuppressed	If present with the value "true" then the service has been suppressed at this location and will not be displayed at the station.
sta	The public scheduled time of arrival of this service at this location. If no sta is present then this is the origin of this service or it does not set down passengers at this location.
staSpecified	The public scheduled time of arrival of this service at this location. If no sta is present then this is the origin of this service or it does not set down passengers at this location.
ata	The actual time of arrival. Will only be present if sta is also present and arrivalType has the value "Actual".
ataSpecified	Whether ata was specified.
eta	The estimated time of arrival. Will only be present if sta is also present and arrivalType has the value "Forecast".
etaSpecified	Whether eta was specified.
arrivalType	The type of arrival forecast at this location. Will only be present if sta is also present.
arrivalTypeSpecified	Whether arrival type was specified.
arrivalSource	A string to indicate the source code of the forecast/movement of expected time of arrival.
arrivalSourceInstance	A string to indicate the source description of the forecast/movement of expected time of arrival.
std	The public scheduled time of departure of this service at this location. If no std is present then this is the destination of this service or it does not pick up passengers at this location.
stdSpecified	Whether std was specified.
atd	The actual time of departure. Will only be present if std is also present and departureType has the value "Actual".
atdSpecified	Whether etd was specified.
etd	The estimated time of departure. Will only be present if std is also present and departureType has the value "Forecast".
etdSpecified	Whether etd was specified.
departureType	The type of departure forecast at this location. Will only be present if std is also present.
departureTypeSpecified	Whether departure type was specified.
departureSource	A string to indicate the source code of the forecast/movement of expected time of departure.
departureSourceInstance	A string to indicate the source description of the forecast/movement of expected time of departure.

Object Member Name	Object Member Description
lateness	The number of seconds (as a string) that this train is late. Note that this value has previously contained text in addition to an integer, and may do so in the future.
uncertainty	UncertaintyType for this ServiceItem, if any.
affectedBy	The NRE incident number

» SourceInstanceName

Object Member Name	Object Member Description
id	The Id of a CIS Source Instance.
name	The Name of a CIS Source Instance.

» StationBoard

Object Member Name	Object Member Description
generatedAt	The time at which the station board was generated.
locationName	The name of the location that the station board is for.
crs	The CRS code of the location that the station board is for.
filterLocationName	If a filter was requested, the location name of the filter location.
filtercrs	If a filter was requested, the CRS code of the filter location.
filterType	If a filter was requested, the type of filter.
stationManager	The name of the TOC that manages this station, or a generic name (e.g. "Bus Station") where there is no manager.
stationManagerCode	The code of the TOC that manages this station.
nrccMessages	An optional list of textual messages that should be displayed with the station board. The message may include embedded and xml encoded HTML-like hyperlinks and paragraphs. The messages are typically used to display important disruption information that applies to the location that the station board was for. Any embedded <p> tags are used to force a new-line in the output. Embedded <a> tags allow links to external web pages that may provide more information. Output channels that do not support HTML should strip out the <a> tags and just leave the enclosed text.
platformsAreHidden	If this flag is present with the value true, then Darwin is configured never to show platforms at this location and any platforms supplied should not be used for public display.
servicesAreUnavailable	If this flag is present with the value of "true" then service data shall not be displayed to the public and the service lists will not be returned on public channels. This may happen for example if access to a station has been closed to the public at short notice, even though the scheduled services are still running.
isTruncated	Will be present with the value "true" if more services exist in the time window but have not been returned because the request limit has been reached.
trainServices busServices ferryServices	Each of these lists contains a ServiceItem object for each service of the relevant type that is to appear on the station board. Each or all of these lists may contain zero items, or may not be present at all.
qos	A value to indicate the "quality of service" at a particular station. The value ranges from 0.0 to 1.0, where 1.0 means good and 0.0 means bad.
qosSpecified	Whether qos was specified.

» StationBoardWithDetails

Object Member Name	Object Member Description
generatedAt	The time at which the station board was generated.
locationName	The display name of the location that this station board is for.
crs	The CRS code of the location that the station board is for.
filterLocationName	If a filter was requested, the location name of the filter location.
filtercrs	If a filter was requested, the CRS code of the filter location.

Object Member Name	Object Member Description
filterType	If a filter was requested, the type of filter.
stationManager	The name of the TOC that manages this station, or a generic name (e.g. "Bus Station") where there is no manager.
stationManagerCode	The code of the TOC that manages this station.
nrccMessages	An optional list of textual messages that should be displayed with the station board. The message may include embedded and xml encoded HTML-like hyperlinks and paragraphs. The messages are typically used to display important disruption information that applies to the location that the station board was for. Any embedded <p> tags are used to force a new-line in the output. Embedded <a> tags allow links to external web pages that may provide more information. Output channels that do not support HTML should strip out the <a> tags and just leave the enclosed text.
platformsAreHidden	If this flag is present with the value true, then Darwin is configured never to show platforms at this location and any platforms supplied should not be used for public display.
servicesAreUnavailable	If this flag is present with the value of "true" then service data shall not be displayed to the public and the service lists will not be returned on public channels. This may happen for example if access to a station has been closed to the public at short notice, even though the scheduled services are still running.
busServices	Collection of <code>ServiceItemWithLocations</code> objects pertaining to bus services.
ferryServices	Collection of <code>ServiceItemWithLocations</code> objects pertaining to ferry services.
trainServices	Collection of <code>ServiceItemWithLocations</code> objects pertaining to train services.
isTruncated	Will be present with the value "true" if more services exist in the time window but have not been returned because the request limit has been reached.
uncertainty	<code>UncertaintyType</code> for this <code>ServiceItem</code> , if any.

» StationRefData

Object Member Name	Object Member Description
version	Schema version to which the data relates.
stationList	Collection of <code>StationName</code> objects containing the Station CRS and descriptions.

» TimelineEvent

Object Member Name	Object Member Description
isOperational	If present with the value "true" then this is an operational calling location. Any scheduled arrival and departure times supplied will be working times, rather than the usual public times. Note that operational locations are only supplied to clients that have been configured to receive them.
isPass	If present with the value "true" then this is a passing location. There will be no arrival times supplied and the departure times should be interpreted as working pass times. Note that passing locations are only supplied to clients that have been configured to receive them.
isCancelled	Indicates that the service is cancelled at this location. Note that if this value is set to "true" then no eta/etd will be supplied, but an ata/atd may be present.
falseDest	A False Destination that should be displayed for this location, if one exists.
fdTiploc	The Tiploc code of a False Destination
platform	The platform number that the service is expected to use at this location, if known.

Object Member Name	Object Member Description
platformIsHidden	If present with the value "true" then the platform number should be treated as advisory only and is not displayed to the public.
serviceIsSuppressed	If present with the value "true" then the service has been suppressed at this location and will not be displayed at the station.
sta	The scheduled time of arrival of this service at this location. If no sta is present then this is the origin of this service or it does not set down passengers at this location.
staSpecified	Whether sta was specified.
eta	The estimated time of arrival. Will only be present if sta is also present and arrivalType has the value "Forecast".
etaSpecified	Whether eta was specified.
ata	The actual time of arrival. Will only be present if sta is also present and arrivalType has the value "Actual".
ataSpecified	Whether ata was specified.
arrivalType	The type of arrival forecast at this location. Will only be present if sta is also present.
arrivalTypeSpecified	Whether the arrival type was specified.
arrivalSource	A string to indicate the source code of the forecast/movement of expected time of arrival.
arrivalSourceInstance	A string to indicate the source description of the forecast/movement of expected time of arrival.
std	The scheduled time of departure of this service at this location. If no std is present then this is the destination of this service or it does not pick up passengers at this location.
stdSpecified	Whether std was specified.
etd	The estimated time of departure. Will only be present if std is also present and departureType has the value "Forecast".
etdSpecified	Whether etd was specified.
atd	The actual time of departure. Will only be present if std is also present and departureType has the value "Actual".
atdSpecified	Whether atd was specified.
departureType	The type of departure forecast at this location.
departureTypeSpecified	Whether the departure type was specified.
departureSource	A string to indicate the source code of the forecast/movement of expected time of departure.
departureSourceInstance	A string to indicate the source description of the forecast/movement of expected time of departure.
lateness	The number of seconds (as a string) that this train is late. Note that this value has previously contained text in addition to an integer, and may do so in the future.
eventTime	The date and time of the historic timeline event.
disruptionReason	A disruption reason for this service at the historic time. If the service is cancelled at this location, this will be a cancellation reason. Otherwise, this will be a late-running reason.
disruptionReasonSpecified	Whether a disruption reason was specified.
isLateReinstated	A boolean to indicate this train is late reinstated at this location.
eventSource	The source of the historic timeline event
activeAdhocExist	If present with the value "true" then this location has got an active adhoc alert at this moment.
isDeletedService	A boolean to indicate that the service was marked as deleted at the time of this timeline entry.
isDeletedLocation	A boolean to indicate that this timeline entry marks the deletion of the location from the service. The location will not be present in service details at this historic time.

Object Member Name	Object Member Description
version	Schema version to which the data relates.
tocList	Collection of <code>TocName</code> objects containing the TOC names and descriptions.

» *TocName*

Object Member Name	Object Member Description
toc	The TOC name.
Value	The description of the TOC.

» *ToiletAvailabilityType*

Object Member Name	Object Member Description
status	ToiletStatus enumeration (Unknown, InService, NotInService), indicating service status.
value	Type of toilet (Unknown, None, Standard, Accessible)

» *UncertaintyType*

Object Member Name	Object Member Description
status	Uncertainty enumeration (Delay, Cancellation, Other), indicating uncertainty status.
reason	<code>ReasonCodeWithLocation</code> object containing the uncertainty reason with location if any.

» *ReasonCodeWithLocation*

Object Member Name	Object Member Description
tiploc	tiploc (string): Optional TIPLOC where the reason refers to, e.g. "signalling failure at Cheadle Hulme".
near	nearField (boolean): If true, the tiploc attribute should be interpreted as "near", e.g. "signalling failure near Cheadle Hulme".
Value	valueField (integer): The reason code that corresponds to the uncertainty reason.

In the objects detailed above, certain properties were specified to return time values. These values will either return absolute times, formatted as a HH:MM string, or a text string such as (but not limited to) "On time", "No report" or "Cancelled". These times should be output in the user interface exactly as supplied. In some cases, the time value may have an asterisk ("**") appended to indicate that the value is "uncertain".