

Praedico Integration Platform

API Field Reference

Customer-facing surface · Spec version 2 · 21 operations

Contents

POST	/v2/assets
POST	/v2/curves
POST	/v2/defects
GET	/v2/status/{id}
GET	/v2/job/{id}/errors
POST	/v2/job/{importJobType}/runbydate
POST	/v2/job/{importJobType}/runbyid
POST	/v2/notifications
POST	/v2/overheadLines
POST	/v2/railfeatures
POST	/v2/rootCauseAnalysis
POST	/v2/serviceorders
POST	/v2/switchconditions
POST	/v2/temporariespeedrestrictions
POST	/v2/trackmeasurements
DELETE	/v2/trackmeasurements
POST	/v2/trackmeasurements/finalized
GET	/v2/trackmeasurements/finalized
GET	/v2/trackmeasurements/auditTrail
POST	/v2/trackusages
POST	/v2/welds

POST **/v2/assets**

Create or update assets

Field	Type	Format	Required	Example	Description
id	string		Yes	456123	Your external identifier for the asset. Used as the upsert (to update record) key, so keep it stable and unique across imports.
subArealId	string		Yes	004	Identifier of the sub-area the asset belongs to.
name	string		Yes	Asset Name	Name of the asset. (short version), for example Switch 1A
description	string		No	Asset Description	Free-text description of the asset.
status	string		Yes	A	Asset status code ('A'=Active, 'I'=Inactive).
createdBy	string		No	System	Source system or user that created the asset record.
updatedBy	string		No	System	Source system or user that last updated the asset record.
createdDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the asset was created in the source system.
updatedDate	string	date-time	No	2024-01-01T12:24:10Z	ISO-8601 UTC timestamp when the asset was last updated in the source system.
startPoint	number	double	No	1	(lowest) Chainage value of the asset.
endPoint	number	double	No	2	(highest) Chainage value of the asset. In case of a point Asset both start- and endpoint are required to be identical.
shapeType	string		Yes	LineString	Geometry shape of the asset (for example "Point" or "LineString").
isComponent	boolean		No	false	Whether this asset is a component of another asset.
assetCategoryId	string		Yes	TRACK-RAIL	Asset category identifier (for example "TRACK-RAIL").
assetTypeId	string		Yes	OBJ007	Asset type identifier (for example "OBJ007").
parentId	string		No	14536	Unique Identifier of the parent asset, when expressing hierarchy by reference. Leave empty for a top-level asset.
geolocation.linearReferenceStart	string		No	Track 1001 (track name)	Linear reference identifier for asset start location.
geolocation.linearReferenceEnd	string		No	Track 1001 (track name)	Linear reference identifier for asset end location.
geolocation.locationStart	number	double	No	1	Location start chainage point.
geolocation.locationEnd	number	double	No	2	Location end chainage point.
geolocation.locationUnit	string		No	km	Unit of measure in which location values are provided (for example, "km" or "mi").
geolocation.offsetStart	number	double	No	0	Offset value for location start point.
geolocation.offsetEnd	number	double	No	0	Offset value for location end point.
geolocation.offsetUnit	string		No	m	Unit of measure in which offset values are provided (for example, "m" or "ft").

Field	Type	Format	Required	Example	Description
geolocation.latitudeStart	number	double	No	0	Latitude corresponding to the location start point.
geolocation.latitudeEnd	number	double	No	0	Latitude corresponding to the location end point.
geolocation.longitudeStart	number	double	No	0	Longitude corresponding to the location start point.
geolocation.longitudeEnd	number	double	No	0	Longitude corresponding to the location end point.
geolocation.coordinateXStart	number	double	No	0	X coordinate corresponding to the location start point.
geolocation.coordinateXEnd	number	double	No	0	X coordinate corresponding to the location end point.
geolocation.coordinateYStart	number	double	No	0	Y coordinate corresponding to the location start point.
geolocation.coordinateYEnd	number	double	No	0	Y coordinate corresponding to the location end point.
assets[]	array		No		Nested child assets, as an alternative to setting ParentId on each child. Don't express the same relationship both ways.
assetProperties[].id	string		Yes	765231	Your external identifier for the asset property. Used as the upsert key, so keep it stable and unique. The identifier is only unique within the attached asset.
assetProperties[].name	string		Yes	Property Name	Name of the property.
assetProperties[].status	string		Yes	Active	Status code of the property (for example "Active").
assetProperties[].startPoint	number	double	No	1	(lowest) Chainage value of the property on the asset.
assetProperties[].endPoint	number	double	No	2	(highest) Chainage value of the property on the asset.
assetProperties[].startDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC date from which the property value is effective.
assetProperties[].endDate	string	date-time	No	2024-02-01T11:24:10Z	ISO-8601 UTC date until which the property value is effective.
assetProperties[].entityName	string		Yes	Entity Name	Name of the attribute this property represents. For example 'Turn Rate'
assetProperties[].entityDescription	string		Yes	Entity Description	Extended description of the entities Name if applicable, otherwise identical to the Entity Name.
assetProperties[].valueName	string		Yes	Value Name	The property's value. For example '1:15'.
assetProperties[].valueDescription	string		Yes	Value Description	Extended description of the property's value if applicable, otherwise identical to the Value Name.
assetProperties[].updatedAt	string	date-time	Yes	2024-03-01T11:24:10Z	ISO-8601 UTC timestamp when the property was last updated in the source system.
assetProperties[].isDeleted	boolean		No	false	Whether this property has been marked as deleted.

POST **/v2/curves**

Import track curves

Field	Type	Format	Required	Example	Description
id	string		Yes	654321	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
name	string		No	Curve Name	Short name or description of curve.
description	string		No	Curve Description	Extended curve description.
comment	string		No	Comment	Free text comments.
externalKey	string		No	External-Key	Record id or reference in source system.
arcRadiusValue	number	double	No	800	Design Radius of curve or mm for chord. The value can be expressed as 1/R, radius or chord.
arcRadiusUnit	string		No	m	Unit used for arc radius design (for example "1/km", "m" or "mm").
cantValue	number	double	No	20	Cant measurement.
cantUnit	string		No	mm	Unit used for cant design (for example "mm" or "in").
curveType	string		No	Curve Type	Horizontal, Top (vertical).
curveDirection	string		No	Left	Direction in which the track curves (e.g. Left or Right). Top curve.
curveStart	number	double	No	1	Curve start chainage point including transition zone.
curveEnd	number	double	No	2	Curve end chainage point including transition zone.
curveUnit	string		No	km	Unit of design in which curve chainage values are provided (for example "km" or "mi").
arcStart	number	double	No	1.2	Arc start chainage point.
arcEnd	number	double	No	1.8	Arc end chainage point.
arcUnit	string		No	km	Unit of design in which arc chainage values are provided (for example "km" or "mi").
installationDate	string	date-time	No	2024-01-01T11:24:10Z	Date curve installed.
removalDate	string	date-time	No	2024-06-01T11:24:10Z	Date curve removed.
designDate	string	date-time	No	2023-12-01T11:24:10Z	Date on which the curve was last designed / redesigned / physically changed.
surveyDate	string	date-time	No	2024-02-01T11:24:10Z	Date curve last surveyed.
updatedAt	string	date-time	No	2024-03-01T11:24:10Z	Date record last updated.
updatedBy	string		No	System	Last updated by.
isDeleted	boolean		No	false	Indicator that curve has been marked for soft delete.
assets[].assetId	string		Yes	456123	Unique identifier of the asset this curve relates to.

Field	Type	Format	Required	Example	Description
assets[].geoLocation.linearReferenceStart	string		No	Track 1001 (track name)	Linear reference identifier for asset start location.
assets[].geoLocation.linearReferenceEnd	string		No	Track 1001 (track name)	Linear reference identifier for asset end location.
assets[].geoLocation.locationStart	number	double	No	1	Location start chainage point.
assets[].geoLocation.locationEnd	number	double	No	2	Location end chainage point.
assets[].geoLocation.locationUnit	string		No	km	Unit of measure in which location values are provided (for example, "km" or "mi").
assets[].geoLocation.offsetStart	number	double	No	0	Offset value for location start point.
assets[].geoLocation.offsetEnd	number	double	No	0	Offset value for location end point.
assets[].geoLocation.offsetUnit	string		No	m	Unit of measure in which offset values are provided (for example, "m" or "ft").
assets[].geoLocation.latitudeStart	number	double	No	0	Latitude corresponding to the location start point.
assets[].geoLocation.latitudeEnd	number	double	No	0	Latitude corresponding to the location end point.
assets[].geoLocation.longitudeStart	number	double	No	0	Longitude corresponding to the location start point.
assets[].geoLocation.longitudeEnd	number	double	No	0	Longitude corresponding to the location end point.
assets[].geoLocation.coordinateXStart	number	double	No	0	X coordinate corresponding to the location start point.
assets[].geoLocation.coordinateXEnd	number	double	No	0	X coordinate corresponding to the location end point.
assets[].geoLocation.coordinateYStart	number	double	No	0	Y coordinate corresponding to the location start point.
assets[].geoLocation.coordinateYEnd	number	double	No	0	Y coordinate corresponding to the location end point.

POST /v2/defects

Report defects against assets

Field	Type	Format	Required	Example	Description
id	string		Yes	External-Id	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
name	string		No	Defect Name	Brief description of the defect.
description	string		No	Defect Description	Detailed description of the defect.
comment	string		No	Additional comments about the defect.	Additional detail comments / details.

Field	Type	Format	Required	Example	Description
defectOwner	string		No	Defect Owner	Person or business unit to which defect rectification has been assigned.
assets[].assetId	string		Yes	456123	External identifier of the asset this defect relates to.
assets[].geoLocation.linearReferenceStart	string		No	Track 1001 (track name)	Linear reference identifier for asset start location.
assets[].geoLocation.linearReferenceEnd	string		No	Track 1001 (track name)	Linear reference identifier for asset end location.
assets[].geoLocation.locationStart	number	double	No	1	Location start chainage point.
assets[].geoLocation.locationEnd	number	double	No	2	Location end chainage point.
assets[].geoLocation.locationUnit	string		No	km	Unit of measure in which location values are provided (for example, "km" or "mi").
assets[].geoLocation.offsetStart	number	double	No	0	Offset value for location start point.
assets[].geoLocation.offsetEnd	number	double	No	0	Offset value for location end point.
assets[].geoLocation.offsetUnit	string		No	m	Unit of measure in which offset values are provided (for example, "m" or "ft").
assets[].geoLocation.latitudeStart	number	double	No	0	Latitude corresponding to the location start point.
assets[].geoLocation.latitudeEnd	number	double	No	0	Latitude corresponding to the location end point.
assets[].geoLocation.longitudeStart	number	double	No	0	Longitude corresponding to the location start point.
assets[].geoLocation.longitudeEnd	number	double	No	0	Longitude corresponding to the location end point.
assets[].geoLocation.coordinateXStart	number	double	No	0	X coordinate corresponding to the location start point.
assets[].geoLocation.coordinateXEnd	number	double	No	0	X coordinate corresponding to the location end point.
assets[].geoLocation.coordinateYStart	number	double	No	0	Y coordinate corresponding to the location start point.
assets[].geoLocation.coordinateYEnd	number	double	No	0	Y coordinate corresponding to the location end point.
thirdPartyId	string		No	Third Party Id	Defect source system Id.
orderId	string		No	Order Id	Unique identifier for a related work / service / maintenance order.
category	string		No	Defect Category	Defect classification.
source	string		No	Source System	Defect source system name.
typeCode	string		No	Type Code	Defect type code.
typeDescription	string		No	Type Description	Defect type name.
severityCode	string		No	Severity Code	Code indicating defect severity / urgency / response rating.

Field	Type	Format	Required	Example	Description
severityDescription	string		No	Severity Description	Descriptive name for the defect severity code.
priorityCode	string		No	Priority Code	Code indicating defect priority / urgency.
priorityDescription	string		No	Priority Description	Descriptive name for the defect priority code.
thresholdClass	string		No	Threshold Class	Parameter type against which exceedence is measured.
thresholdValue	number	double	No	10	Value of threshold parameter.
thresholdUnit	string		No	mm	Unit of measure for threshold parameter in metric or in imperial.
measuredValue	number	double	No	12.5	value of the measurement (e.g., crack depth).
railLegCode	string		No	Left	Physical track rail on which the defect is present (e.g., Left, Right).
creationDate	string	date-time	No	2024-01-01T11:24:10Z	Date the defect record was raised.
createdBy	string		No	Created By	Reference to the person, business unit or process which created the defect record.
updatedAt	string	date-time	No	2024-01-01T12:24:10Z	Date the defect record was last modified.
updatedBy	string		No	Updated By	Reference to the person, business unit or process which modified the defect record.
identifiedDate	string	date-time	Yes	2024-01-01T11:24:10Z	Date of defect discovery.
requiredDate	string	date-time	No	2024-01-15T11:24:10Z	Date of planned rectification. From order client system.
completedDate	string	date-time	No	2024-01-20T11:24:10Z	Date of defect rectification. From client order system.
isDeleted	integer	int32	No	0	Indicator that defect has been marked for soft delete.

GET **/v2/status/{id}**

Check import job status

Field	Type	Format	Required	Example	Description
id	integer	int64	Yes		The job ID returned in the `id` field of the import response you want to track.

GET **/v2/job/{id}/errors**

Get Job Errors

Field	Type	Format	Required	Example	Description
id	integer	int64	Yes		The job ID whose validation errors you want to download — the same `id` you polled for status.

POST /v2/job/{importJobType}/runbydate

Re-run imports by date range

Field	Type	Format	Required	Example	Description
importJobType	string		Yes		The kind of import to re-run (for example `Asset`, `Defect`, `Weld`) — the same job type reported by the status endpoint.
createdFrom	string	date-time	No		Start of the submission window, inclusive. Only jobs created at or after this instant are re-run.
createdTo	string	date-time	No		End of the submission window, inclusive. Must not be earlier than `createdFrom`.

POST /v2/job/{importJobType}/runbyid

Re-run imports by job ID range

Field	Type	Format	Required	Example	Description
importJobType	string		Yes		The kind of import to re-run (for example `Asset`, `Defect`, `Weld`) — the same job type reported by the status endpoint.
from	integer	int64	No		Lowest job ID to re-run, inclusive.
to	integer	int64	No		Highest job ID to re-run, inclusive. Must not be lower than `from`.

POST /v2/notifications

Create or update notifications

Field	Type	Format	Required	Example	Description
id	string		Yes	423154100	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
assetId	string		Yes	123456	External identifier of the asset this notification is raised against.
thirdPartyId	string		No	345123	Identifier of the notification in a third-party system, when applicable.
name	string		No	Name	Summary of the description of the notification.
type	string		Yes	Notification Type	Notification type code (for example the source system's notification category).
shortText	string		Yes	Short Text	Short summary text describing the notification.
longText	string		No	This is the Long Text field.	Full detailed description of the notification.
responsibleDepartment	string		No	Responsible Department	Department responsible for actioning the notification.
startDate	string	date-time	Yes	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the notification becomes effective.
endDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the notification is no longer effective.

Field	Type	Format	Required	Example	Description
status	string		Yes	Open	Notification status code (for example "Open" or "Closed").
failureModeReference	string		No	Failure Mode Reference	Reference to the failure mode associated with the notification.
desiredRepairDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp indicating the desired date for the repair to be completed.
repairAction	string		No	Repair Action	Description of the repair action required to resolve the notification.
maintWorkCentreCode	string		No	Maint Work Centre Code	Code identifying the maintenance work centre responsible for the notification.
maintWorkCentreDescription	string		No	Maint Work Centre Description	Description of the Maintenance Work Centre Code.
plannerGroupCode	string		No	Planner Group Code	Code identifying the planner group responsible for scheduling the work.
plannerGroupDescription	string		No	Planner Group Description	Description of the Planner Group.
functionalLocation	string		No	Functional Location	Functional location reference in the source system where the work applies.
orderType	string		No	PM03	Type code of the maintenance order linked to the notification.
orderCode	string		No	Order Code	Identifier of the maintenance order linked to the notification.
systemStatus	string		No	System Status	System-assigned status of the notification in the source system.
userStatus	string		No	User Status	User-assigned status of the notification in the source system.
createdDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the notification was created in the source system.
createdBy	string		No	Created By	Source system or user that created the notification record.
requiredEndDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp by which the work must be completed.
priorityCode	string		No	Priority Code	Code identifying the priority of the notification.
priorityDescription	string		No	Priority Description	Description of the Priority Code.
classificationCode	string		No	Classification Code	Code identifying the classification of the notification.
classificationDescription	string		No	Classification Description	Description of the Classification.
updatedDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the notification was last updated in the source system.
geolocation.linearReferenceStart	string		No	Track 1001 (track name)	Linear reference identifier for asset start location.
geolocation.linearReferenceEnd	string		No	Track 1001 (track name)	Linear reference identifier for asset end location.
geolocation.locationStart	number	double	No	1	Location start chainage point.
geolocation.locationEnd	number	double	No	2	Location end chainage point.
geolocation.locationUnit	string		No	km	Unit of measure in which location values are provided (for example, "km" or "mi").
geolocation.offsetStart	number	double	No	0	Offset value for location start point.

Field	Type	Format	Required	Example	Description
geolocation.offsetEnd	number	double	No	0	Offset value for location end point.
geolocation.offsetUnit	string		No	m	Unit of measure in which offset values are provided (for example, "m" or "ft").
geolocation.latitudeStart	number	double	No	0	Latitude corresponding to the location start point.
geolocation.latitudeEnd	number	double	No	0	Latitude corresponding to the location end point.
geolocation.longitudeStart	number	double	No	0	Longitude corresponding to the location start point.
geolocation.longitudeEnd	number	double	No	0	Longitude corresponding to the location end point.
geolocation.coordinateXStart	number	double	No	0	X coordinate corresponding to the location start point.
geolocation.coordinateXEnd	number	double	No	0	X coordinate corresponding to the location end point.
geolocation.coordinateYStart	number	double	No	0	Y coordinate corresponding to the location start point.
geolocation.coordinateYEnd	number	double	No	0	Y coordinate corresponding to the location end point.
isDeleted	boolean		No	false	Whether this notification has been marked as deleted in the source system.

POST /v2/overheadLines

Import overhead line readings

Field	Type	Format	Required	Example	Description
rightHeight	number	double	No	5	Height of the contact wire when a single wire is used, in metres or feet.
rightThickness	number	double	No	12.5	Remaining thickness of the contact wire when a single wire is used, in millimetres or in inches.
rightStagger	number	double	No	200	Lateral stagger of the contact wire when a single wire is used, in millimetres or in inches.
leftHeight	number	double	No	5	Height of the contact wire when a second wire is used, in metres or feet.
leftThickness	number	double	No	12.5	Remaining thickness of the contact wire when a second wire is used, in millimetres or in inches.
leftStagger	number	double	No	200	Lateral stagger of the contact wire when a second wire is used, in millimetres or in inches.
voltage	number	double	No	0.15	Measured overhead line voltage at the measurement location, in volts.
force	number	double	No	50	Measured contact force between the pantograph and contact wire at the measurement location, in newtons.
dateTime	string	date-time	Yes	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the measurement was taken.
measurementRunId	string		Yes	2024_10	Identifier of the measurement run that produced this reading.
networkId	string		Yes	Network-External-Id	The external ID of the Network that the Track Code belongs to.
track	string		Yes	Track 1001 (track name)	Track code used to geolocate the overhead line via linear referencing (LRS).
chainage	number	double	Yes	1.26	Chainage (linear measure) along the track where the reading was taken.

POST /v2/railfeatures

Import rail features

Field	Type	Format	Required	Example	Description
id	string		Yes	External-Id	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
name	string		No	Rail Feature Name	Short name or description of rail.
description	string		No	Rail Feature Description	Extended rail description.
comment	string		No	Comment	Free text comment field.
status	string		No	Open	Open/Closed/Invalid.
externalKey	string		No	External Key	Record id or reference in source system.
manufacturer	string		No	Manufacturer	Rail manufacturer name.
railType	string		No	60E1 400H	Rail type and steel grade.
condition	string		No	New	Condition of rail at installation.
railLeg	string		No	Left	Leg of the track on which the rail is installed.
railSizeValue	number	double	No	60	Weight of the installed rail (for example 60 or 132).
railSizeUnit	string		No	kg/m	Unit of measure for rail (for example "kg/m" or "lb/yd").
railHeightValue	number	double	No	172	Height of the installed rail.
railHeightUnit	string		No	mm	Unit of measure for rail height (for example "mm" or "in").
railSection	string		No	60E1	Rail section industry code (for example "60E1" or "60E3").
rollingStamp	string		No	2024	Date stamp indicating date rail steel was rolled.
installationDate	string	date-time	No	2024-01-01T11:24:10Z	Date rail installed.
removalDate	string	date-time	No	2024-06-01T11:24:10Z	Date rail removed.
updatedAt	string	date-time	No	2024-06-01T12:24:10Z	Date record last updated.
updatedBy	string		No	System	Last updated by.
assets[].assetId	string		Yes	456123	External identifier of the asset this rail feature relates to.
assets[].geoLocation.linearReferenceStart	string		No	Track 1001 (track name)	Linear reference identifier for asset start location.
assets[].geoLocation.linearReferenceEnd	string		No	Track 1001 (track name)	Linear reference identifier for asset end location.
assets[].geoLocation.locationStart	number	double	No	1	Location start chainage point.

Field	Type	Format	Required	Example	Description
assets[].geoLocation.locationEnd	number	double	No	2	Location end chainage point.
assets[].geoLocation.locationUnit	string		No	km	Unit of measure in which location values are provided (for example, "km" or "mi").
assets[].geoLocation.offsetStart	number	double	No	0	Offset value for location start point.
assets[].geoLocation.offsetEnd	number	double	No	0	Offset value for location end point.
assets[].geoLocation.offsetUnit	string		No	m	Unit of measure in which offset values are provided (for example, "m" or "ft").
assets[].geoLocation.latitudeStart	number	double	No	0	Latitude corresponding to the location start point.
assets[].geoLocation.latitudeEnd	number	double	No	0	Latitude corresponding to the location end point.
assets[].geoLocation.longitudeStart	number	double	No	0	Longitude corresponding to the location start point.
assets[].geoLocation.longitudeEnd	number	double	No	0	Longitude corresponding to the location end point.
assets[].geoLocation.coordinateXStart	number	double	No	0	X coordinate corresponding to the location start point.
assets[].geoLocation.coordinateXEnd	number	double	No	0	X coordinate corresponding to the location end point.
assets[].geoLocation.coordinateYStart	number	double	No	0	Y coordinate corresponding to the location start point.
assets[].geoLocation.coordinateYEnd	number	double	No	0	Y coordinate corresponding to the location end point.
isDeleted	integer	int32	No	0	Indicator that rail feature has been marked for soft delete.

POST /v2/rootCauseAnalysis

Import root cause analyses

Field	Type	Format	Required	Example	Description
id	string		Yes	External-Id	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
assetId	string		Yes	456123	External identifier of the asset this root cause analysis relates to.
severity	number	double	Yes	2.5	Severity of the problem as a continuous value depending on your internal matrix.
problemType	string		Yes	Excessive wear	Category of the identified problem.
rootCause	string		No	Alignment	Identified underlying cause of the problem.
solution	string		No	Tamping	Recommended solution to address the problem.
problemLocation.locationStart	number	double	Yes	1.26	Starting chainage of the identified problem; cannot be greater than LocationEnd and may be negative.

Field	Type	Format	Required	Example	Description
problemLocation.locationEnd	number	double	Yes	3.75	Ending chainage of the identified problem; cannot be lower than LocationStart and may be negative.
problemLength.value	number	double	Yes	2.49	How far the problem spans along the track, in the accompanying unit of measure. The length should match the difference between LocationEnd and LocationStart.
problemLength.unit	string		Yes	m	Unit of measure for the length value (for example "m" or "ft").
createdDate	string	date-time	Yes	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the root cause analysis record was created in the source system.

POST /v2/serviceorders

Import service orders

Field	Type	Format	Required	Example	Description
id	string		Yes	525387954	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
assetId	string		Yes	456123	External identifier of the asset this service order applies to.
thirdPartyId	string		No	1345894	Identifier of the third party associated with the service order.
shortText	string		Yes	Short Text	Short summary text describing the service order.
actionName	string		Yes	Action Name	Description of the action code.
operationalStatus	string		Yes	Operational Status	Operational status code of the service order.
type	string		No	Preventive	Service order type code (for example "Preventive" or "Condition").
responsibleDepartment	string		No	Responsible Department	Department responsible for carrying out the service order.
actionCode	string		No	Action Code	Code identifying the action to be performed.
actionUnit	string		No	Action Unit	Unit of measure associated with the action.
plannedStartDate	string	date-time	Yes	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the work is planned to start.
plannedEndDate	string	date-time	No	2024-01-05T11:24:10Z	ISO-8601 UTC timestamp when the work is planned to finish.
recommendedStartDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp of the recommended start date.
recommendedEndDate	string	date-time	No	2024-01-05T11:24:10Z	ISO-8601 UTC timestamp of the recommended end date.
executionStartDate	string	date-time	No	2024-01-02T11:24:10Z	ISO-8601 UTC timestamp when execution of the work actually started.
executionEndDate	string	date-time	No	2024-01-04T11:24:10Z	ISO-8601 UTC timestamp when execution of the work actually finished.
noteRealisation	string		No	Note Realisation	Free-text note describing the realisation of the work.
amountUnitsPlanned	number	float	No	10	Number of units planned to be performed.

Field	Type	Format	Required	Example	Description
amountUnitsPerformed	number	float	No	8	Number of units actually performed.
systemStatus	string		No	System Status	System status of the service order in the source system.
userStatus	string		No	User Status	User-defined status of the service order in the source system.
poScheduleReferenceId	string		No	PO-Schedule-Reference-Id	Reference identifier of the related purchase-order schedule.
revision	string		No	Revision	Revision identifier of the service order.
revisionDescription	string		No	Revision Description	Description of the revision.
priorityCode	string		No	Priority Code	Priority code of the service order.
workCenter	string		No	Work Center	Work center responsible for the service order.
plannerGroup	string		No	Planner Group	Planner group associated with the service order.
createdBy	string		No	Created By	Source system or user that created the service order record.
createdDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the service order was created in the source system.
updatedBy	string		No	Updated By	Source system or user that last updated the service order record.
updatedDate	string	date-time	No	2024-01-01T12:24:10Z	ISO-8601 UTC timestamp when the service order was last updated in the source system.
estimatedCost	number	float	No	1000	Estimated cost of the service order.
plannedCost	number	float	No	1200	Planned cost of the service order.
actualCost	number	float	No	1150	Actual cost incurred for the service order.
functionalLocation	string		No	Functional Location	Functional location associated with the service order.
notificationNumber	string		No	Notification Number	Reference number of the related notification.
requiredDate	string	date-time	No	2024-01-05T11:24:10Z	ISO-8601 UTC timestamp by which the service order is required to be completed.
isDeleted	boolean		No	false	Whether this service order has been marked as deleted in the source system.
geolocation.linearReferenceStart	string		No	Track 1001 (track name)	Linear reference identifier for asset start location.
geolocation.linearReferenceEnd	string		No	Track 1001 (track name)	Linear reference identifier for asset end location.
geolocation.locationStart	number	double	No	1	Location start chainage point.
geolocation.locationEnd	number	double	No	2	Location end chainage point.
geolocation.locationUnit	string		No	km	Unit of measure in which location values are provided (for example, "km" or "mi").
geolocation.offsetStart	number	double	No	0	Offset value for location start point.
geolocation.offsetEnd	number	double	No	0	Offset value for location end point.

Field	Type	Format	Required	Example	Description
geolocation.offsetUnit	string		No	m	Unit of measure in which offset values are provided (for example, "m" or "ft").
geolocation.latitudeStart	number	double	No	0	Latitude corresponding to the location start point.
geolocation.latitudeEnd	number	double	No	0	Latitude corresponding to the location end point.
geolocation.longitudeStart	number	double	No	0	Longitude corresponding to the location start point.
geolocation.longitudeEnd	number	double	No	0	Longitude corresponding to the location end point.
geolocation.coordinateXStart	number	double	No	0	X coordinate corresponding to the location start point.
geolocation.coordinateXEnd	number	double	No	0	X coordinate corresponding to the location end point.
geolocation.coordinateYStart	number	double	No	0	Y coordinate corresponding to the location start point.
geolocation.coordinateYEnd	number	double	No	0	Y coordinate corresponding to the location end point.
status	string		Yes	Active	Service order status. Normalised to title case on import.

POST /v2/switchconditions

Import switch conditions

Field	Type	Format	Required	Example	Description
id	string		Yes	External-Id	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
assetId	string		Yes	456123	External identifier of the asset (switch) this condition applies to.
imposedDate	string	date-time	No	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the switch condition was imposed.
imposedBy	string		No	System	Source system or user that imposed the switch condition.
liftedDate	string	date-time	No	2024-02-01T11:24:10Z	Will be Null for current Switch Conditions.
liftedBy	string		No	System	Source system or user that lifted the switch condition.
conditionTypeCode	string		No	CI	Code identifying the type of switch condition (for example "CI" or "Av").
conditionTypeName	string		No	Clamped	Switch availability (for example "Clamped" or "Available").
directionCode	string		No	Both	Code identifying the direction the condition applies to (for example "Both", "R" or "N").
directionName	string		No	Direction Name	Reverse(R), Normal(N).
positionCode	string		No	Position Code	Code identifying the switch position the condition applies to. Clamped in R or N position.
positionName	string		No	Position Name	Name of the switch position.
trainTypeCode	string		No	Train Type Code	Code identifying the train type the condition applies to.
trainTypeName	string		No	Train Type Name	Name of the train type.

Field	Type	Format	Required	Example	Description
operationsComment	string		No	Operations Comment	Free-text comment from operations relating to the condition.
inspectionComment	string		No	Inspection Comment	Free-text comment from inspection relating to the condition.
groupCauseCode	string		No	Group Cause Code	Code identifying the group cause of the condition.
groupCauseName	string		No	Group Cause Name	Name of the group cause.
causeCode	string		No	Cause Code	Code identifying the specific cause of the condition.
causeName	string		No	Cause Name	Name of the cause.
orderId	string		No	Order Id	External identifier of the related work order.
updatedAt	string	date-time	No	2024-02-01T12:24:10Z	ISO-8601 UTC timestamp when the switch condition was last updated in the source system.
updatedBy	string		No	System	Source system or user that last updated the switch condition record.
isDeleted	integer	int32	No	0	Indicator that switch condition has been marked for soft delete.

POST

/v2/temporariespeedrestrictions

Import temporary speed restrictions

Field	Type	Format	Required	Example	Description
id	string		Yes	TSR-External-Id	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
restrictionTypeCode	string		No	TR	TR (Track) /SW (Switch).
imposedDate	string	date-time	No	2024-01-01T11:24:10Z	Date restriction was imposed.
imposedBy	string		No	System	User who imposed the restriction.
liftedDate	string	date-time	No	2024-02-01T11:24:10Z	Date restriction was lifted.
liftedBy	string		No	System	User who lifted the restriction.
normalSpeed	integer	int32	No	100	Normal unrestricted maximum operating speed.
restrictedSpeed	integer	int32	No	40	Maximum operating speed under the restriction.
directionCode	string		No	B	Code designating direction(s) in which restriction applies.
directionName	string		No	Both Directions	Short description of the direction.
switchPositionCode	string		No	N	Code designating the switch position.
switchPositionName	string		No	Normal	Short description of the switch position.
protectionCode	string		No	P	Code designating type of protections in place for restriction.
protectionName	string		No	Protection Name	Short description of the protections in place.

Field	Type	Format	Required	Example	Description
protectionLocationCode	string		No	F	Code designating direction in which protections are facing.
protectionLocationName	string		No	Facing	Short description of the protection locations.
trainTypeCode	string		No	L	Code designating the train loading status in respect of the restriction.
trainTypeName	string		No	Loaded	Short description of the train loading status.
inspectionComment	string		No	Inspection Comment	Track inspection comments.
operationsComment	string		No	Operations Comment	Train operations comments.
notificationId	string		No	Notification-Id	Reference to a notification or other document triggering the restriction.
orderId	string		No	Order-Id	Reference to a work / maintenance / service order assigned to cause remediation.
plannedDate	string	date-time	No	2024-03-01T11:24:10Z	Date that restriction is expected to be lifted.
groupCauseCode	string		No	GC01	Code designating a cause group to which the restriction applies.
groupCauseName	string		No	Group Cause Name	Short name for the cause group.
causeCode	string		No	C01	Code designating a cause to which the restriction applies.
causeName	string		No	Cause Name	Short name for the cause.
updatedAt	string	date-time	No	2024-01-15T11:24:10Z	Date last reviewed / updated.
updatedBy	string		No	System	Last reviewed / updated by.
impactUnit	string		No	min	Unit of the operational impact caused by the speed restriction.
impactValue	number	double	No	2	Magnitude of the operational impact caused by the speed restriction, expressed in impactUnit.
effectiveLength	number	double	No	250	Actual length of track impacted by TSR in meters or feet (not calculated value).
gauge	string		No	Standard	Useful where multi-gauge tracks are involved, e.g. Narrow, Standard, Both etc.
operationsType	string		No	Passenger	What type of train is restriction applicable to e.g. Passenger, Freight, Grain, Heavy Haul, Iron Ore.
restrictionOwner	string		No	Work Centre Code	Code designating the person, team or work centre responsible for the restriction.
isDeleted	integer	int32	No	0	Indicator that the speed restriction has been marked for soft delete.
speedRestrictedAsset[].restrictionId	string		Yes	TSR-External-Id	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports. It is the same as the Id field.
speedRestrictedAsset[].assetId	string		Yes	456123	Track or switch asset Id.
speedRestrictedAsset[].geolocation.linearReferenceStart	string		No	Track 1001 (track name)	Linear reference identifier for asset start location.
speedRestrictedAsset[].geolocation.linearReferenceEnd	string		No	Track 1001 (track name)	Linear reference identifier for asset end location.

Field	Type	Format	Required	Example	Description
speedRestrictedAsset[].geolocation.locationStart	number	double	No	1	Location start chainage point.
speedRestrictedAsset[].geolocation.locationEnd	number	double	No	2	Location end chainage point.
speedRestrictedAsset[].geolocation.locationUnit	string		No	km	Unit of measure in which location values are provided (for example, "km" or "mi").
speedRestrictedAsset[].geolocation.offsetStart	number	double	No	0	Offset value for location start point.
speedRestrictedAsset[].geolocation.offsetEnd	number	double	No	0	Offset value for location end point.
speedRestrictedAsset[].geolocation.offsetUnit	string		No	m	Unit of measure in which offset values are provided (for example, "m" or "ft").
speedRestrictedAsset[].geolocation.latitudeStart	number	double	No	0	Latitude corresponding to the location start point.
speedRestrictedAsset[].geolocation.latitudeEnd	number	double	No	0	Latitude corresponding to the location end point.
speedRestrictedAsset[].geolocation.longitudeStart	number	double	No	0	Longitude corresponding to the location start point.
speedRestrictedAsset[].geolocation.longitudeEnd	number	double	No	0	Longitude corresponding to the location end point.
speedRestrictedAsset[].geolocation.coordinateXStart	number	double	No	0	X coordinate corresponding to the location start point.
speedRestrictedAsset[].geolocation.coordinateXEnd	number	double	No	0	X coordinate corresponding to the location end point.
speedRestrictedAsset[].geolocation.coordinateYStart	number	double	No	0	Y coordinate corresponding to the location start point.
speedRestrictedAsset[].geolocation.coordinateYEnd	number	double	No	0	Y coordinate corresponding to the location end point.

POST /v2/trackmeasurements

Import track measurement readings

Field	Type	Format	Required	Example	Description
runId	string		Yes	b95e152d-3df2-4ec8-9068-07ab58424852	Identifier of the measurement run this record belongs to. Groups all records imported together.
recordDate	string	date-time	Yes	2024-01-01T11:24:10Z	ISO-8601 UTC timestamp when the measurement was recorded in the field.

Field	Type	Format	Required	Example	Description
source	string		No	Measurement Vehicle	Source system or measurement vehicle that produced this record.
trackCode	string		Yes	track 1001	Identifier of the track the measurement was taken on.
location	number	double	No	1.26	Chainage position along the track where the measurement was taken. (km or Mi).
speed	number	double	No	80	Vehicle speed at the point of measurement.
latitude	number	double	No	0	Latitude of the measurement point.
longitude	number	double	No	0	Longitude of the measurement point.
accuracy	number	double	No	0.05	Positional accuracy of the recorded coordinates.
leftMatchIndex	number	double	No	0	Match index used to align the left rail measurement to the reference profile.
rightMatchIndex	number	double	No	0	Match index used to align the right rail measurement to the reference profile.
leftHorWear	number	double	No	0.5	Horizontal (side) wear measured on the left rail.
rightHorWear	number	double	No	0.5	Horizontal (side) wear measured on the right rail.
leftRailIncline	number	double	No	0	Rail cant (incline) measured on the left rail.
rightRailIncline	number	double	No	0	Rail cant (incline) measured on the right rail.
leftHeadLoss	number	double	No	0	Rail head loss on the left rail, relative.
rightHeadLoss	number	double	No	0	Rail head loss on the right rail, relative.
leftHeadLossAbs	number	double	No	0	Absolute rail head loss on the left rail.
rightHeadLossAbs	number	double	No	0	Absolute rail head loss on the right rail.
leftVertWear	number	double	No	0.3	Vertical (top) wear measured on the left rail.
rightVertWear	number	double	No	0.3	Vertical (top) wear measured on the right rail.
left0DevRailPro	number	double	No	0	Left rail profile deviation at the 0 degree reference angle.
right0DevRailPro	number	double	No	0	Right rail profile deviation at the 0 degree reference angle.
leftNeg05DevRailPro	number	double	No	0	Left rail profile deviation at GaugeSideAngle01.
rightNeg05DevRailPro	number	double	No	0	Right rail profile deviation at GaugeSideAngle01.
leftNeg10DevRailPro	number	double	No	0	Left rail profile deviation at GaugeSideAngle02.
rightNeg10DevRailPro	number	double	No	0	Right rail profile deviation at GaugeSideAngle02.
leftNeg15DevRailPro	number	double	No	0	Left rail profile deviation at GaugeSideAngle03.
rightNeg15DevRailPro	number	double	No	0	Right rail profile deviation at GaugeSideAngle03.
leftNeg20DevRailPro	number	double	No	0	Left rail profile deviation at GaugeSideAngle04.

Field	Type	Format	Required	Example	Description
rightNeg20DevRailPro	number	double	No	0	Right rail profile deviation at GaugeSideAngle04.
leftNeg30DevRailPro	number	double	No	0	Left rail profile deviation at GaugeSideAngle05.
rightNeg30DevRailPro	number	double	No	0	Right rail profile deviation at GaugeSideAngle05.
leftNeg40DevRailPro	number	double	No	0	Left rail profile deviation at GaugeSideAngle06.
rightNeg40DevRailPro	number	double	No	0	Right rail profile deviation at GaugeSideAngle06.
leftNeg50DevRailPro	number	double	No	0	Left rail profile deviation at GaugeSideAngle07.
rightNeg50DevRailPro	number	double	No	0	Right rail profile deviation at GaugeSideAngle07.
leftNeg55DevRailPro	number	double	No	0	Left rail profile deviation at GaugeSideAngle08.
rightNeg55DevRailPro	number	double	No	0	Right rail profile deviation at GaugeSideAngle08.
leftPos10DevRailPro	number	double	No	0	Left rail profile deviation at FieldSideAngle02.
rightPos10DevRailPro	number	double	No	0	Right rail profile deviation at FieldSideAngle02.
leftPos15DevRailPro	number	double	No	0	Left rail profile deviation at FieldSideAngle03.
rightPos15DevRailPro	number	double	No	0	Right rail profile deviation at FieldSideAngle03.
leftPos05DevRailPro	number	double	No	0	Left rail profile deviation at FieldSideAngle01.
rightPos05DevRailPro	number	double	No	0	Right rail profile deviation at FieldSideAngle01.
crossLevel	number	double	No	0	Cross level (height difference between the two rails).
curvature	number	double	No	0	Track curvature at the measurement point.
cyclicTwistD0	number	double	No	0	Cyclic twist over the wavelength 1m<; ² &CVÒ f'2Ã&gB Ò bÃFgB'à
cyclicTwistD1	number	double	No	0	Cyclic twist over the wavelength band 3m<; ² &C#VÒ f'ÃfFgB Ò f&gB'à
cyclicTwistD1a	number	double	No	0	Cyclic twist over the wavelength band 3m<; ² &C#VÒ f'ÃfFgB Ò f&gB'à
cyclicTwistD2	number	double	No	0	Cyclic twist over the wavelength band 25m<; ² &Cs Ò f f&gB Ò ##'ÃvgB'à
leftCyclicLineD1	number	double	No	0	Left rail cyclic horizontal alignment over the wavelength band 3m<; ² &C#VÒ f'ÃfFgB Ò f&gB'à
rightCyclicLineD1	number	double	No	0	Right rail cyclic horizontal alignment over the wavelength band 3m<; ² &C#VÒ f'ÃfFgB Ò f&gB'à
leftCyclicTopD1	number	double	No	0	Left rail cyclic vertical alignment over the wavelength band 3m<; ² &C#VÒ f'ÃfFgB Ò f&gB'à
rightCyclicTopD1	number	double	No	0	Right rail cyclic vertical alignment over the wavelength band 3m<; ² &C#VÒ f'ÃfFgB Ò f&gB'à
leftLineD1	number	double	No	0	Left rail horizontal alignment over the wavelength band 3m<; ² &C#VÒ f'ÃfFgB Ò f&gB'à
rightLineD1	number	double	No	0	Right rail horizontal alignment over the wavelength band 3m<; ² &C#VÒ f'ÃfFgB Ò f&gB'à
leftLineD1a	number	double	No	0	Left rail horizontal alignment over the wavelength band 3m<; ² &C#VÒ f'ÃfFgB Ò f&gB'à

Field	Type	Format	Required	Example	Description
rightLineD1a	number	double	No	0	Right rail horizontal alignment over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
leftLineD0	number	double	No	0	Left rail horizontal alignment over the wavelength 1m<; ² &CV0 f2Ä&gB Ò bÄFgB'à
rightLineD0	number	double	No	0	Right rail horizontal alignment over the wavelength 1m<; ² &CV0 f2Ä&gB Ò bÄFgB'à
leftLineD1b	number	double	No	0	Left rail horizontal alignment over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
rightLineD1b	number	double	No	0	Right rail horizontal alignment over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
leftLineD2	number	double	No	0	Left rail horizontal alignment over the wavelength band 25m<; ² &Cs Ò ff&gB Ò ##'ÄvgB'à
rightLineD2	number	double	No	0	Right rail horizontal alignment over the wavelength band 25m<; ² &Cs Ò ff&gB Ò ##'ÄvgB'à
leftTopD1	number	double	No	0	Left rail vertical alignment over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
rightTopD1	number	double	No	0	Right rail vertical alignment over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
leftTopD1a	number	double	No	0	Left rail vertical alignment over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
rightTopD1a	number	double	No	0	Right rail vertical alignment over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
leftTopD0	number	double	No	0	Left rail vertical alignment over the wavelength 1m<; ² &CV0 f2Ä&gB Ò bÄFgB'à
rightTopD0	number	double	No	0	Right rail vertical alignment over the wavelength 1m<; ² &CV0 f2Ä&gB Ò bÄFgB'à
leftTopD0a	number	double	No	0	Left rail vertical alignment over the wavelength 1m<; ² &CV0 f2Ä&gB Ò bÄFgB'à
rightTopD0a	number	double	No	0	Right rail vertical alignment over the wavelength 1m<; ² &CV0 f2Ä&gB Ò bÄFgB'à
leftTopD1b	number	double	No	0	Left rail vertical alignment over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
rightTopD1b	number	double	No	0	Right rail vertical alignment over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
leftTopD2	number	double	No	0	Left rail vertical alignment over the wavelength band 25m<; ² &Cs Ò ff&gB Ò ##'ÄvgB'à
rightTopD2	number	double	No	0	Right rail vertical alignment over the wavelength band 25m<; ² &Cs Ò ff&gB Ò ##'ÄvgB'à
gauge	number	double	No	1435	Track gauge (distance between the running edges of the two rails).
superElevation	number	double	No	0	Super-elevation (cant) of the track.
twistD0	number	double	No	0	Track twist over the wavelength 1m<; ² &CV0 f2Ä&gB Ò bÄFgB'à
twistD1	number	double	No	0	Track twist over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
twistD1a	number	double	No	0	Track twist over the wavelength band 3m<; ² &C#V0 f'ÄfFgB Ò f&gB'à
rightTRPQI	number	double	No	0	Right rail top profile quality index (TRPQI).
leftTRPQI	number	double	No	0	Left rail top profile quality index (TRPQI).
leftPQI	number	double	No	0	Left rail profile quality index (PQI).
rightPQI	number	double	No	0	Right rail profile quality index (PQI).

Field	Type	Format	Required	Example	Description
leftFPQI	number	double	No	0	Left rail field side profile quality index (FPQI).
rightFPQI	number	double	No	0	Right rail field side profile quality index (FPQI).
leftGPQI	number	double	No	0	Left rail gauge side profile quality index (GPQI).
rightGPQI	number	double	No	0	Right rail gauge side profile quality index (GPQI).
trackTQIA	number	double	No	0	Track quality index A.
trackTQIB	number	double	No	0	Track quality index B.
trackTQIC	number	double	No	0	Track quality index C.
trackTopD0	number	double	No	0	Track vertical alignment over the wavelength 1m<²&CVÒ f2Ã&gB Ò bÃFgB'à
trackTopD1	number	double	No	0	Track vertical alignment over the wavelength band 3m<²&C#VÒ f'ÃfFgB Ò f&gB'à
trackTopD1a	number	double	No	0	Track vertical alignment over the wavelength band 3m<²&C#VÒ f'ÃfFgB Ò f&gB'à
trackLineD0	number	double	No	0	Track horizontal alignment over the wavelength 1m<²&CVÒ f2Ã&gB Ò bÃFgB'à
trackLineD1	number	double	No	0	Track horizontal alignment over the wavelength band 3m<²&C#VÒ f'ÃfFgB Ò f&gB'à
gaugeAv	number	double	No	1435	Track average gauge value over wavelength band.
gaugeVar	number	double	No	0	Track gauge variation (standard deviation) over wavelength band.
exportedDate	string	date-time	Yes	2024-01-01T12:24:10Z	ISO-8601 UTC timestamp when this measurement was exported from the source system.

DELETE

lv2/trackmeasurements

Delete track measurement readings

Field	Type	Format	Required	Example	Description
runId	string		Yes	2024_10	Identifier of the measurement run whose records should be deleted.
exportedDate	string	date-time	Yes	2024-01-01T12:24:10Z	Exported date of the records to delete. Used together with the run identifier to target the correct import.
trackCode	string		No	track 1001	Track code to scope the deletion to. Leave empty to delete records for every track in the run.

POST

lv2/trackmeasurements/finalized

Finalise a measurement run

Field	Type	Format	Required	Example	Description
runId	string		Yes	2024_10	Identifier of the measurement run to finalize. Must match the runId used when importing the records.
trackCode	string		No	track 1001	Track code to scope the finalization to. Leave empty to finalize every track in the run.

Field	Type	Format	Required	Example	Description
requestDateTime	string	date-time	No	2024-01-01T12:24:10Z	UTC timestamp when the finalization request was created.

GET **/v2/trackmeasurements/finalized**

List finalised runs

No request parameters or body.

GET **/v2/trackmeasurements/auditTrail**

Get measurement import audit trail

No request parameters or body.

POST **/v2/trackusages**

Import track usage

Field	Type	Format	Required	Example	Description
id	string		Yes	7d09ff32-70ed-4c0a-aa6c-4a2e1803ff44	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
assetId	string		Yes	456123	Id of the asset to which the track usage relates.
movementDateTime	string	date-time	Yes	2024-01-01T11:24:10Z	Movement Datestamp.
usageType	string		Yes	Usage Type	Type of Usage.
switchPosition	string		No	Switch Position	Position of Switch.
switchDirection	string		No	Switch Direction	Direction of Switch.
trainTypeCode	string		No	Train Type Code	Train Type Code.
trainTypeName	string		No	Train Type Name	Train Type Name.
tonnageValue	number	double	No	2	Tonnage Value - Defaults to zero if not supplied.
tonnageUnit	string		No	MGT	Description of tonnage measurement type, e.g. million gross tons, kilotonnes, tonnes, tons, pounds etc.
axleLoadTrain	number	double	No	20	Average axle load per train.
axleLoad	number	double	No	5	Predefined expected axle load per Axle.
trainDirectionTrack	string		No	Up	Up/Down - Up from low km to high km.
trainAxlesTrack	integer	int32	No	40	Amount of Axles.
switchAxles	integer	int32	No	40	Total Axles passed the switch.
isDeleted	integer	int32	No	0	Indicator that track usage has been marked for soft delete.

Field	Type	Format	Required	Example	Description
metadata	object		No		Additional information about the track usage in a structured format.
geoLocation.linearReferenceStart	string		No	Track 1001 (track name)	Linear reference identifier for asset start location.
geoLocation.linearReferenceEnd	string		No	Track 1001 (track name)	Linear reference identifier for asset end location.
geoLocation.locationStart	number	double	No	1	Location start chainage point.
geoLocation.locationEnd	number	double	No	2	Location end chainage point.
geoLocation.locationUnit	string		No	km	Unit of measure in which location values are provided (for example, "km" or "mi").
geoLocation.offsetStart	number	double	No	0	Offset value for location start point.
geoLocation.offsetEnd	number	double	No	0	Offset value for location end point.
geoLocation.offsetUnit	string		No	m	Unit of measure in which offset values are provided (for example, "m" or "ft").
geoLocation.latitudeStart	number	double	No	0	Latitude corresponding to the location start point.
geoLocation.latitudeEnd	number	double	No	0	Latitude corresponding to the location end point.
geoLocation.longitudeStart	number	double	No	0	Longitude corresponding to the location start point.
geoLocation.longitudeEnd	number	double	No	0	Longitude corresponding to the location end point.
geoLocation.coordinateXStart	number	double	No	0	X coordinate corresponding to the location start point.
geoLocation.coordinateXEnd	number	double	No	0	X coordinate corresponding to the location end point.
geoLocation.coordinateYStart	number	double	No	0	Y coordinate corresponding to the location start point.
geoLocation.coordinateYEnd	number	double	No	0	Y coordinate corresponding to the location end point.

POST /v2/welds

Import welds

Field	Type	Format	Required	Example	Description
id	string		Yes	7d09ff32-70ed-4c0a-aa6c-4a2e1803ff44	Your external identifier for the record. Used as the upsert (to update record) key, so keep it stable and unique across imports.
name	string		No	Weld Name	Short name or description of Weld.
description	string		No	Weld Description	Extended Weld description.
comment	string		No	Comment	Free text comment field.
externalKey	string		No	External-Key	Record id or reference in source system.
weldBatch	string		No	Weld Batch	Batch Id of weld.
weldType	string		No	AT	Type of weld.

Field	Type	Format	Required	Example	Description
isClosureWeld	boolean		No	false	Is a closure or stress weld?
isOffTrackWeld	boolean		No	false	true if the weld is made in the field.
isBowWeld	boolean		No	false	Is a bow weld?
weldProfile	string		No	Weld Profile	Rail profile to be achieved.
jointGapValue	number	double	No	24	Joint gap.
jointGapUnit	string		No	mm	Unit of measure used for joint gap (for example "mm" or "in").
tappingTimeValue	number	double	No	2	Tapping time.
tappingTimeUnit	string		No	min	Unit of time in which tapping is conducted.
preheatTimeValue	number	double	No	3	Time taken (in minutes) to preheat the rail (used with AT welds only).
preheatTimeUnit	string		No	min	Unit of time in which preheating is conducted.
railTempValue	number	double	No	25	Temperature of rail at time of installation.
railTempUnit	string		No	C	Unit of measure in which rail temperature is recorded.
railHeightUpValue	number	double	No	150	Measured rail height for rail heading toward 0 km point.
railHeightUpUnit	string		No	mm	Unit of measure used for rail height for rail heading toward 0 km point (for example "mm" or "in").
railHeightDownValue	number	double	No	150	Measured rail height for rail heading away from 0 km point.
railHeightDownUnit	string		No	mm	Unit of measure used for rail height for rail heading away from 0 km point (for example "mm" or "in").
railLeg	string		No	Left	Leg of rail in which the weld was inserted.
conditionType	string		No	Condition Type	Weld condition type.
testDate	string	date-time	No	2024-01-01T11:24:10Z	Date of ultrasonic test.
testResult	string		No	Pass	Result of ultrasonic test.
welderId	string		No	WLD-01	Id or initials of the welder who installed the weld.
operatorId	string		No	OP-01	Id or initials of the operator of the welding machine.
companyName	string		No	Company Name	Company who installed the weld (e.g. vendor name).
railUpId	string		No	Rail-Up-Id	Rail string Id for rail heading to 0 km point.
railUpType	string		No	Rail Up Type	Rail string type for rail heading to 0 km point.
railDownId	string		No	Rail-Down-Id	Rail string Id for rail heading away from 0 km point.
railDownType	string		No	Rail Down Type	Rail string type for rail heading away from 0 km point.

Field	Type	Format	Required	Example	Description
installationDate	string	date-time	No	2024-01-01T11:24:10Z	Date Weld installed.
requiredRemovalDate	string	date-time	No	2024-06-01T11:24:10Z	Required Removal Date.
removalDate	string	date-time	No	2024-07-01T11:24:10Z	Actual Removal Date.
updatedAt	string	date-time	No	2024-01-01T12:24:10Z	Date record last updated.
updatedBy	string		No	System	Last updated by.
assets[].assetId	string		Yes	456123	External identifier of the asset this weld relates to.
assets[].geoLocation.linearReferenceStart	string		No	Track 1001 (track name)	Linear reference identifier for asset start location.
assets[].geoLocation.linearReferenceEnd	string		No	Track 1001 (track name)	Linear reference identifier for asset end location.
assets[].geoLocation.locationStart	number	double	No	1	Location start chainage point.
assets[].geoLocation.locationEnd	number	double	No	2	Location end chainage point.
assets[].geoLocation.locationUnit	string		No	km	Unit of measure in which location values are provided (for example, "km" or "mi").
assets[].geoLocation.offsetStart	number	double	No	0	Offset value for location start point.
assets[].geoLocation.offsetEnd	number	double	No	0	Offset value for location end point.
assets[].geoLocation.offsetUnit	string		No	m	Unit of measure in which offset values are provided (for example, "m" or "ft").
assets[].geoLocation.latitudeStart	number	double	No	0	Latitude corresponding to the location start point.
assets[].geoLocation.latitudeEnd	number	double	No	0	Latitude corresponding to the location end point.
assets[].geoLocation.longitudeStart	number	double	No	0	Longitude corresponding to the location start point.
assets[].geoLocation.longitudeEnd	number	double	No	0	Longitude corresponding to the location end point.
assets[].geoLocation.coordinateXStart	number	double	No	0	X coordinate corresponding to the location start point.
assets[].geoLocation.coordinateXEnd	number	double	No	0	X coordinate corresponding to the location end point.
assets[].geoLocation.coordinateYStart	number	double	No	0	Y coordinate corresponding to the location start point.
assets[].geoLocation.coordinateYEnd	number	double	No	0	Y coordinate corresponding to the location end point.
isDeleted	integer	int32	No	0	Indicator that weld has been marked for soft delete.

