Nature REST Service Manual

Nature Rest services exist in 3 release versions. The root endpoints (ROOT_URL_API) of them can be found at here)

- Test: https://naturdata.test.miljoeportal.dk/services
- Demo: https://naturdata.demo.miljoeportal.dk/services
- Prod: https://naturdata.miljoeportal.dk/services

Nature REST services use "Camel Case" contract format for serializing all property names of input objects and outputs. Examples

- Input object: {"shape": "", "year": 1" }
- Output object: {id: 123, activityTypeId=2}

Hint: Use Fiddler with one of our report sites to learn more on the request formats.

Input Object for Search Method

Input Object basically helps the method select the appropriate array of Activities

Object	Property	Description	Example
Input Object	**searchText**	Support for free text search like what is known from Search Engines. It looks within Activities and Activity Definitions for the Search Texts specified by the user.	"searchText":"ørm"
	shape	When using a shape for search we will only return Activities that have at least some area within this shape. Possible formats include Simple polygon Ex. POLYGON((1 2,1 4,3 4,3 2,1 2)) Polygon with hole Ex. POLYGON((0.5 0.5,5 0,5 5,0 5,0.5 0.5), (1.5 1,4 3,4 1,1.5 1)) Multipolygon Ex. MULTIPOLYGON(((0 1,3 0,4 3,0 4,0 1)), ((3 4,6 3,5 5,3 4)), ((0 0,–1 –2,–3 –2,–2 –1,0 0)))	"includeShape":true "shape":"POLYGON((946289.660 0684442 7673503.478875945,946289.660 0684442 7595843.458138207,1033122.12 42004044 7595843.458138207,1033122.12 42004044 7673503.478875945,946289.660 0684442 7673503.478875945))"
	shapeSrId	SRId is spatial system code; default is 25832.	"shapeSrId":3857
	journalNumber	A reference number as decided by each Authority.	"journalNumber":"JI12"
	activityId	Activity ID for getting a specific	"activityId":123456

		activity returned	
	authorityIds	**Array** Identifiers of the Authorities for which you wish to get results.	"authorityIds":[165]
	speciesIds	**Array** Returns only Activities that have positive sightings of species included in this Array.	"speciesIds":[31284,31286]
	speciesListTypeIds	**Array** Returns only Activities that have positive sightings of species that belong to any of the Species Lists included in this Array.	"speciesListTypeIds":[536]
	natureTypeIds	**Array** The reference to the Nature Type that is selected for this field. Possible values that can be chosen are defined on the Nature Type Registration Definition.	"natureTypeIds":[9102]
	programIds	**Array** The program ids that the activities must belong to.	"programIds":[510]
	statusIds	**Array** Only Activities that are within this array of statuses will be included.	
	purposeIds	**Array** Only Activities that are within this array of purposes will be included.	"purposeIds":[2]
	locationName	Only activities where this filter is part of their name will be included.	"locationName":"Herning"
	fromDate	Only activities that start date is greater than this value	"fromDate":"2017-06-10T17:00:00.000Z"
	toDate	Only activities that start date is less than this value	"toDate":"2017-06-23T16:59:59.000Z"
	themeNames	**Array** Only Activities that are within this array of location themes will be included.	"structuralIndexes":["III – Moderat tilstand"]
	mainAreaIds	**Array** The Activity must belong to at least one of the Main Areas in this filter to be returned.	"mainAreaIds":null
	biologicalStatusIndexes	**Array** In Calculation Types we have defined some arrays that can be used to only get Activities returned whose results is within this stated array.	"biologicalStatusIndexes":["II – God tilstand"]

	speciesIndexes	**Array** In Calculation Types we have defined some arrays that can be used to only get Activities returned whose results is within this stated array.	"speciesIndexes":["II – God tilstand"]
	structuralIndexes	**Array** In Calculation Types we have defined some arrays that can be used to only get Activities returned whose results is within this stated array.	
	includeTotal	This field indicates that output object should include "Total number of records in result"	"includeTotal":true
	skip	This is used for paging, bypasses a specified number of activities and then returns the remaining	"skip":0
	take	This is used for paging, returns a specified number of activities from **skip** number.	"take":100

Methods Supported

SearchDistributedActivityIds: This method simply returns an array of AktID.

SearchDistributedActivities: This method returns "light" Activity objects. Usually used to generate a list view of activities, where user can then select one of them to get more detailed information.

SearchFullDistributedActivities: This method returns "full" Activity objects.

ExportDistributedActivities: Exports Activities to an Excel format where the Activity is the central organizing item.

ExportDistributedActivitySpecies

Exports Activities to an Excel format where the Species is the central organizing item.

In the following we will just show one example. We do reference the WCF Guidelines for more information on the other methods.

SearchFullDistributedActivities

This method returns full Activity objects.

URL	ROOT_URL_API/activity/search/full	
Purpose	Search and retrieve full Activity objects	
Authorization Rules	Returns only activities with status 100 or where activity is from the same municipality as the logged in user.	
Input Object	See above	
Output Object	**total**	Total of Objects
	data	Result Objects
	id	Unique Identifier of Activity

		startDate	The start date of when the activity took place.
		endDate	The end date of when the activity took place.
		journalNr	A reference number as decided by each Authority.
		description	Any comment that the user may have for the Activity.
		createdBy	Reference to the user who created the Activity
		lastUpdatedBy	Reference to the user who last modified the Activity
		creaetedDate	Date that the Activity was last created
		lastUpdatedDate	Date that the Activity was last modified
		statusId	Status id of the Activity.
		statusName	Status name of the Activity.
		parentId	Id of Activity's Parent
		Location	Location information.
		id	Identifier of location.
		name	Name of location.
		objectId	Identifier used in DAI.
		shape	Geometry of the location as Well Known Text.
		mainAreas	Array of main areas
		mainAreaId	Identifier of the Main Area.
		mainAreaName	Name of the Main Area.
p		percentageOverla	If Activity goes beyond the border of this Main Area, then value will identify the percentage overlap between the two.
		type	1: Division – when an Authority is split up into multiple divisions, these Divisions can be used to do additional Search within that Authority. 2: Border – the Authority Border 3: User – User generated main areas. Look at UsageType below to understand in more detail.
		usageType	1: Collection – a Main Area that is used to ensure that any Activities - that are requested to belong to this Main Area – also do not cross beyond the borders of this Main Area. 2: Template – an Area which is copied to the Location of an Activity – to ensure that this Activity becomes part of a "Tidsseries" ("time series" where the exact same area is visited over a period of time)
		activityType	This is program information object that the activity belongs to.
		id	Identifier of the program.
		name	Name of the program.

		hasStation	Indicates that the program has the parent
		parentId	Id of the program
		authority	This is authority information object that the activity belongs to.
		id	Identifier of the authority.
		name	Name of the authority.
		purpose	This is purpose information object that the activity belongs to.
		id	Identifier of the purpose.
		name	Name of the purpose.
		subActivities	Array of sub-activities
		id	Identifier of the Sub Activity
		description	A comment from the "inventør" to explain the sub activity in more detail.
		subActivityDefinitionId	A specification of the Sub Activity Definition that this instance of the Activity belongs to.
		location	Location information.
		id	Identifier of location.
		name	Name of location.
		objectId	Identifier used in DAI.
		shape	Geometry of the location as Well Known Text.
		RegNums	Array of numeric registrations. Notice that the number of registrations allowed as well as validations of values in each of them, is defined by the referenced Registration Definitions. ay of NumReg answers
		id	Identifier of the NumReg.
		regDefinitionId	Reference to the Registration Definition of this registration Object, which defines the values that can be contained in it.
		value	The numeric value saved for the registration. There may be min, max and decimal restrictions set for it on the Registration Definition.
		regCodes	Array of code registrations. Notice that the number of registrations allowed as well as validations of values in each of them, is defined by the referenced Registration Definitions.
		id	Unique identifier of an item in the array
		regDefinitionId	Reference to the Registration Definition of this registration Object, which defines the values that can be contained in it.
		codeId	The Code chosen in the field. Possible Code values are defined on the Registration Definition.
		tegTexts	Array of text registrations. Notice that the number of registrations allowed as well as validations of values in each of them, is defined by the referenced Registration

			Definitions.
		id	Unique identifier of an item in the array
		regDefinitionId	Reference to the Registration Definition of this registration Object, which defines the values that can be contained in it.
		textTypeId	This value defines the type of text contained within this Text Registration. The value for this field should basically be inherited from the Text Registration Definition, that also contains this value. And yes, it does not make much sense, but will be cleaned up in the future.
		value	
		regNatureTypes	Array of nature type registrations. Notice that the number of registrations allowed as well as validations of values in each of them, is defined by the referenced Registration Definitions.
		id	Unique identifier of an item in the array
		regDefinitionId	Reference to the Registration Definition of this registration Object, which defines the values that can be contained in it.
		natureTypeId	The reference to the Nature Type that is selected for this field. Possible values that can be chosen are defined on the Nature Type Registration Definition.
	nt	**natureTypePerce**	Whether this field will appear in the UI depends on a setting in the registration definition. Since it is required we will set it to 100 if not set by user.
	speciesRegs		Array of nature type registrations. Notice that the number of registrations allowed as well as validations of values in each of them, is defined by the referenced Registration Definitions.
		id	Unique identifier of an item in the array
		regDefinitionId	Reference to the Registration Definition of this registration Object, which defines the values that can be contained in it.
		speciesId	The reference to the Species that is selected for this field. Possible values that can be chosen are defined on the Species Registration Definition.
		frequencyId	When the Registration Definition has defined there to be offered a dropdown for this value, then it can contain a reference to a CodeID.
		frequencyValue	When the Registration Definition has defined there to be offered a numeric field for this value, then it can contain a number.
		areaCodeId	When the Registration Definition has defined there to be offered a dropdown for

			this value, then it can contain a reference to a CodeID.
		speciesRegTypeId	When the Registration Definition has defined there to be offered a dropdown for this value, then it can contain a reference to a CodeID.
		pinpoint	When Species Registration belongs to a Pinpoint Type Species Registration Definition, then you must set a value between 1 and 16 for this attribute.
	calculations		Returns information regarding the indexes calculated for the activity
		biologicalStatusIndex	General state of biology
		speciesIndex	General state of species
		structuralIndex	General state of environmental structures