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1 Easy Connect AS directory information API

The directory information API is Easy Connects search interface for integration in websites or applications. It searches in our complete directory of private persons and businesses in Norway. It is a multi-purpose API suited to many different use cases: directory information website, form auto-fill for e-commerce, CRM software and more.

Our own directory service at <http://1890.no> is 100% backed by our APIs.

The API is a HTTP REST API where lookups are GET queries and responses are JSON documents.

For access contact us at post@easyconnect.no or call 53 20 53 00.

1.1 Authentication

Access to the service is controlled with HTTP Basic Authentication¹ and optionally limited by IP address.

In this document the following URL scheme is used: <https://accountname:key@api.easyconnect.no>. The links use a demo user with the username "demo" and the API key "3505cee9f9d34b4baf59bf60dbb0f9d5". Note that this account is only to be used for demonstration purposes and has strict usage limits. To make these requests with a user agent that does not support username/password in URL set the following Authorization header:

```
Authorization: Basic ZGVtbzozNTA1Y2VlOWY5ZDM0YjRiYWY1OWJmNjBkYmIwZjlkNjQ==
```

1.1.1 Account name and API key

In the notation used in RFC 7617 the account name is used as user-id and the API key as password.

Example request: [https://account:key@api.easyconnect.no/...](https://account:key@api.easyconnect.no/)

¹See RFC 7617

1.1.2 Password-less

Optionally the account can be configured without an API key but with access limited by IP address/subnet (IPv4 and/or IPv6).

Example request: [https://account@api.easyconnect.no/...](https://account@api.easyconnect.no/)

1.2 Response codes

The API responds with the following HTTP response codes:

200 OK. The request was successful.

400 Bad Request. Invalid request parameters or headers.

401 The request did not contain an `Authorization` header.

403 Access denied. Either the account name or key is invalid or the IP address does not have access.

404 Not Found. Requested endpoint does not exist or (for some endpoints) the requested entity does not exist.

429 Too Many Requests. Either the account has exceeded contractually defined usage limits or the API service is overloaded.

500 - 599 Internal error.

1.3 Instances

There are two public instances of the API: `api.easyconnect.no` and `beta.api.easyconnect.no`. All endpoints under these are identical, the main difference is SLA. Unless explicitly directed to by Easy Connect AS customers should use `api.easyconnect.no`.

Select customers with special customization, capacity or SLA requirements can get dedicated instances.

1.4 Stability

All endpoints, parameters and response structures documented in this document are considered stable. Customers will be notified about breaking changes well in advance.

Some endpoints may return more fields than what is documented. Undocumented fields may be changed or removed at any time. New fields can also be added.

2 Organizations API

The API endpoints under `/organizations` gives access to various sets of data about organizations: private enterprises, public sector entities, non-profit organizations and other entities registered in the Central Coordinating Register for Legal Entities (enhetsregisteret).

2.1 API endpoints

2.1.1 `/organizations/{orgno}`

Fetches basic official data from the official business registry for Norway. The lookup key is the official organization number (organisasjonsnummer).

Returns 404 if given an invalid or non-existent organization number.

Example: </organizations/981176553>²

```
GET /organizations/981176553 HTTP/1.1
Host: api.easyconnect.no
Authorization: Basic ZGVtbzozNTA1Y2VlOWY5ZDM0YjRiYWY1OWJmNjBkYmIwZjlkNjQ==
```

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
```

```
{
  "more": {
    "listings": [
      "/listings/Easy-Connect-AS"
    ],
    "organization": "/organizations/981176553",
    "organization_accounting": "/organizations/981176553/accounting",
    "organization_owners": "/organizations/981176553/owners",
    "organization_roles": "/organizations/981176553/roles"
  },
  "organization": {
    "orgno": "981176553",
    "registered": "1999-11-03",
    "established": "1999-10-01",
    "legal_name": "Easy Connect AS",
    "historical_name": "GUL NO AS",
    "institutional_sector": "2100",
    "reg_type": "01",
    "legal_form": "AS",
    "nace_1": "63.120",
    "share_capital": 9809581,
    "address": "Midtunhaugen 10",
    "zip": "5224",
    "city": "NESTTUN",
    "municipality_code": "1201",
    "country": "NO",
    "employees": 8
  }
}
```

Response structure See also [common more response structure](#).

- `more/listings` Array[String]

This links to the *Listings API*. This field contains a list of API endpoint paths for listings with this organization number. Note that some organization numbers are connected to multiple listings while others are not connected to any listings.
- `orgno` String (9 digits)

Organization number from the national business registry.
- `registered` Date (YYYY-MM-DD)

Date registered in the business registry.
- `established` Date (YYYY-MM-DD)

Date the business or entity was established.
- `legal_name` String

²<https://demo:3505cee9f9d34b4baf59bf60dbb0f9d5@api.easyconnect.no/organizations/981176553>

- `historical_name` String
- `institutional_sector` String
- `reg_type` String
- `legal_form` String
- `nace_1` String
NACE code 1 (SN/SIC 2007)³.
- `share_capital` Number
- `address` String
Address.
- `zip` String
Address: Post code.
- `city` String
Address: City (poststed).
- `municipality_code` String
Address: Municipality code (kommunennummer). We use an extended municipality code definition from SSB that also includes regional special codes⁴.
- `country` String
Address: Country.
- `employees` String

2.1.2 /organizations/{orgno}/accounting

Returns 404 if the organization number does not exist or does not have published company accounts.

Example: </organizations/981176553/accounting>⁵

GET /organizations/981176553/accounting HTTP/1.1

Host: api.easyconnect.no

Authorization: Basic ZGVtbzozNTA1Y2VlOWY5ZDM0YjRiYWY1OWJmNjBkYmIwZjlkNQ==

HTTP/1.1 200 OK

Content-Type: application/json; charset=utf-8

```
{
  "accounting": {
    "2018": {
      "aksjer_samme": 0,
      ...
    }
  },
  "more": {
    "organization": "/organizations/981176553",
    "organization_accounting": "/organizations/981176553/accounting",
    "organization_owners": "/organizations/981176553/owners",
    "organization_roles": "/organizations/981176553/roles"
  }
}
```

³<https://www.ssb.no/klasse/klassifikasjoner/6>

⁴<https://www.ssb.no/klasse/klassifikasjoner/4>

⁵<https://demo:3505cee9f9d34b4baf59bf60dbb0f9d5@api.easyconnect.no/organizations/981176553/accounting>

```
}
}
```

Response structure See also [common more response structure](#).

Under /accounting the keys are years. Each year contains the accounting data for that year.

The accounting data contains a lot of fields, see [A.1](#).

2.1.3 /organizations/{orgno}/owners

Returns shareholders for a business. If the organization number does not exist or the organization is of a type that does not have shareholders the endpoint returns 404.

Example: [/organizations/981176553/owners](#)⁶

```
GET /organizations/981176553/owners HTTP/1.1
```

```
Host: api.easyconnect.no
```

```
Authorization: Basic ZGVtbzozNTA1Y2VlOWY5ZDM0YjRiYWY1OWJmNjBkYmIwZjlkNjQ==
```

```
HTTP/1.1 200 OK
```

```
Content-Type: application/json; charset=utf-8
```

```
{
  "owners": [
    {
      "owned_orgno": "981176553",
      "owner_city": "STAVANGER",
      "owner_country": "NO",
      "owner_name": "Hodne Invest AS",
      "owner_orgno": "919954396",
      "owner_type": "company",
      "owner_zip": "4023",
      "registration_order": "1",
      "registration_year": "2017",
      "share_percentage": "95.41",
      "shares": "3119860.000"
    },
    {
      "owned_orgno": "981176553",
      "owner_city": null,
      "owner_country": "NO",
      "owner_name": "Stix Invest AS",
      "owner_orgno": "998264995",
      "owner_type": "company",
      "owner_zip": null,
      "registration_order": "2",
      "registration_year": "2017",
      "share_percentage": "4.38",
      "shares": "143334.000"
    },
    {
      "owned_orgno": "981176553",
      "owner_city": null,
      "owner_country": "NO",
```

⁶<https://demo:3505cee9f9d34b4baf59bf60dbb0f9d5@api.easyconnect.no/organizations/981176553/owners>

```

    "owner_name": "ANDRE AKSJONÆRER",
    "owner_type": "unknown",
    "owner_zip": null,
    "registration_order": "3",
    "registration_year": "2017",
    "share_percentage": "0.20",
    "shares": "6667.000"
  }
],
"more": {
  "organization": "/organizations/981176553",
  "organization_accounting": "/organizations/981176553/accounting",
  "organization_owners": "/organizations/981176553/owners",
  "organization_roles": "/organizations/981176553/roles"
}
}

```

Response structure See also [common more response structure](#).

owners is a list of shareholders with the largest shareholders sorted first. Each entry in this list has the following structure:

- owned_orgno
- shares
 - The exact number of shares this shareholder owns.
- share_percentage
 - The percentage of shares this shareholder owns.
- registration_year String: YYYY
- registration_order Integer
- owner_type String: (person, company, unknown) (NOTE: subject to change, add "generic" or something to that effect)
- owner_name String
- owner_firstname (only for person) String
- owner_lastname (only for person) String
- owner_birthdate (only for person) Date: YYYY-MM-DD
- owner_gender (male/female/null) (only for person) String
- owner_orgno (only for company) String (9 digits)
- owner_zip String
- owner_city String
- owner_country String

2.1.4 /organizations/{orgno}/roles

Returns information about roles. Some roles (such as chairman of the board) are physical persons, others (such as auditor) are companies. Some can be either. If the organization number does not exist or the organization is of a type that do not have any registered roles the endpoint returns 404.

Example: </organizations/981176553/roles>⁷

```
GET /organizations/981176553/roles HTTP/1.1
Host: api.easyconnect.no
Authorization: Basic ZGVtbzozNTA1Y2VlOWY5ZDM0YjRiYWY1OWJmNjBkYmIwZjlkNkQ==
```

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
```

```
{
  "roles": [
    {
      "address": "Kanalveien 7",
      "city": "BERGEN",
      "name": "AZETS INSIGHT AS",
      "orgno": "983338917",
      "role": "REGN",
      "title": "Regnskapsfører",
      "zip": "5068"
    },
    {
      "address": "Munkedamsveien 45A",
      "city": "OSLO",
      "name": "BDO AS",
      "orgno": "993606650",
      "role": "REVI",
      "title": "Revisor",
      "zip": "0250"
    },
    {
      "address": "Fanahammeren 132 A",
      "city": "FANA",
      "gender": "male",
      "name": "Ove Johan Kvamme",
      "role": "DAGL",
      "title": "Daglig leder",
      "zip": "5244"
    },
    {
      "address": "Ulsberghagen 4",
      "city": "STAVANGER",
      "gender": "male",
      "name": "Tor Johan Finne",
      "role": "LEDE",
      "title": "Styrets leder",
      "zip": "4034"
    },
    {
      "address": "Gustav Vigelands Vei 64",
      "city": "STAVANGER",
      "gender": "male",
      "name": "Rolf Smedvig Hodne",
      "role": "MEDL",
      "title": "Styremedlem",
      "zip": "4023"
    }
  ]
}
```

⁷<https://demo:3505cee9f9d34b4baf59bf60dbb0f9d5@api.easyconnect.no/organizations/981176553/roles>

```

    },
    {
      "address": "Verven 12 C",
      "city": "STAVANGER",
      "gender": "male",
      "name": "Stein Indseth Modahl",
      "role": "MEDL",
      "title": "Styremedlem",
      "zip": "4014"
    }
  ],
  "more": {
    "organization": "/organizations/981176553",
    "organization_accounting": "/organizations/981176553/accounting",
    "organization_owners": "/organizations/981176553/owners",
    "organization_roles": "/organizations/981176553/roles"
  }
}

```

Response structure See also [common more response structure](#).

roles is a list of roles in no particular order. Each entry in this list has the following structure:

- title String
The title for this role
- role String
The role code
- name String
- gender String
- address String
- zip String
- city String
- orgno String (9 digits)

2.2 Common more response structure

organization, organization_accounting, organization_owners and organization_roles link to the same entity in their respective endpoints. This is done to aid discovery and to make it easier to write clients that collect data from several endpoints.

3 Document version

A Appendix

A.1 Accounting fields

For now this is only documented in Norwegian. The field lists are not complete, contact us if you want more details.

A.1.1 Nøkkeltall

- totalkapital_rentabilitet Totalkapitalrentabilitet

$$\frac{\text{kapital} = \text{sum_egenkap} + \text{sum_langs_gjeld} + \text{sum_korts_gjeld} + \text{sum_avsetn_forpl} \\ \text{res_f_skatt} - \text{finans_kostnad}}{(\text{kapital}_{\text{dette}} + \text{kapital}_{\text{forrige}})/2} * 100$$

- totalkapital_rentabilitet_2 Totalkapitalrentabilitet (siste år)

$$\frac{\text{kapital} = \text{sum_egenkap} + \text{sum_langs_gjeld} + \text{sum_korts_gjeld} + \text{sum_avsetn_forpl} \\ \text{res_f_skatt} - \text{finans_kostnad}}{\text{kapital}} * 100$$

- resultat_grad Resultatgrad

$$\frac{\text{drifts_res}}{\text{sum_drinnt}} * 100$$

- likvid_grad1 Likviditetsgrad I

$$\frac{\text{sum_oml}}{\text{sum_korts_gjeld}}$$

- likvid_grad2 Likviditetsgrad II

$$\frac{\text{sum_oml} - \text{varebeholdning}}{\text{sum_korts_gjeld}}$$

- soliditet Soliditet/egenkapitalandel

$$\frac{\text{sum_egenkap}}{\text{sum_anlegg} + \text{sum_omlop}} * 100$$

- gjeldsgrad Gjeldsgrad

$$\frac{\text{sum_langs_gjeld} + \text{sum_avsetn_forpl} + \text{sum_korts_gjeld}}{\text{sum_egenkap}}$$

A.1.2 Resultatregnskap

- salgs_innt Salgsinntekter
- andre_innt Andre driftsinntekter
- sum_drinnt Sum driftsinntekter

- beholdn_vare Beholdningsendringer
- vare_kost Varekostnad
- lønn Lønnskostnader
- av_skriv Avskrivninger

- ned_skriv Nedskrivninger
 - tap_fordr Tap på fordringer
 - andre_drkost Andre driftskostnader
 - driftskostnader Sum driftskostnader
-
- drifts_res Driftsresultat
-
- innt_inv_datter Inntekter investert i datterselskap
 - innt_inv_tilkn Inntekter investert i tilknyttede selskaper
 - innt_inv_annet Inntekter investert i annet selskap
 - renteinnt_samme Renteinntekter fra foretak i samme konsert
 - annen_renteinnt Annen renteinntekt
 - annen_fin_innt Annen finansinntekt
 - verdiendr Verdiendringer (positive summeres i finansinntekter, negative i finanskostnader)
 - finans_inntekt Sum finansinntekter
-
- nedskriv_omlop Nedskrivning av finansielle omløpsmidler
 - nedskriv_anlegg Nedskrivning av finansielle anleggsmidler
 - rentekost_samme Rentekostnader foretak samme konsern
 - annen_rentekost Annen rentekostnad
 - fin_kost Annen finanskostnad
 - finans_kostnad Sum finanskostnader
-
- finans_sum Sum finans
-
- res_f_skatt Resultat før skatt
 - skatt_ord Skattekostnad på ord. res.
 - ord_res Ordinært resultat
 - eks_innt Ekstraordinære inntekter
 - eks_kost Ekstraordinære kostnader
 - skatt_eks Skatt på ekstraordinært resultat
 - res_e_skatt Resultat etter skatt
 - kon_bidr Konsernbidrag
 - utbytte Avsatt utbytte

A.1.3 Balanseregnskap

- goodwill Goodwill
- fou_spes Forskning og utvikling
- konsesj_p Konsesjoner, patenter, lisenser, rettigheter, varemerker o.l.
- uts_skatt Utsatt skattefordel
- sum_immatriell Sum immaterielle eiendeler

- eiendom Fast eiendom, tomter og bygninger
- maskin Maskiner og anlegg
- skip_rigg_fly Skip, rigger, fly o.l
- drift_inv_verk Inventar, verktøy o.l
- sum_varige_drift Sum varige driftsmidler

- invest_i_datter Investeringer i datterselskap
- invest_i_annet Investeringer i annet foretak i samme konsern
- laan_samme Lån til foretak samme konsern
- invest_i_tilkn Investeringer i tilknyttede selskap
- laan_tilkn Lån til tilknyttede selskap
- invest_i_aksjer Investeringer i aksjer og andeler
- obligasjoner Obligasjoner og andre fordringer
- pensjonsmidler Pensjonsmidler
- andre_anlegg Andre anleggsmidler
- sum_finansielle Sum finansielle anleggsmidler

- sum_anlegg Sum anleggsmidler

- kunde_fordr Kundefordringer
- andre_fordr Andre fordringer
- konsern_fordr Konsernfordringer
- krav_aksjekap Krav på innbetaling av aksjekapital
- sum_fordringer Sum fordringer

- aksjer_samme Aksjer i foretak samme konsern
 - marked_aksjer Markedsbaserte aksjer
 - marked_obliga Markedsbaserte obligasjoner
 - marked_finans Markedsbaserte finansielle instrumenter
 - andre_finans Andre finansielle instrumenter
 - sum_invest Sum investeringer
-
- varebeholdning Varebeholdning
 - kasse Kasse/bank
 - andre_oml Andre omløpsmidler
-
- sum_oml Sum omløpsmidler
-
- sum_eiendeler Sum eiendeler
-
- selskapskapital Selskapskapital
 - egne_aksjer Egne aksjer
 - overkursfond Overkursfond
 - annen_innsk_egenk Annen innskutt egenkapital
 - sum_innsk_egenk Sum innskutt egenkapital
-
- fond_vurdering Fond for vurderingsforskjeller
 - reserve_fond Reserve fond
 - annen_egenkap Annen egenkapital
 - sum_opptj_egenkap Sum opptjent egenkapital
-
- sum_egenkap Sum egenkapital
-
- pensjonsforpl Pensjonsforpliktelse
 - utsatt_skatt Utsatt skatt
 - andre_avsetn Andre avsetninger for forpliktelse
 - sum_avsetn_forpl Sum avsetninger for forpliktelse

- konv_laan_lang Langsiktige konvertible lån
- obligasjonslaan Obligasjonslån
- gjeld_kreditt_lang Langsiktig gjeld til kredittinstitusjoner
- ansv_laan Ansvarlig lånekapital
- konserngjeld_lang Langsiktig konserngjeld
- ovr_langs_gjeld Øvrig langsiktig gjeld
- sum_langs_gjeld Sum langsiktig gjeld

- konv_laan_kort Kortsiktige konvertible lån
- sertifikatlaan Sertifikatlån
- gjeld_kreditt Kortsiktig gjeld til kredittinstitusjoner
- lever_gjeld Leverandørgjeld
- betalbar_skatt Betalbar skatt
- skyldig_off_avg Skyldig offentlige avgifter
- utbytte_gjeld Utbytte
- konserngjeld_kort Kortsiktig konserngjeld
- kassekreditt Kassekredittgjeld
- annen_korts_gjeld Annen kortsiktig gjeld
- sum_korts_gjeld Sum kortsiktig gjeld

- sum_gjeld Sum gjeld

- totalkapital Sum gjeld egenkapital