

Suomen Asiakastieto Oy

Integration Interfaces

Company REST 5.01

Selected services for development portal

Note that this document only contains selected services from Asiakastieto and only covers fraction of the services available from interfaces

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Document History

Version	Date	Issuer	Issue
1.0	19.12.2016	Marko Lehto	First version.
1.1	6.2.2017	Katri Rautiainen	Name changed REST
1.2	9.1.2018	Katri Rautiainen	page refs fixed
1.3	6.3.2018	Katri Rautiainen	Suomen Asiakastieto Oy introduction deleted
1.4	2.10.2018	Marko	Cash flow serv ice added
1.5	28.5.2019	Aleksi Leppo	Test environment addresses and parameters updated.
1.6	11.12.2020	Jussi Korkonen	Added BLIS, correction to FS business id format, examples into endpoint demo
1.7	15.6.2021	Marko Lehto	Authorized signature 2021services added
1.7.1	5.8.2021	Jussi Korkonen	Authorized signature 2021services parameters revisited
1.7.2	20.1.2022	Katri Rautiainen	Authorized signature examples
1.7.3	8.3.2022	Katri Rautiainen	New document format
1.7.4	9.9.2022	Katri Rautiainen	Financial statement request parameters fixed
1.7.5	20.9.2022	Jussi Korkonen	Improved examples monitoring/auth sign check
1.7.6	20.10.2022	Katri Rautiainen	Company report request example fixed
1.7.7	17.11.2022	Jussi Korkonen	Added JSON request information Added monitoring with company report
1.8	5.1.2022	Katri Rautiainen	ESG report
1.9	3.7.2023	Katri Rautiainen	Monitoring maintenance parameters – not in use
2.0	10.1.2024	Katri Rautiainen	Json formatted request updated
2.1	12.2.2024	Katri Rautiainen	reqmsg parameter description updated
2.2	26.3.2024	Katri Rautiainen	Monitoring maintenance updated
2.3	18.6.2024	Katri Rautiainen	Persons in Charge, Corporate links of person (Vastuuhenkilön yritysyhteydet lisätty)
2.4	12.8.2024	Katri Rautiainen	Asiakastieto address updated
2.5	9.9.2024	Toni Myllyoja	Company search by name – removed "businessld"
2.5	19.9.2024	Jussi Korkonen	Development portal edition

The REST interface Company Version 5.01

The REST interface is based on HTTPS calls. The interface is SSL encrypted. Client's application forms a specified-form URL, which contains the required parameters, e.g. the user ID, the key identifying the subject, and the data on which operation of service is requested. The message is protected by an identifier, which is calculated on the basis of the SHA-512 algorithm. The interface returns an XML or JSON page containing the data contents of the selected service.

Services in the REST interface

- Company Identification (name, address, etc.)
- Company Basics
- Company Group References
- Information of Mergers
- Company Classification (Risk Indicator, Rating)
- Register Data (e.g. Prepayment register)
- Company Payment Defaults
- Persons In Charge
- Decision makers
- Persons In Charge Summary
- Shareholders
- Payment History
- Payment Indicator
- Business mortgages
- Other names
- News in Finnish
- Authorised Signatures
- Financial Statements (Company and group)
- Ratios (Company and group)
- Cash flow (Company and group)
- Group structure
- Company search by name – List of companies
- Foreign Company Report
- Business Loan Information System (BLIS)

The REST interface

Format of the URL for REST requests

The URL is formed according to the following syntax:

Fixed part:

<https://www.asiakastieto.fi/services/company5/REST?> (Production)

<https://demo.asiakastieto.fi/services/company5/REST?> (Testing)

For Financial Statements (only available as XML)

https://www.asiakastieto.fi/as_pap1/services/xml/100/financialStatementXML? (Production)

https://www.asiakastieto.fi/as_vap1/services/xml/100/financialStatementXML? (Testing)

JSON request

For JSON response please use the following parameter `format=json`

For legacy support using `Accept: application/json`

header without `format=json` parameter will return json response with dates and times in java milliseconds.

Request parameters

General obligatory parameters for Company requests

Name	Description	Max length
userid	User ID, given by SAT	12
passwd	password, given by SAT	10
timestamp	Time stamp for calculating the URL checksum (more Calculating the SHA-512 checksum)	24
checksum	URL check calculated by using the SHA-512 hash value	128
version	5.01, interface version for company services	
enduser	defines the enduser	12
reqmsg	COMPANY (company request) GROUP (group request) DECISION (decision support service) MONITORING (monitoring maintenance)	
format	xml /json	4

Voluntary parameters

Name	Description	Max length
target	Target database requests PAP1 production requests (default) VAP1 for testing company information TAP1 for testing soletrader information	

lang	defines the response language, FI= Finnish EN= English SV= Swedish	2
ccenter	cost center: For an enclosure of invoice including transactions sorted by the cost center	20

Company report

Name	Description	Max length
businessid	nnnnnnN VAT number, search criterion when requesting companies	8
segment	A/B depending on service	1
packet	customized packet code	4
monitoring	1=set company to be monitored, 0=remove from monitoring. Monitoring service has to be agreed with Suomen Asiakastieto.	1

Decision support service

Name	Description	Max length
qtype	02	2
businessid	nnnnnnN VAT number, search criterion when requesting companies	8
model	customized model code	4
C6_input.code	A05 = amount of a credit A08 = customer key A17 = sole trader SSN	table
C6_input.value	amount of a credit customer key, for example 123 ID ddmmyyXnnnC, when requesting sole trader	table

Company search by name – List of companies

Name	Description	Max length
segment	A	1
qtype	Inquiry type 01 List of companies	2
request	N	
name	Company's name	60

Company report, ESG sub services

Name	Description	Max length
businessid	nnnnnnN VAT number, search criterion when requesting companies	8

segment	A/B depending on service	1
packet	customized packet code Q630 = ESG check Q631 = Certificates and ecolabels Q632 = Information security and GDPR Q633 = Net impact profile Q634 = Court rulings and penalty payments	4
monitoring	1=set company to be monitored, 0=remove from monitoring. Monitoring service has to be agreed with Suomen Asiakastieto.	1

Financial Statements

Name	Description	Max length
businessid	nnnnnnN VAT number, search criterion when requesting companies	8
servicename	getFinancialStatements; complete profit and loss and balance sheet getRatios; Key ratios getCashFlowStatements; Cash flow statements	
fstype	1	
formula	0 = company financial statements 1 = group financial statements 2 = both company and group financial statements	
accountingPeriodEndDayBegins	yyyymmdd	
accountingPeriodEndDayEnds	yyyymmdd	
version	5_00	

If both accountingPeriodEndDayBegins and accountingPeriodEndDayEnds are empty, the service returns financial statements of the latest accounting period.

If accountingPeriodEndDayBegins is given and accountingPeriodEndDayEnds is empty, the service returns financial statements of the latest accounting period (max 6 periods) starting from accountingPeriodEndDayBegins date.

Monitoring service, maintenance for company objects

Name	Description	Obligatory	Max length
reqmsg	MONITORING	yes	
businessid	nnnnnnN VAT number, search criterion when requesting companies	yes	8
idnumber	ddmmyyXnnnC	N/A	11
objectname	name of a person/ company	yes	

customerkey			30
operation	I=insert R=remove Q=query	yes	
monitoringDatabase	Database id, given by Asiakastieto		
notificationCount	number of payment defaults notification will be delivered until ending monitoring, 0 = continual monitoring kuinka monta valvontailmoitusta kohteesta lähetetään, 0 = jatkuva valvonta		1
paymentsDefaults	0= all payment defaults 2= Severe payment defaults		1
monitoringInput	agreed with customer		6
version	4.03	yes	

SHA-512 checksum

Calculating the SHA-512 checksum

Formation of the verified URL is performed at the customer's end, using the secret calculation key the customer and Asiakastieto have agreed upon.

The interface application conducts the security check for the given URL, based on the given time stamp (current time) and the calculated verification. This procedure eliminates the risk that Asiakastieto's actual database user ID and password should fall into wrong hands, in case they are possibly shown in plain text in the target address line of the browser.

Time stamp

The time stamp is supplied with the parameter timestamp, and it is of the following format:

YYYYMMDDHHMMSSXXTZNNNNNN

in which

YYYY	year in four digits
MM	month 01-12
DD	day of the month 01-31
HH	hour 00-23
MM	minutes 00-59
SS	seconds 00-59
XX	hundredths of a second 00-99
TZN	time zone correction in relation to GMT. In Finland +02 (plus has to be included). The offset from GMT is always presented in relation to local normal time, daylight saving time (DST) is not added to the correction value.
NNNNN	consecutive number

Verification

The checksum (SHA-512 hash value) is presented as a hexadecimal string of 128 characters, in which letter symbols are capital letters.

The verification is calculated by using the standard SHA-512 algorithm, forming first a source character string from part of the parameters, and including the secret key known only by the customer and Asiakastieto.

Source character string: `userid&enduser×tamp&key&`

The parameters are placed in succession, set off by & characters as a single uniform character string, and the SHA-512 hash value is calculated for this, which is again placed into the parameter checksum in the final URL. The & character also has to be found at the end of the source character string when performing the calculation. The SHA-512 hash value received is presented as a hexadecimal character string of 128 characters, in which letter symbols are capital letters.

URL Notes

URL Notes

Question mark (?) is used as separator between the fixed part and the parameter part. The separator between the parameters is & character. Each parameter is separated from its value with the equals sign (=).

URL in its entirety must not contain spaces or characters in the so-called 8-bit area (national characters, e.g. åäö). For example, if the password contains characters in the 8-bit area, they have to be entered as their UTF-8 hexadecimal values, set off by percentage characters, in accordance with the http/URL standard. For example, the password PÄIVÄÄ should be entered as the parameter `passwd=P%C3%84IV%C3%84%C3%84`. Blank characters should be entered as %20 e.g. in the parameter `"name=Miehinien%20Mikael"`.

Timestamp consists of time zone correction related to GMT time, the "+" or "-" sign must be included. Notice that in the url the "+" sign must be as UTF-8 value %2B and "-" sign as UTF-8 hexadecimal value %2D.

The checksum (the SHA-512 hash value) is presented as a hexadecimal character string of 128 characters, in which letter symbols are capital letters.

Input parameters for the Decision support service are delivered in two tables. `C6_input.code` and `C6_input.value`.

Brackets must be as UTF-8 hexadecimal value "[" as %5B and "]" as %5D.

The first element of `C6_input.code` is indexed by 0 (`C6_input.code%5B0%5D=XXX&C6_input.value%5B0%5D=nnnn`), e.g. `C6_input.code%5B0%5D=A05` and `C6_input.value%5B0%5D=1000` (amount of the credit).

Examples of REST request for testing

Examples

Company report (for testing)

<https://demo.asiakastieto.fi/services/company5/REST?version=5.01&target=VAP1&userid=nnnnnnnnnnnn&passwd=nnnnnn&enduser=nnnnnnnn&segment=A&reqmsg=COMPANY&format=xml&businessid=01110279&packet=Xnnn×tamp=2016121912000300%2B0200000&checksum=516B0C68ECB9932235B0E22EC7409CD6257CE3699BC81F9E19EC749B24594B873A2F58F0F4FD9B5CD50DE42404EDBB77E7F5D29C08F3D7DB5D0D54CDC44C23CA&>

Company report (for production)

<https://www.asiakastieto.fi/services/company5/REST?version=5.01&target=PAP1&userid=nnnnnnnnnnnn&passwd=nnnnnn&enduser=nnnnnnnn&segment=A&reqmsg=COMPANY&format=xml&businessid=01110279&packet=Xnnn×tamp=2016121912000300%2B0200000&checksum=516B0C68ECB9932235B0E22EC7409CD6257CE3699BC81F9E19EC749B24594B873A2F58F0F4FD9B5CD50DE42404EDBB77E7F5D29C08F3D7DB5D0D54CDC44C23CA&>

Decision support service

https://demo.asiakastieto.fi/services/company5/REST?version=5.01&target=VAP1&userid=nnnnnnnnnnnn&passwd=xxxx&enduser=cccc&businessid=01110279&reqmsg=DECISION&qtype=02&model=MALLI1&C6_input.code%5B0%5D=A05&C6_input.value%5B0%5D=1000&C6_input.code%5B1%5D=A08&C6_input.value%5B1%5D=123456&format=xml×tamp=2005110112264400%2B0200001&checksum=516B0C68ECB9932235B0E22EC7409CD6257CE3699BC81F9E19EC749B24594B873A2F58F0F4FD9B5CD50DE42404EDBB77E7F5D29C08F3D7DB5D0D54CDC44C23CA&

Company Financial Statements

For production:

https://www.asiakastieto.fi/as_pap1/services/xml/100/financialStatementXML?userid=nnnnnnnnnnnn&passwd=nnnnnn&enduser=xxxxx&version=5_00&businessid=01110279&servicename=getFinancialStatements&fstype=1&formula=0&accountingPeriodEndDayBegins=20190101&accountingPeriodEndDayEnds=20211231×tamp=2023041511035600%2B0200000&checksum=C4E5639D40C56BF72DE1A3BCC6A53C5C59D99114A68E9C7E6FB41AE771FA8602693D8DD4074154796876C6B9EB73C548DF20D8B7501508E590D8620900D94210

for testing:

https://www.asiakastieto.fi/as_vap1/services/xml/100/financialStatementXML?userid=nnnnnnnnnnnn&passwd=nnnnnn&enduser=xxxxx&version=5_00&businessid=01110279&servicename=getFinancialStatements&fstype=1&formula=0&accountingPeriodEndDayBegins=20050101&accountingPeriodEndDayEnds=20161231×tamp=2016091511035600%2B0200000&checksum=C4E5639D40C56BF72DE1A3BCC6A53C5C59D99114A68E9C7E6FB41AE771FA8602693D8DD4074154796876C6B9EB73C548DF20D8B7501508E590D8620900D94210

Insert into Monitoring

<https://demo.asiakastieto.fi/services/company5/REST?businessid=01110279×tamp=2022092011000700%2B0200000&checksum=20358C447407181E8F3FDE253C309C15F4D7F4BB28BA2A258097569CD9CCFC6B331AE066D225A656E0B098236967761E1870272F348C54DF80ABA3BE80974023&target=VAP1&lang=EN&userid=xxxxxxxxxxx&passwd=yyyyy&version=4.03&enduser=testuser&reqmsg=MONITORING&format=xml&objectname=Suomen%20Asiakastieto%20Oy&operation=I¬ificationsCount=0&customerKey=1234>

List of Companies

<https://demo.asiakastieto.fi/services/company5/REST?version=5.01&target=VAP1&userid=nnnnnnnnnnnn&passwd=xxxx&enduser=cccc&segment=A&reqmsg=COMPANY&name=Nokia&forma>

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