

# Search and list URL

This function allows to directly invoke the search and list interface of the web application with search parameters. The system automatically executes the query based on the provided filter parameters in the URL.

The function is available as a HTTP GET request.

## Request

Search and list URL HTTP GET sample:

```
http://192.168.1.104/verba/gwtCallSearch.do?reset=1&p_date_from=2011-07-10 23:59:59&p_date_to=2011-07-11 21:00:00&p_phone_number=1002&p_phone_number_operator=INCLUDES
```

If the external single sign on (SSO) function is used to authenticate the users, the URL has to contain reference to the session token, which was registered previously:

```
http://192.168.1.104/verba/extssologin.do?token=12345&ssotarget=gwtCallSearch.do&reset=1&p_date_from=2011-07-10 23:59:59&p_date_to=2011-07-11 21:00:00&p_phone_number=1002&p_phone_number_operator=INCLUDES
```

Detailed description of the API request elements:

API request element	Description	Requirements
http://192.168.1.104/verba/gwtCallSearch.do	Verba direct HTTP URL.	Mandatory
reset=1	The system will delete the user's current ("default") search parameters from the database, and create a new one according to the additional parameters, described below. Basically, this parameter flags that the system should act differently than in case of a normal call search.	Optional
autoplay=1	If there is only 1 call in the results, the system will automatically start playing the call back.	Optional
p_date_from=2011-07-10 23:59:59	Start date and time for the query. Date format is: yyyy-mm-dd hh24:mi:ss.  The time part can be omitted, so 2011-07-10 is a valid format too, in this case time will be set to 00:00:00	If the parameter is missing it will default to today at 00:00:00.
p_date_to=2011-07-11 21:00:00	End date and time for the query. Date format is: yyyy-mm-dd hh24:mi:ss  If the time part omitted, it will default to 23:59:59.	If the parameter is missing it will default to today at 23:59:59.
p_date=2011-07-11 21:00:00	This is an alternative date search option. If this is used, p_date_from and p_date_to is ignored.  Date format is: yyyy-mm-dd hh24:mi:ss	If the parameter is missing it will default to 10 minutes.
p_date_window=10	The resulting search will show a time interval from (p_date - p_date_window) to (p_date + p_date_window).  Time is given in minutes.	
p_date_last_days=30	If defined the search results will show calls from the last X days	If defined, no other date related information is required.
p_phone_number=1002	Phone Number (Caller or Called Party) filter.	Optional

p_phone_number_operator=INCLUDES	<p>Operator to be used when filtering for Phone Number.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> <li>▪ =</li> <li>▪ !=</li> <li>▪ IN</li> <li>▪ NOT_IN</li> <li>▪ EXISTS</li> <li>▪ DOES_NOT_EXIST</li> <li>▪ STARTS_WITH</li> <li>▪ ENDS_WITH</li> <li>▪ INCLUDES</li> <li>▪ LIKE</li> <li>▪ BETWEEN</li> </ul> <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_direction=incoming,outgoing	<p>Call direction filter.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> <li>▪ internal</li> <li>▪ incoming</li> <li>▪ outgoing</li> <li>▪ inter-tenant</li> <li>▪ undefined</li> </ul>	Optional
p_direction_operator=IN	<p>Operator to be used when filtering for Call Direction.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> <li>▪ =</li> <li>▪ !=</li> <li>▪ IN</li> <li>▪ NOT_IN</li> <li>▪ EXISTS</li> <li>▪ DOES_NOT_EXIST</li> <li>▪ STARTS_WITH</li> <li>▪ ENDS_WITH</li> <li>▪ INCLUDES</li> <li>▪ LIKE</li> <li>▪ BETWEEN</li> </ul> <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_caller=1005	Caller Party Phone Number filter	Optional
p_caller_operator=LIKE	Operator to be used when filtering for Caller Party Phone Number	Optional
p_called=236783	Called Party Phone Number filter	Optional

p_called_operator=LIKE	<p>Operator to be used when filtering for Called Party Phone Number.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> <li>▪ =</li> <li>▪ !=</li> <li>▪ IN</li> <li>▪ NOT_IN</li> <li>▪ EXISTS</li> <li>▪ DOES_NOT_EXIST</li> <li>▪ STARTS_WITH</li> <li>▪ ENDS_WITH</li> <li>▪ INCLUDES</li> <li>▪ LIKE</li> <li>▪ BETWEEN</li> </ul> <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_caller_name=James Woods	Caller Party Name filter	Optional
p_caller_name_operator=LIKE	<p>Operator to be used when filtering for Caller Party Name.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> <li>▪ =</li> <li>▪ !=</li> <li>▪ IN</li> <li>▪ NOT_IN</li> <li>▪ EXISTS</li> <li>▪ DOES_NOT_EXIST</li> <li>▪ STARTS_WITH</li> <li>▪ ENDS_WITH</li> <li>▪ INCLUDES</li> <li>▪ LIKE</li> <li>▪ BETWEEN</li> </ul> <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_called_name=Richard Dreyfus	Called Party Name filter	Optional
p_called_name_operator=LIKE	<p>Operator to be used when filtering for Called Party Name.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> <li>▪ =</li> <li>▪ !=</li> <li>▪ IN</li> <li>▪ NOT_IN</li> <li>▪ EXISTS</li> <li>▪ DOES_NOT_EXIST</li> <li>▪ STARTS_WITH</li> <li>▪ ENDS_WITH</li> <li>▪ INCLUDES</li> <li>▪ LIKE</li> <li>▪ BETWEEN</li> </ul> <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_server=NYREC-SERVER	Recording Server filter.This field corresponds to the hostname of the recording server.	Optional

p_server_operator=LIKE	<p>Operator to be used when filtering for Recording Server.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> <li>▪ =</li> <li>▪ !=</li> <li>▪ IN</li> <li>▪ NOT_IN</li> <li>▪ EXISTS</li> <li>▪ DOES_NOT_EXIST</li> <li>▪ STARTS_WITH</li> <li>▪ ENDS_WITH</li> <li>▪ INCLUDES</li> <li>▪ LIKE</li> <li>▪ BETWEEN</li> </ul> <p>The default operation is "equals" (=). If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_duration=120-150	Duration filter in seconds.	Optional
p_duration_operator=BETWEEN	<p>Operator to be used when filtering for Duration.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> <li>▪ BETWEEN</li> </ul>	Optional
p_normalize=1	If this is set to 1, the p_local_prefix and p_country_prefix parameters will be used to add additional phone number search variants. Normalization is not happening on SIP addresses.	Optional
p_local_prefix=0	<p>If a phone number starts with this p_local_prefix, normalization will add a search variant, where this part is removed and p_default_country is added</p> <p>Example: if p_local_prefix=0 and p_default_country=44, then 012345678 will be normalized to +4412345678</p>	Optional
<del>p_country_prefix=+46</del> (deprecated - see p_default_country)	<del>If a phone number starts with this p_local_prefix, normalization will add a search variant, where this is removed and p_country_prefix is added</del>	Deprecated
p_default_country=44	<p>This country code will be added when numbers are found in non-international formats (non-E.164 formats)</p> <p>See p_local_prefix, p_external_prefix and p_international_prefix.</p>	Optional
p_external_prefix=9	<p>If a phone number starts with this p_external_prefix, normalization will add a search variant, where this part is removed and the number is normalized based on p_local_prefix and p_international_prefix</p> <p>Example: if p_external_prefix=0, p_local_prefix=0 and p_default_country=44, then 9012345678 will be normalized to +4412345678</p>	Optional
p_international_prefix=00	<p>If a phone number starts with this p_international_prefix, normalization will replace that with a +</p> <p>Example: if p_international_prefix=00 then 004612345678 will be normalized to +4612345678</p>	Optional

## Phone number normalization rules

If the `p_normalize` parameter is set to "1", the API call will search for additional, normalized variants of the numbers given in `p_caller`, `p_called` or `p_phone_number`.

The normalization is defined based on `p_default_country`, `p_external_prefix` and `p_international_prefix` (see more details in the table above).

### Examples for normalizations

Based on `p_default_country=44`, `p_external_prefix=9` and `p_international_prefix=00`:

Type	Source number	Normalized	Rule
E.164 numbers	+<intl_number>	+<intl_number>	start with + -> no change
local numbers	0<local_number>	+44<local_number>	leading 0 replaced with +44
numbers with international dialing prefix	00<intl_number>	+<intl_number>	leading 00 replaced with +
external dialing of local number	90<local_number>	+44<local_number>	leading 9 and 0 replaced with +
external dialing of international number	900<intl_number>	+<intl_number>	leading 9 and 00 replaced with +
various numbers with extension numbers	e.g. 0<local_number> (ext 12)	+44<local_number>	extension number is removed
SIP URI	user@domain.com	user@domain.com	No normalization will run on SIP URIs.

### Response

The system opens the web application at the search and list interface displaying the results according to the filters defined in the request.