Centah REST API For Service Providers

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Request Authentication Token

The first step required to being utilization of the Centah REST API is the authentication step that will result in an issuance of the Authentication Token that is a necessary for all subsequent requests.

Parameter	Description
_[action]	The name of the API call.
login	The login name of the user you wish to authenticate to use XML API.
passwd	The password relative to the specified login name.

Sample Request
http://{systemUrl}/xml.php?_[action]=auth&login=login&passwd=password

```
Sample Response

<?xml version='1.0' encoding='UTF-8'?>
  <centah-response>
    <auth-token>c4ca4238a0b923820dcc509a6f75849b</auth-token>
  </centah-response>
```

Get New Leads

Centah XML API gives you the ability to retrieve a list of leads that have not yet been acknowledged by the service provider. These leads typically have a *CCNEW* indicating that the lead has not yet been red-flagged for inactivity. Alternatively the leads may have a *FLOATING* status indicating that the allowed period during which the service provider must acknowledge the lead had passed and the lead was tagged with a red-flag.

Parameter	Description	
_[action]	The name of the API call.	
_[auth_token]	The authentication token.	

Sample Request
http://{systemUrl}/xml.php?_[action]=get_new_leads&_[auth_token]=[token]

```
Sample Response
<?xml version='1.0' encoding='UTF-8'?>
<centah-response>
 <leads>
   <lead>
   <id>24790</id>
   <status>CCNEW</status>
   <br/><book-date>2015-07-07 15:28:31</book-date>
 </lead>
 <lead>
   <id>24791</id>
   <status>CCNEW</status>
   <book-date>2015-07-07 15:29:55</book-date>
 </lead>
 <lead>
   <id>24792</id>
   <status>CCNEW</status>
   <book-date>2015-07-07 15:33:19</book-date>
 </lead>
</leads>
</centah-response>
```

Acknowledge Lead

To acknowledge a *CCNEW* or a *FLOATING* lead, the **acknowledge** action needs to be issued with a corresponding lead id.

Parameter	Description	
_[action]	The name of the API call.	
_[auth_token]	The authentication token.	
lead_id	The ID of the lead you wish to acknowledge	

Sample Request	
http://{systemUrl}/xml.php? <u>[action]=acknowledge&[auth_token]=[token]&lead_id=1234</u>	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Sample Error Message
xml version='1.0' encoding='UTF-8'? <centah-response></centah-response>
<errors></errors>
<pre><error code="1000">This lead was already acknowledged</error></pre> /error>

Upon successful operation the information pertaining to the lead will be returned. The lead information XML will contains all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Quote a Lead

Centah's REST API gives you the ability to enter quote amounts for existing, acknowledged leads by executing the **quote** action.

Parameter	Description	
_[action]	The name of the API call	
_[auth_token]	The authentication token	
lead_id	The ID of the lead you wish to quote	
quote_amount	The dollar amount of the quote	
quote_date	The date of the quote in YYYY-MM-DD	

Sample Request	
http://{systemUrl}/xml.php?_[action]=quote&_[auth_token]=[token]&lead_id=1234"e_amount=199.11"e_date=2007-01-13	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the information pertaining to the lead will be returned, including the newly added quoted details. The lead information XML will contains all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Set Estimate Date

Centah's REST API allows you to set the estimate date for a particular lead via the **estimate** action, which can be performed on all leads in status *NEW*, *IN-PROGRESS* and *UNATTENDED*.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead you wish to set an estimate date for
estimate_slot (optional)	The day range during which the estimate was or will be given. Valid values are: · AM · PM · EV · ALL If no value is provided the value will default to ALL.
estimate_time (optional)	The time of the appointment in HH:MM format, the minutes must be divisible by 15. The value for this field can only be supplied if the estimate_slot is not used, the two fields are mutually exclusive.
estimate_date	The date of the estimate in YYYY-MM-DD

Sample Request
http://{systemUrl}/xml.php?_[action]=estimate&_[auth_token]=[token]&lead_id=1234&
estimate_slot=AM&estimate_date=2007-01-13

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Sample Error Message
xml version='1.0' encoding='UTF-8'? <centah-response></centah-response>
<errors></errors>
<error code="1080">can not estimate lead with status QUOTED</error>

Upon successful operation the information pertaining to the lead will be returned, including the newly added estimate date details. The lead information XML will contains all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Set Callback Date

Centah's REST API allows you to set the callback date for a particular lead via the **callback** action, which can be performed on all leads in status *NEW*, *IN-PROGRESS* and *UNATTENDED*.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead you wish to set a callback date for
callback_slot (optional)	The day range during which the callback was or will be given. Valid values are: · AM · PM · EV · ALL If no value is provided the value will default to ALL.
callback_time (optional)	The time of the appointment in HH:MM format, the minutes must be divisible by 15. The value for this field can only be supplied if the callback_slot is not used, the two fields are mutually exclusive.
callback_date	The date of the callback in YYYY-MM-DD

Sample Request	
http://{systemUrl}/xml.php?_[action]=callback&_[auth_token]=[token]&lead_id=1234&callback_slot=AM&callback_date=2007-01-13	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the information pertaining to the lead will be returned, including the newly added callback date details. The lead information XML will contains all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Set Work Date

Centah's REST API allows you to set the work-date for a particular lead via the **workdate** action, which can be performed on all F&I leads in status *NEW*, *IN-PROGRESS*, *UNATTENDED*, *FALLBACK* and *INCOMPLETE*.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead you wish to set a callback date for
work_slot <i>(optional)</i>	The day range during which the work-date was or will be given. Valid values are: · AM · PM · EV · ALL If no value is provided the value will default to ALL.
work_time (optional)	The time of the appointment in HH:MM format, the minutes must be divisible by 15. The value for this field can only be supplied if the work_slot is not used, the two fields are mutually exclusive.
work_date	The date of the work-date in YYYY-MM-DD

Sample Request	
http://{systemUrl}/xml.php?_[action]=workdate&_[auth_token]=[token]&lead_id=1234work_slot=AM&work_date=2007-01-13	&

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the information pertaining to the lead will be returned, including the newly added work-date details. The lead information XML will contains all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Fetch Cancellation Codes

Centah REST API provides a mechanism for canceling leads, in order to successfully perform this action you must provide a cancellation code indicating the reason behind the cancellation. Since the codes may change from time to time, the REST API provides a mechanism for fetching all valid cancellation codes via **fetch_cancellation_codes** call.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token

Sample Request	
http://{systemUrl}/xml.php?_[action]=fetch_cancellation_codes&_[auth_token]=[token]	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the list of all the cancellation codes will be returned.

Canceling a Lead

Centah REST API provides a mechanism for canceling leads. All leads with the exception of those that have yet to be acknowledged (*CCNEW* or *FLOATING* status) or the ones that are completed (*COMPLETED* status) can be canceled via the **cancel** action.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead you wish to cancel
cancel_id	The ID of the cancellation code you want to set as the cancellation reason.
Optional Fields	
	Optional cancellation details that may help clarify the reason behind the cause of the cancellation. Whenever possible we recommend that this field be provided. The field can contain up to 16kb of text.

Sample Request - No Cancellation Details	
http://{systemUrl}/xml.php?_[action]=cancel&_[auth_token]=[token]&cancel_id=123&lead_id=345	

In instances where cancellation details are provided we recommend that the request be sent via POST rather then GET to avoid the data from being trimmed due to the inherent limitation of URI lengths.

Sample Request - With Cancellation Details
POST /xml.php HTTP/1.1
Host: {systemURL}
Content-Length: 84
_[action]=cancel&lead_id=123&cancel_id=29& cancel_details=abc+123&_[auth_token]=[token]

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the information pertaining to the lead will be returned, including the newly added cancellation details and the status of the lead will change to CANCELED. The lead information XML will contains all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Reinstate Lead

A an existing canceled lead can be re-instated back into the active status via the **reinstate** action that can be executed on all leads in status *CANCELED*.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead you wish to reinstate

Sample Request	
http://{systemUrl}/xml.php?_[action]=reinstate&_[auth_token]=[token]&lead_id=123	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

```
Sample Error Message

<?xml version='1.0' encoding='UTF-8'?>
<centah-response>

<errors>

<error code="1120">Can not reinstate lead with status NEW</error>

</errors>

</centah-response>
```

Upon successful operation the information pertaining to the lead will be returned, the status of the lead will change to the status is was previously in. The lead information XML will contains all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Add Order Note

Centah REST API provides a mechanism for appending notes to existing leads via the **add_note** action. This operation can be successfully performed on all acknowledged and non-canceled orders.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead to which you would like to add a note
note	The note you wish to append. this field can contain up to 16kb of text.
note_time (optional)	Note time

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

To avoid problems caused by URI length limitation it is recommended that transmission be done via POST rather then GET.

Sample Request	
POST /xml.php HTTP/1.1	
Host: {systemURL}	
Content-Length: 88	
[action]=add_note&lead_id=123¬e=customer+requested+pricing+details&_[auth_token]=[token]	

Upon successful operation the information pertaining to the lead will be returned, the new notes field will be modified, with the new value prefixed to the existing notes in addition to the timestamp of the data addition. The lead information XML will contains all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Create Complaint

CLMS supports a complaint functionality whereby complaints can be submitted by customers, management companies etc... The service provider has the ability to create the complaints relating to their leads via the Centah REST API through the **complaint** action.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead to which complaint information is being added and/or appended.
complaint	The text of the complaint you wish to append. this field can contain up to 16kb of text.
status (optional)	Complaint status, the Centah system supports 3 complaint states:
create_date (optional)	Creation date timestamp.
reason_id <i>(optional)</i>	Reason id

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Sample Request	
POST /xml.php HTTP/1.1	
Host: {systemURL} Content-Length: 88	
_[action]=complaint&lead_id=123&complaint=refund+given&_[auth_token]=[token]&status=PEND	ING

Upon successful operation, the id of the complaint and date of creation will be returned.

Update Complaint

CLMS supports a complaint functionality whereby complaints can be updated by customers, management companies etc... The service provider has the ability to update the complaints relating to their leads via the Centah REST API through the **complaint_update** action.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
complaint_id	The ID of the complaint to which new information is being appended.
complaint	The text of the update you wish to append. this field can contain up to 16kb of text.
status	Complaint status, the Centah system supports 3 complaint states: PENDING IN-PROGRESS RESOLVED

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Sample Request
POST /xml.php HTTP/1.1
Host: {systemURL}
Content-Length: 88
_[action]=complaint_update&complaint_id=123&complaint=refund+given&_[auth_token]=[token]&status=RESOLVED

Upon successful operation, the id of the complaint will be returned.

S	ample Response
xml version='1.0' encoding='UTF-8'? <centah-response> <complaint> <id>123</id> </complaint> </centah-response>	

Fetch Employee List

If your CLMS account includes "employee" support, you have the ability to re-route leads between your employees. To facilitate this ability you will need to know which employees are available and what are their ids. This can be accomplished via the **fetch_employee_list** action that will return employee names and ids of all the active employees associated with your account.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token

Sample Request	
http://{systemUrl}/xml.php?_[action]=fetch_employee_list&_[auth_token]=[tol	ren]

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the list of active employee company names and the related ids will be listed.

```
Sample Response

<?xml version='1.0' encoding='UTF-8'?>
    <centah-response>
        <employees>
            <employee id="123">John Smith</code>
            <employee id="456">Widgets Co.</code>
            </employees>
        </centah-response>
```

Employee Re-Route

If your CLMS account includes employee support, you have the ability to re-route acknowledged leads that have not been completed or cancelled between your employees via the **emp_reroute** action.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead to which you would like to add a note
employee_id	The ID of the employee you want to assign this lead to.
note <i>(optional)</i>	The reason explaining the cause of the re-route, this will be automatically appended to the order notes.

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

To avoid problems caused by URI length limitation it is recommended that transmission be done via POST rather then GET.

Sample Request
POST /xml.php HTTP/1.1
Host: {systemURL}
Content-Length: 75
_[action]=emp_reroute&lead_id=123¬e=sample&_[auth_token]=[token]&employee_id=987

Upon successful operation the information pertaining to the lead will be returned, containing the new service provider information and notes detailing the cause of the transfer if there are any. The lead information XML will contains all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Sell a Lead

Centah's REST API gives you the ability to mark *IN-PROGRESS* leads as *SOLD* by indicating the amount of the sale and the scheduled work date for the order via the **sold** action. This action may also be used to update the existing sold amount of an order in the *SOLD* status.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead you wish to mark as sold
sale_sub_total	The pre-tax dollar amount of the sale
sale_federal_tax	The dollar amount of applicable federal taxes such as GST or HST
sale_provincial_tax	The dollar amount of applicable provincial taxes such as PST or QST
work_date	The date on which the work is supposed to commence in YYYY-MM-DD format
work_time (optional)	The time of the appointment in HH:MM format, the minutes must be divisible by 15. The value for this field can only be supplied if the work_slot is not used, the two fields are mutually exclusive.
work_date_slot (optional)	The day range during which the work-date was or will be given. Valid values are: · AM · PM · EV · ALL If no value is provided the value will default to ALL.
work_end_date	The date on which the work is supposed to be completed in YYYY-MM-DD format.
sold_date (optional)	Sold date
date_generated (optional)	Date generated
POs (optional)	P.O. numbers
membership_number (optional)	Membership number
cash_card (optional)	Cash card amount
customer_agreement_name (optional), customer_agreement_extension (optional), customer_agreement_content (optional)	Customer agreement file information
product_ordering_form_name (optional), product_ordering_form_extension (optional), product_ordering_form_content (optional)	Product ordering form file information

Sample Request	
http://{systemUrl}/xml.php?_[action]=sold&_[auth_token]=[token]&lead_id=1234&sale_sub_total=100&	
sale_federal_tax=7&sale_provincial_tax=7&work_date=2007-05-	
22&POs[1]=7777888&membership_number=123456789012&cash_card=55.55	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the information pertaining to the lead will be returned, the status of the lead will change to SOLD and will contain the sale details information. The lead information XML will contains

all available values about the lead, with non-available values no present in the XML feed. See the "get lead" response value for the possible return value.

Fetch Payment Methods

In order to facilitate completion of a lead via the Centah REST API you will be required to indicate the payment method used by the customer to facilitate the transaction. Since the payment methods may change from time to time, **fetch_pay_methods** action is provided that will return a list of all valid payment methods and their respective ids.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token

Sample Request	
http://{systemUrl}/xml.php?_[action]=fetch_pay_methods&_[auth_token]=[token]	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the list of all the active payment methods will be returned.

Complete a Lead

The **complete** action gives you the ability to use Centah's REST API to complete SOLD leads or update an existing completed order details as long as the latter operations is performed within the allowable window (2 calendar days at the present time) as defined by the client (Ex. Home Depot). When a lead is being marked completed the system requires that an itemized list of products and/or services be provided to indicate was precisely was sold to the customer. At least one "item" is required for successful completion of a lead, but there is no limit as to how many more items can be provided.

Parameter	Description
[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead you wish to mark as completed
payment_id	The identifier of a payment method used by the customer to pay for the job.
close_date <i>(optional)</i>	Close date
date_generated (optional)	Date generated flag
membership_number (optional)	Membership number
payment_date (optional)	Payment date
cash_card (optional)	Cash card
file_name <i>(optional)</i> ,	File upload information
file_extension <i>(optional)</i> ,	
file_content <i>(optional)</i>	
Individual item definition that may occur	N times (enumeration of N should start at 0)
description[N]	The name of the item being identified
price[N]	A pre-tax price of the item
provincial_taxes[N]	The dollar amount of the applicable provincial taxes for the given item such as QST or PST.
federal_taxes[N]	The dollar amount of the applicable federal taxes for the given item such as GST or HST.
POs (optional)	P. O. numbers

Due to the complexity of the possible input resultant from a substantial number of items, it is recommended that this type of the request be formed via HTTP POST method.

Sample Request http://{systemUrl}/xml.php?_[action]=complete&_[auth_token]=[token]&lead_id=1234&payment_id=1&de scription[0]=material&price[0]=100.98&provincial_taxes[0]=6.78&federal_taxes[0]=3.22& description[1]=material&price[1]=291.22&provincial_taxes[1]=10.65&federal_taxes[1]=4.35

If there is an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the information pertaining to the lead will be returned, the status of the lead will change to COMPLETED and will contain the completion details. In the event that an update of an already completed lead is being performed, the update operation works in replace mode, whereby all existing data will be replaced with the newly supplied information.

Complete a Lead - Basic

The complete_basic action gives you the ability to use Centah's REST API to complete SOLD leads.

Parameter	Description
_[action]	The name of the API call
_[auth_token]	The authentication token
lead_id	The ID of the lead you wish to mark as completed

Sample Request	
http://{systemUrl}/xml.php?_[action]=complete_basic&_[auth_token]=[token]&lead_id=1234	

If there is an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the information pertaining to the lead will be returned, the status of the lead will change to COMPLETED and will contain the completion details. In the event that an update of an already completed lead is being performed, the update operation works in replace mode, whereby all existing data will be replaced with the newly supplied information.

Action List

Centah XML API gives you the ability to retrieve all work-in-progress leads in the order of priority as defined below if the action list functionality is enabled for your account. This operation trigger-able via the **action_list** action will return all leads that are not either completed or canceled in the following order:

- 1. CCNEW
- 2. FLOATING
- 3. UNATTENDED
- 4. FALLBACK
- 5. NEW
- 6. IN-PROGRESS
- 7. SOLD

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.

Sample Request
http://{systemUrl}/xml.php?_[action]=action_list&_[auth_token]=[token]

```
Sample Response
<?xml version='1.0' encoding='UTF-8'?>
 <centah-response>
       <leads>
              <lead>
                      <id>24791</id>
                      <status>CCNEW</status>
                      <book-date>2015-07-07 15:29:55</book-date>
              </lead>
              <lead>
                      <id>24792</id>
                      <status>CCNEW</status>
                      <br/><book-date>2015-07-07 15:33:19</book-date>
              </lead>
       </leads>
 </centah-response>
```

My Info

Centah XML API gives you the ability to retrieve the information about your company stored in the Centah system via the **fetch_my_info** action. It is recommended that you periodically retrieve this information to make sure it is up to date, you will have the ability to update the information by sending updated details to the Centah support team via the **fetch_my_info** action.

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.

Sample Request	
http://{systemUrl}/xml.php?_[action]=fetch_my_info&_[auth_token]=[token]	

```
Sample Response
<?xml version="1.0" encoding="UTF-8"?>
<centah-response>
      <company-info>
              <id>49667</id>
              <company>Test Company</company>
              <contact-person>John Smith</contact-person>
              <language>EN</language>
              cprimary-phone>
                     <phone1>1231231234</phone1>
                     <phone1_ext/>
              </primary-phone>
              <email>1@1.com</email>
              <address>
                     <city>Toronto</city>
                     ovince>ON
                     <postal-code>A1B2C3</postal-code>
                     <street>123 Abc Street</street>
              </address>
      </company-info>
</centah-response>
```

Update My Info

The **update_my_info** action gives you the ability to use Centah REST API to submit updated information to Centah support team. The submitted information will be reviewed by our support staff and updated as needed, support team will send an e-mail confirming that the update was performed successfully. A successful submission of the data via the API call does not indicate that the information will be updated in real-time.

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.
company <i>(optional)</i>	The company name
contact_person (optional)	The full name (first & last) of the primary contact person for the company
Language <i>(optional)</i>	The language preference for when you are logged in into the site. Valid values are EN for English or FR for French
primary_phone <i>(optional)</i>	The primary phone # at which the company personnel can be reached at. Transfered calls from the call center will be routed to this #. Format: 1119997777
secondary_phone (optional)	Alternate contact number for the company. Format: 1119997777
cell (optional)	A mobile (cellular) phone number that can be used to reach someone at the company in the event of an emergency. Format: 1119997777
fax (optional)	A fax number of the company. Format: 1119997777
email	An e-mail address for the company, CCECs and any other notifications such as the ones for New Leads and Red Flags will be sent here.
street_address <i>(optional)</i> , city <i>(optional)</i> , province <i>(optional)</i> , postal <i>(optional)</i>	The full mailing address of the company, street name, city/town, postal code, province

Sample Request

http://{systemUrl}/xml.php?_[action]=update_my_Info&_[auth_token]=[token]&company=Acme%20Inc.&contact_person=Mike%20Smith&language=EN&phone=1234567890&fax=1234567891&cell=1234567891&email=acme@acme.com

	Sample Response
<pre><?xml version='1.0' encoding='UTF-8'?></pre>	
<centah-response></centah-response>	
<ack>OK</ack>	

Get My Stores Info

Centah XML API gives you the ability to retrieve a list of all the client stores where you are providing one or more services through the **get_my_stores** call.

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.

```
Sample Request

http://{systemUrl}/xml.php?_[action]=get_my_stores&_[auth_token]=[token]
```

Get Store Info

If you would like to retrieve full details about a particular store where you are performing a service you can do so by using **get_store** Centah REST API call. The <users> block of the API call will provide names and e-mail address of all management users attached to this store (MSM, SMS, ZSM and Store Manager).

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.
	The id of the store for which you would like to retrieve information for.

Sample Request	
http://{systemUrl}/xml.php?_[action]=get_store&_[auth_token]=[token]&id=123	

```
Sample Response
<?xml version="1.0" encoding="UTF-8"?>
<centah-response>
<store>
 <store-no>7008</store-no>
 <location>HAMILTON</location>
 <store-manager>Keith Dobson</store-manager>
 <phone>9055619755</phone>
 <fax>9055616641</fax>
 <email></email>
 <address>
  <street>350 Centennial Parkway</street>
  <city>Hamilton</city>
  ovince>ON
  <postal>L8E2X4</postal>
 </address>
 <users>
   <first-name>Jane</first-name>
   <last-name>Smith/last-name>
   <email>email@user.com</email>
   <role>ZSM</role>
  </user>
 </users>
</store>
</centah-response>
```

Update Customer Details

The **update_customer** action gives you the ability to use Centah REST API to update customer details in relation to one of the leads that is assigned to your account. The operation can only be performed for acknowledged leads that are not marked as *SOLD*, *COMPLETED*, *CANCELED*.

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.
lead_id	The id of the lead the customer record you wish to update.
first_name	The first name of the customer
last_name	The last name of the customer
address	The street address of the customer
address_street_number	The house number portion of the street address for the customer
city	The city of residence for the customer
province	The province abbreviation where the customer lives. <i>Ex. ON</i>
postal_code	The postal code of the customer, without any spaces, must be all caps. Ex. L4B4V1
primary_phone	The ideal phone number where the customer can be reached at. <i>Format: 1119997777</i>
primary_phone_extension (optional)	The optional extension for the primary phone number.
work_phone <i>(optional)</i>	The alternate phone number where the customer can be reached at. <i>Format: 1119997777</i>
work_phone_extension (optional)	The optional extension for the secondary phone number.
cell_phone <i>(optional)</i>	The optional cell phone number at which the customer can be reached at. <i>Format: 1119997777</i>
email <i>(optional)</i>	The e-mail address where the customer can be reached at.
title	The name prefix for the customer. Valid values are: · Mr. · Mrs. · Miss · Ms. · Dr.

Due to the potentially large size of the request, to avoid pruning of data due to HTTP GET method limitation, we recommend that the data be transmitted via HTTP POST mechanism.

Sample Request http://{systemUrl}/xml.php?_[action]=update_customer&_[auth_token]=[token]&id=123&first_name=Joe&l ast_name=Smith&title=Mr.&address=1%20Road%20Ave.&city=Toronto&province_abbr=ON&primary_ph one=8887779999&email=customer@customers.com

Upon successful execution of the API call the full, updated details of the customer will be returned.

```
<?xml version="1.0" encoding="UTF-8"?>
<centah-response>
 <customer id="544755">
  <title>Mr.</title>
  <first-name>Joe</first-name>
  <last-name>Smith</last-name>
  <address>
   <city>Toronto</city>
   ovince>ON
   <postal-code>X0X0X0</postal-code>
   <street>1 Road</street>
  </address>
  primary-phone>
   <phone>
    <phone>8887779999</phone>
    <ext></ext>
   </phone>
  <work-phone>
   <phone>
    <phone>9997778888</phone>
    <ext>234</ext>
   </phone>
  </work-phone>
  <email>customer@customers.com</email>
 </customer>
</centah-response>
```

Find Lead

The **find_lead** action gives you the ability to use Centah REST API to locate leads that have been assigned to your account. The action supports any number of filters that can either be used individually or in unison with any other filters. The two restrictions that exist are that at least one filter parameter must be present and the result set will not be allowed to exceed 1000 records. In the event more then 1000 records are available, only the first 1000 records will be returned.

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.
ld (optional)	The id the lead you wish to locate.
customer (optional)	The keyword for the customer record (Firstname, Lastname, any phone)
phone <i>(optional)</i>	Phone
store (optional)	The id of the store that the lead belongs to
service (optional)	The id of the service being performed
status (optional)	Order status, acceptable values are:
Date Based Queries - when searching by date a	Il date fields are required
date_type (optional)	The type of date you are searching by, acceptable values are: ·book_date - The date the lead was booked on ·est_date - Estimate date ·cb_date - Callback date ·sold_date - The date the lead was sold on ·close_date - The date the lead was completed on ·followup_date - Followup date
start_date (optional)	The starting date for the search in YYYY-MM-DD format
end_date (optional)	The ending date for the search in YYYY-MM-DD format

Sample Request	
http://{systemUrl}/xml.php?_[action]=find_lead&_[auth_token]=[token]&store=123	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the list of matching lead ids will be returning in conjunction with meta information relating to how many results were found

```
Sample Response
<?xml version='1.0' encoding='UTF-8'?>
<centah-response>
       <leads>
               <lead>
                      <id>24449</id>
                      <br/><book-date>2014-10-30 00:43:54</book-date>
                      <status>UNATTENDED</status>
                      <first-name>tina</first-name>
                      <last-name>bell</last-name>
                      <phone1>1231231234</phone1>
               </lead>
       </leads>
       <results>
               <records-found>6</records-found>
               <records-returned>6</records-returned>
       </results>
</centah-response>
```

In typical cases, the values of **records-found** and **records-returned** elements will match, however in instances where only a partial record set is returned due to the 1000 record constraint imposed by the system the **records-returned** will indicate how many records were actually returned while, **records-found** will represent the total number of matching results in the Centah system.

Get Lead

The **get_lead** action can be used to retrieve the complete information associated with a lead in the Centah System.

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.
lead_id	The id of the lead you wish to retrieve.

Sample Request	
http://{systemUrl}/xml.php?_[action]=get_lead&_[auth_token]=[token]&lead_id=123	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

```
Sample Response
<?xml version='1.0' encoding='UTF-8'?>
 <centah-response>
    <lead>
       <status>COMPLETED</status>
       <br/><book-date>2008-01-11 16:47:03.846314</book-date>
       <advertising-code>SP Entered</advertising-code>
       <service>Some Service
       <estimate-date slot="ALL">2008-01-12</estimate-date>
       <callback-date slot="ALL">2008-01-12</callback-date>
       <work-date slot="ALL">2008-01-12</work-date>
       <service>Some Service
       <appointment-id>2012-01-01 10:00 - 12:00</appointment>
       <notes>some note here</notes>
       <hold-until>2013-01-01</hold-until>
       {customer component}
       {booking information component}
       {quote component}
       {sold component}
       {completed component}
       {canceled component}
    </lead>
 </centah-response>
```

The information regarding the employee-id field is conditional upon the employee functionality being utilized by your account.

Customer Information Component

```
customer id="544755">
 <title>Mr.</title>
 <first-name>Joe</first-name>
 <last-name>Smith/last-name>
 <address>
  <city>Toronto</city>
  ovince>ON
  <postal-code>X0X0X0</postal-code>
  <street>Road</street>
  <street-number>1<street-number>
 </address>
 primary-phone>
  <phone>
   <phone1>8887779999</phone1>
   <phone1_ext></phone1_ext>
  </phone>
 </primary-phone>
 <work-phone>
  <phone>
   <phone2>9997778888</phone2>
   <phone2_ext>234</phone2_ext>
  </phone>
 </work-phone>
 <email>customer@customers.com</email>
 <distance-from-store unit="km">5.28</distance-from-store>
</customer>
```

Booking Information Component

```
<booking-info>
  <source>CC</source>
  <call-center-agent>John Doe</call-center-agent>
  <call-center-time unit="seconds">210</call-center-time>
</booking-info>
```

Complaints Component

```
<complaints>
<complaint id="31778">
<complaint id="31778">
<date>2008-03-06 09:56:33.223576</date>
<status>RESOLVED</status>
<created-by>John Doe</created-by>
<notes><![CDATA[service was performed poorly]]></notes>
</complaint>
</complaints>
```

Quote Component

```
<quote>
  <date>2008-01-12</date>
  <amount>200.00</amount>
</quote>
```

Sold Component

```
<sold>
<sale-date>2008-02-25</sale-date>
<work-date>2007-01-01</work-date>
<work-end-date>2007-01-30</work-end-date>
<sub-total>123.00</sub-total>
<federal-tax>3.00</federal-tax>
<provincial-tax>7.00</provincial-tax>
<total>133.00</total>
</sold>
```

```
Completed Component
<completed>
 <completion-date>2008-02-25</completion-date>
 <payment-method id="1">Cash</payment-method>
 <sub-total>134.00</sub-total>
 <federal-tax>5.00</federal-tax>
 cprovincial-tax>2.00/provincial-tax>
 <total>141.00</total>
 <items>
    <item id="0">
       <name>labour</name>
       <sub-total>134</sub-total>
       <federal-tax>5</federal-tax>
       cprovincial-tax>
    </item>
  </items>
</completed>
```

Cancelled Component

```
<canceled>
<type id="29">Estimate only</type>
<date>2008-02-22</date>
</canceled>
```

Outstanding Complaints

Centah XML API gives you the ability to retrieve a list of all the outstanding complaints (complaints with an IN-PROGRESS or PENDING status) via the **outstanding_complaints** action.

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.

```
Sample Request

http://{systemUrl}/xml.php?_[action]=outstanding_complaints&_[auth_token]=[token]
```

```
Sample Response
<?xml version="1.0" encoding="UTF-8"?>
<centah-response>
 <complaints>
    <complaint id="31774">
       <date>2008-02-06 19:18:26.899052</date>
       <status>IN-PROGRESS</status>
       <created-by>First Customer/created-by>
       <notes><![CDATA[complaint #1]]></notes>
       <lead-id>1808510</lead-id>
    </complaint>
    <complaint id="25560">
       <date>2007-04-03 10:55:32</date>
       <status>PENDING</status>
       <created-by>Second Customer</created-by>
       <notes><![CDATA[complaint #2]]></notes>
       <lead-id>1677911</lead-id>
    </complaint>
 </complaints>
</centah-response>
```

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Ping

The authentication token assigned by the auth action will expire within 1 hour due to inactivity. If you are unsure as to whether the current token is valid or not you can issue a ping action that will return the status of your existing token. If the token is valid *OK* response will be returned and if it had already expired, *EXPIRED* token will be returned.

Parameter	Description
[action]	The name of the API call.
_[auth_token]	The authentication token.

Sample Request
http://{systemUrl}/xml.php?_[action]=ping&_[auth_token]=[token]

	Sample Response
<pre><?xml version='1.0' encoding='UTF-8'?></pre>	
<centah-response></centah-response>	
<status>OK</status>	

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Get Service List

The **get_service_list** action allows to retrieve a list of all the services currently assigned to your account and their details.

Parameter	Description
_[action]	The name of the API call.
_[auth_token]	The authentication token.

```
Sample Request

http://{systemUrl}/xml.php?_[action]=get_service_list&_[auth_token]=[token]
```

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Fetch List of Files

The file_get_list action allows you to retrieve a list of all files attached to a lead.

Parameter	Description
_[action]	The name of the API call: file_get_list
_[auth_token]	The authentication token
lead_id	The ID of the lead for which you would like to get list of files

Sample Request
http://{systemUrl}/xml.php?_[action]=file_get_list &_[auth_token]=[token]&lead_id=123

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the list of attached files will be listed.

Get File

The **file_get** action allows you to retrieve a file attached to the lead.

Parameter	Description
_[action]	The name of the API call: file_get_list
_[auth_token]	The authentication token
lead_id	The ID of the lead for which you would like to get the file
file_id	The ID of the file which you would like to get

Sample Request
http://{systemUrl}/xml.php?_[action]=file_get&_[auth_token]=[token]&lead_id=123&file_id=456

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the base64 encoded file content will be returned.

	Sample Response
<pre><?xml version="1.0" encoding="UTF-8"?> <centah-response> <file>VGVzdCB0eHQgZmlsZQ==</file> </centah-response></pre>	

Delete File

The **file_delete** action allows you to delete a file attached to the lead.

Parameter	Description
_[action]	The name of the API call: file_get_list
_[auth_token]	The authentication token
lead_id	The ID of the lead for which you would like to delete the file
file_id	The ID of the file which you would like to delete

Sample Request
http://{systemUrl}/xml.php?_[action]=file_delete&_[auth_token]=[token]&lead_id=123&file_id=456

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the "OK" message will be returned.

Sample Response
xml version="1.0" encoding="UTF-8"? <centah-response> <file>OK</file> </centah-response>

Fetch File Catalogs

The **fetch_file_catalogs** action allows you to retrieve a list of catalogs into which uploaded files can be placed. This action will be available only in the event your user account has the ability to upload files.

Parameter Description	
[action] The name of the API call: file_get_list	
[auth_token] The authentication token	

Sample Request
http://{systemUrl}/xml.php?_[action]=fetch_file_catalogs &_[auth_token]=[token]

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the list of attached files will be listed.

```
</mul>

<
```

Fetch Hold Reasons

The **fetch_hold_reasons** action allows you to retrieve a list of hold reasons that can be applied to orders. This action will be available only in the event your user account has the ability to place orders on hold.

Parameter	Description	
_[action]	The name of the API call: fetch_hold_reasons	
_[auth_token]	The authentication token	

Sample Request
http://{systemUrl}/xml.php?_[action]=fetch_hold_reasons &_[auth_token]=[token]

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the list of attached files will be listed.

Set Hold Reason

The **set_hold_reason** action allows you to put a lead on hold, making it not subject to red-flags for the duration of the hold. This action will be available only in the event your user account has the ability to place orders on hold.

Parameter	Description	
_[action]	The name of the API call: set_hold_reasons	
_[auth_token]	The authentication token	
lead_id	Lead #	
end_date	Required hold end date in YYYY-MM-DD format	
	Optional notes that can be used to indicate why the order is being place on hold	
	Required hold reason id (obtained via fetch hold reasons API) to indicate the reason why the order is placed on hold	

Sample Request		
http://{systemUrl}/xml.php?_[action]=set_hold_reasons&lead_id=123&end_date=2013-01- 01¬es=Optional%20Notes&hold_reason_id=123&_[auth_token]=[token]		

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the information pertaining to the lead will be returned, the lead information will now contain a populated hold-until attribute indicating the date until which the order

Upload File

The **file_upload** action allows you to upload a file attached to the lead.

Parameter	Description	
_[action]	The name of the API call: file_get_list	
_[auth_token]	The authentication token	
lead_id	The ID of the lead for which you would like to upload the file	
file_name	The name of the file which you would like to upload	
file_extension	The extension of the file which you would like to upload	
file_content	The base64 encoded content file which you would like to upload	
catalog_id (optional)	Catalog ID to assign the uploaded file to	

To avoid problems caused by URI length limitation it is recommended that transmission be done via POST rather then GET.

Sample Request
POST /xml.php HTTP/1.1 Host: {systemURL} Content-Length: 123 _[action]=file_upload&_[auth_token]=[token]&lead_id=123&file_name=test&file_extension=txt&file_conte nt=VGVzdCB0eHQgZmlsZQ==

In the event of an error the system will return a response containing <errors> element containing one or more child elements <error> detailing the nature of the error(s) that were triggered.

Upon successful operation the ID of the uploaded file will be returned.

	Sample Response
<pre><?xml version="1.0" encoding="UTF-8"?> <centah-response> <file_id>537</file_id> </centah-response></pre>	

Error codes

Code	Operation	Description
4000	[Any Operation]	Invalid XML API action requested.
4010	[Any Operation]	Permission denied to execute XML API action
4020	[Any Operation]	State expired
4030	[Any Operation]	Missing Required XML API action name
4040	[Any Operation]	Invalid rendering format requested
3000	[Any operation with input data]	Standard data validation error.
2000	Outstanding Complaints	Too many complaints to display. (limit is 10000)
2010	Action list	Too many leads to display. (limit is 4000)
2020	Get New Leads	Too many leads to display. (limit is 5000)
1000	Acknowledge	Impossible to acknowledge the lead in it's current status
1010	Authentication	Invalid Authentication Information
1020	Add note	Impossible to add note
1030	Add Callback date	Impossible to add callback date
1040	Add Callback date	Callback Date is earlier than Book Date
1050	Cancel lead	Impossible to cancel lead
1060	Cancel lead	Unknown cancellation code provided
1070	Employee Reroute	Impossible to reroute lead
1080	Add Estimate date	Impossible to add estimate date
1090	Add Estimate date	Estimate Date is earlier than Book Date
1091	[Any Operation]	Time and Slot values are exclusive, use one or the other
1092	[Any Operation]	Time value must be in HH:MM format, with minutes in 15 min increments
1100	Add Quote	Impossible to quote lead
1110	Add Quote	Quote Date is earlier than Book Date
1120	Reinstate	Impossible to reinstate lead
1130	Sell	Impossible to sell lead in it's current status
1131	Sell	Invalid Federal tax rate
1132	Sell	Invalid Provincial tax rate
1133,11 34,1135	Sell	Customer agreement file related errors
1136,11 37,1138	Sell	Product ordering form file related errors

1140	Update My Info	Can not create a ticket
1150	Complete a lead (Basic)	Cannot complete lead
1151	Complete a Lead	Invalid Federal tax rate
1152	Complete a Lead	Invalid Provincial tax rate
1153, 1154, 1155	Complete a Lead	POs related errors
1156, 1159, 1160	Complete a Lead	Membership number related errors
1157	Complete a Lead	Cannot complete a lead without payment date
1161, 1162	Complete a Lead	Cash card related errors
1163, 1164, 1165, 1166	Complete a Lead	File upload related errors
1180	Update Customer Details	Cannot modify customer information
1190	Update/Create Complaint	Cannot add complaint. Invalid action/Permission denied
1191	Update/Create Complaint	Can not update complaint. Invalid action/Permission
5000	File Upload	Can not upload file
5010	Get List of Files	Do not have permissions to see the list of files
5020	Get File	Do not have permissions to get the file
5030	Get File	File does not exists
5040	Delete file	Do not have permissions to delete the file
1160	Add Work Date	Not possible to add a work date
1170	Add Work Date	Work date is earlier then the book date
1180	Update Customer	Customer information cannot be modified
5050	File Upload	Invalid Catalog ID
6001	Set Lead on Hold	Hold end date must be in the future
6002	Set Lead on Hold	Unknown hold reason code provided, please fetch hold reason codes before use
6003	Set Lead on Hold	Hold is too set for too long of a period
6004	Set Lead on Hold	This lead is already on hold
6005	Set Lead on Hold	User is not permitted to Put this Lead on Hold