Internode Customer Webtools API Specification 1.5

Abstract

This document provides the necessary information to interface to the Internode customer webtools API.

Security

All transmissions to the service are via HTTPS. All authentication is via HTTP basic auth, and all requests and form parameters are passed using GET only.

Overview

The service provides a RESTful interface to service and usage information. All output is in XML format.

Authentication

Upon each request to the service the client must send authentication details. The customers username and password are submited via HTTP basic auth.

The realm of the authentication is `internode-api`

Request Types

To support various different types of information being returned, there are several different requests that a client can perform to get the users information.

Service Listing

To get a list of services available in the usage meter, perform a GET request to

`https://customer-webtools-api.internode.on.net/api/v1.5/`

This will return an XML list of services like:

```
<internode>
  <api>
    <services count="1">
      <service type="$(SERVICE_TYPE)" href="/api/v1.5/$(SERVICE_ID)">$(SERVICE_ID)</service>
    </services>
  </api>
</internode>
```

REF	Desciption	Example, Type or Values
SERVICE_TYPE	The type of service	`Personal_ADSL`
SERVICE_ID	The unique identifier of the service	`1234567`

The HREF attribute is the link to get extra information for the service

The services types `Personal_ADSL` and `NodeMobile` are supported.

Please note that whilst we will generally keep the fields standardised between services, they may change slightly. Please either account for this in your application or only fetch service types that you are

expecting.

Service Resources Listing

If you follow the HREF attribute listed in the service listing section you will get a list of resources associated with that service

```
https://customer-webtools-api.internode.on.net/api/v1.5/$(SERVICE_ID)
```

This will return XML formatted data.

```
<internode>
  <api>
    <service type="$(SERVICE_TYPE)">$(SERVICE_ID)</service>
    <resources count="3">
      <resource type="history" href="/api/v1.5/$(SERVICE_ID)/history">history</resource>
      <resource type="usage" href="/api/v1.5/$(SERVICE_ID)/usage">usage</resource>
      <resource type="service" href="/api/v1.5/$(SERVICE_ID)/service">service</resource>
    </resources>
  </api>
</internode>
```

Service Type Details

Personal_ADSL

Personal_ADSL will display usage for all ADSL type services, this includes Home ADSL, SOHO ADSL, Business ADSL, Wireless DSL and Easy Broadband.

History

This will return the usage history associated with service being queried.

```
https://customer-webtools-api.internode.on.net/api/v1.5/$(SERVICE_ID)/history
```

There are also extra form parameters you can pass to get extra information about the service

param	description	Example, Type or Values
start	date to request usage history from	`YYYY-MM-DD` defaults to 1 year ago
stop	date to request usage history to	`YYYY-MM-DD` defaults to today
verbose	requests extra information	`1` requests extra information
count	number of days usage to get from stop date	`1`

By default a history request will only return the last year of usage unless the request is altered with the *start* and *stop* parameters. *verbose* is set to `0` be default.

Will return xml data in the following format

```
<internode>
  <api>
    <service type="$(SERVICE_TYPE)" request="history">$(SERVICE_ID)</service>
    <usagelist>
      <usage day="$(DATE)">
        <traffic direction="up" name="metered" unit="bytes">$(METERED_BYTES_UP)</traffic>
        <traffic direction="down" name="metered" unit="bytes">$(METERED_BYTES_DOWN)</traffic>
        <traffic direction="up" name="unmetered" unit="bytes">$(UNMETERED_BYTES_UP)</traffic>
        <traffic direction="down" name="unmetered" unit="bytes">$(UNMETERED_BYTES_DOWN)</traffic>
        <traffic name="total" unit="bytes">$(TOTAL_BYTES)</traffic>
      </usage>
```

```
...
      <usage day="$(DATE)">
        <traffic direction="up" name="metered" unit="bytes">$(METERED_BYTES_UP)</traffic>
        <traffic direction="down" name="metered" unit="bytes">$(METERED_BYTES_DOWN)</traffic>
        <traffic direction="up" name="unmetered" unit="bytes">$(UNMETERED_BYTES_UP)</traffic>
        <traffic direction="down" name="unmetered" unit="bytes">$(UNMETERED_BYTES_DOWN)</traffic>
        <traffic name="total" unit="bytes">$(TOTAL_BYTES)</traffic>
      </usage>
    </usagelist>
  </api>
</internode>
```

REF	Description	Example, Type or Values
DATE	The date that the contained traffic information is for	`YYYY-MM-DD`
METERED_BYTES_UP	Amount of data transferred from metered sites to the service, only returned when *verbose* is set to `1`	bytes
METERED_BYTES_DOWN	Amount of data transferred to metered sites from your service, only returned when *verbose* is set to `1`	bytes
UNMETERED_BYTES_UP	Amount of data transferred from unmetered sites to your service, only returned when *verbose* is set to `1`, this is an optional field so won't always be present	bytes
UNMETERED_BYTES_DOWN	Amount of data transferred to unmetered sites from your service, only returned when *verbose* is set to `1`, this is an optional field so won't always be present	bytes
TOTAL_BYTES	Total bytes towards your quota for that day	bytes

Usage

This will return the current usage value towards the user's quota for their usage period.

```
https://customer-webtools-api.internode.on.net/api/v1.5/$(SERVICE_ID)/usage
```

Will return xml data in the following format

```
<internode>
  <api>
    <service type="$(SERVICE_TYPE)" request="usage">$(SERVICE_ID)</service>
    <traffic name="metered" unit="bytes">$(METERED_BYTES)</traffic>
    <traffic name="unmetered" unit="bytes">$(UNMETERED_BYTES)</traffic>
    <traffic name="total" rollover="$(ROLLOVER_DATE)" plan-interval="$(ROLLOVER_INTERVAL)"
             quota="$(QUOTA)" unit="bytes">$(CURRENT_QUOTA)</traffic>
  </api>
</internode>
```

REF	Desciption	Example, Type or Values
ROLLOVER_DATE	The date the quota next gets rolled over	`YYYY-MM-DD`
ROLLOVER_INTERVAL	The period that the quota is valid for	`Monthly` or `Quarterly`
CURRENT_QUOTA	The amount of data that has been used towards quota	bytes
METERED_BYTES	Amount of data to or from metered sites, this is an *optional field so won't always be displayed*	bytes

UNMETERED_BYTES	Amount of data to or from unmetered sites, this is an *optional field so won't always be displayed*	bytes
QUOTA	The amount of data in the plan quota	bytes

Service

This will return information specific to the service being queried.

```
https://customer-webtools-api.internode.on.net/api/v1.5/$(SERVICE_ID)/service
```

Will return xml data in the following format

```
<internode>
  <api>
    <service type="$(SERVICE_TYPE)" request="service">
      <id>$(SERVICE_ID)</id>
      <username>$(USERNAME)</username>
      <quota units="bytes">$(QUOTA)</quota>
      <plan>$(PLAN_NAME)</plan>
      <carrier>$(CARRIER)</carrier>
      <speed>$(SPEED)</speed>
      <usage-rating>$(RATING)</usage-rating>
      <rollover>$(ROLLOVER_DATE)</rollover>
      <excess-cost units="aud">$(EXCESS_COST)</excess-cost>
      <excess-charged>$(EXCESS_CHARGED)</excess-charged>
      <excess-shaped>$(EXCESS_SHAPED)</excess-shaped>
      <excess-restrict-access>$(EXCESS_RESTRICT_ACCESS)</excess-restrict-access>
      <plan-interval>$(ROLLOVER_INTERVAL)</plan-interval>
      <plan-cost units="aud">$(PLAN_COST)</plan-cost>
    </service>
  </api>
</internode>
```

REF	Desciption	Example, Type or Values
USERNAME	The Internode username associated with the service	`username@internode.on.net`
QUOTA	The amount of data in the plan quota	`bytes`
PLAN	Name of the plan the customer is subscribed to	`HOME-Easy-Broadband`
CARRIER	The underlying carrier supplying the ADSL service	`Agile` , `Optus` , `Telstra`

SPEED	The speed of the service	`256 Kbits/sec`
		`512 Kbits/sec`
		`SDSL 512 Kbits/sec`
		`1.5 Mbits/sec`
		`8 Mbits/sec`
		`24 Mbits/sec`

RATING	How data usage gets counted towards the quota	`down` for download plans or `up+down` for upload and download plans
EXCESS_CHARGED	If the service is charged for usage beyond quota	`yes` or `no`
EXCESS_SHAPED	If the service is shaped when usage is beyond quota	`yes` or `no`
EXCESS_RESTRICT_ACCESS	If the service has it's access restricted when beyond quota	`yes` or `no`

EXCESS_COST	Hoy much the customer is charged for each megabyte beyond quota, only present when EXCESS_CHARGED is set to yes	cents per megabyte
ROLLOVER_DATE	The date when the quota is rolled over	YYYY-MM-DD
ROLLOVER_INTERVAL	The period the user is charged for access	Monthly or Quarterly

NodeMobile

NodeMobile will display usage and other service information for a NodeMobile Data service.

History

History for NodeMobile is identical to Personal_ADSL

Usage

Usage for NodeMobile is identical to Personal_ADSL

Service

This will return information specific to the service being queried.

Compared to Personal_ADSL the only difference here is that SPEED is replaced by SIM.

```
https://APIHOST/api/v1.5/$(SERVICE_ID)/service
```

Will return xml data in the following format

```
<internode>
  <api>
    <service type="$(SERVICE_TYPE)" request="service">
      <id>$(SERVICE_ID)</id>
      <username>$(USERNAME)</username>
      <quota units="bytes">$(QUOTA)</quota>
      <plan>$(PLAN_NAME)</plan>
      <sim>$(SIM)</sim>
      <carrier>$(CARRIER)</carrier>
      <usage-rating>$(RATING)</usage-rating>
      <rollover>$(ROLLOVER_DATE)</rollover>
      <excess-cost units="aud">$(EXCESS_COST)</excess-cost>
      <excess-charged>$(EXCESS_CHARGED)</excess-charged>
      <excess-shaped>$(EXCESS_SHAPED)</excess-shaped>
      <excess-restrict-access>$(EXCESS_RESTRICT_ACCESS)</excess-restrict-access>
      <plan-interval>$(ROLLOVER_INTERVAL)</plan-interval>
      <plan-cost units="aud">$(PLAN_COST)</plan-cost>
    </service>
  </api>
</internode>
```

REF	Desciption	Example, Type or Values
USERNAME	The Internode username associated with the service	username@internode.on.net
QUOTA	The amount of data in the plan quota	bytes
PLAN	Name of the plan the customer is subscribed to	NodeMobile-Data-Value

CARRIER	The underlying carrier supplying the NodeMobile service	`Agile`, `Optus`, `Telstra`
SIM	The unique SIM card identifier for this NodeMobile service	`01234567890123`
RATING	How data usage gets counted towards the quota	`down` for download plans or `up+down` for upload and download plans
EXCESS_CHARGED	If the service is charged for usage beyond quota	`yes` or `no`
EXCESS_SHAPED	If the service is shaped when usage is beyond quota	`yes` or `no`
EXCESS_RESTRICT_ACCESS	If the service has it's access restricted when beyond quota	`yes` or `no`
EXCESS_COST	Hoy much the customer is charged for each megabyte beyond quota, only present when EXCESS_CHARGED is set to `yes`	cents per megabyte
ROLLOVER_DATE	The date when the quota is rolled over	`YYYY-MM-DD`
ROLLOVER_INTERVAL	The period the user is charged for access	`Monthly` or `Quarterly`

Errors

Generic Errors

On an error from the service, the service will return a 500 HTTP status with XML content of the following format:

```
<error>
  <msg>$(MESSAGE)</msg>
</error>
```

REF	Desciption	Example, Type or Values
MESSAGE	A message describing the error	`Textual error message will appear here`

Authentication Error

On an authentication error a HTTP status of 401 is returned, with no document body.

Notifications

Optionally included in any of the XML messages returned by the service is a 'notify' element.

```
<internode>
  <api>
    <notify displaytouser='$(DISPLAY_TYPE)'>
      <ref>$(REFERENCE)</ref>
      <msg>$(MESSAGE)</msg>
    </notify>

    ...

  </api>
</internode>
```

REF	Desciption	Example, Type or Values
DISPLAY_TYPE	This is either *optional* where the message can be displayed to the end user, or *mandatory* where the message must be displayed to the end user via a notification bubble, alert, growl notification, banner text, etc. Mandatory messages should be displayed in a way that gets the users attention.	`optional` or `mandatory`
REFERENCE	A unique reference code that can be used to determine if the user has already seen this message	reference number
MESSAGE	A message describing the error	free form text

Other important notes and requirements

Unmetered Traffic

The current version does not yet provide explicit information on traffic flow to unmetered sites. Even though it is in the spec.

Because of the way our current usage system works, unmetered traffic is initially counted in the total quota, then 'unwound' sometime later. (usually within an hour), please account for this in your application.

Request Frequency

Do not request data more than once per hour. There is no point as the relevant systems are only updated once per hour. Further requests within the hour receive cached data, and place unnecessary load on Internode's servers.

HTTP User Agent

You *must* configure your software to provide a HTTP User Agent. This must be the name of your software, followed by a version number. This will allow Internode to track the popularity of software, as well as enable us to easily track down and isolate potential issues.

The format of the user agent must be:

```
UsageMeterName/0.00 (other details)
```

Where 0.00 is the version number and the detail within the parentheses can be anything you like, perhaps your name, or a contact email address, or operating system information. The UsageMeterName should not contain any spaces or other characters. To separate words, capitalise the first letter as per the example.

This information is purely to allow Internode to track users using our APIs and make it easier for us to contact you in the event that we spot an issue with your software.

Demo Interface

If you want to see what it looks like "in the real world", hit the script in your web browser. We recommend using Firefox to do so, then you'll see the XML output in a nice format.

Future functionality, additional XML output

Internode may add additional functionality, output, attributes or options to the XML feeds over time,

please design for this in your software. **Ensure that your software can handle receiving additional XML information or options without a version number change.**

We will not change the version number if we add new services or new information.

We will change the version number if we alter existing attributes or remove them.

There will be a grace period before older versions are retired. That grace period will be specified in the announcement of a new version.

Other notes

- Listing of your application on the Internode website is *not guaranteed* and is subject to approval and at the discretion of Internode. More info below.
- Internode are planning on writing our own public applications in the future, indeed we already have our own in-house iPhone and iPod touch usage meter applications. We won't stop you from making your own usage meters for the same platforms that we write for, however we would like to advise that we are looking at doing this, so you don't get offended if we do. :)
- If your usage meter software is open source, please make an explicit note at the top of your file(s) with text similar to this: "If you wish to create your own usage meter interface, do not copy the interface from this program, please contact Internode via http://www.internode.on.net/contact/support/ for the API document" - we'd like people to contact us directly so we can record their details and provide them with updates in the future when necessary.

Other tools for your use

The following tools are also available at the url https://customer-webtools-api.internode.on.net for your use.

You should only use tools at this URL within your application. Please do not screen-scrape other parts of our website.

In the future, these tools will be integrated into the XML API.

Show My Spam Rate

This tool reads the IP address from which it is being requested (not necessarily the IP address of the service) and will provide this IP address back, as well as whether any email rate limiting is being applied to that given Internode IP, due to email spam or viruses being sent. If it is a positive result (i.e. customer is sending spam or viruses), some statistics will be displayed in the following format:

```
REMOTE_IP_ADDRESS
messagesIn = 0, recipientsTotalIn = 0, spamFoundMsgIn = 0, virusFoundMsgsIn = 0,
spamPercent = 0.00, virusPercent = 0.00
```

If everything is okay, and no rate limiting is happening, the following response will be displayed:

```
REMOTE_IP_ADDRESS
No Rate Limiting in effect for this IP
```

If the IP address from which the user fetched the script, is not routed by the Internode network, then the following message will be displayed:

```
REMOTE_IP_ADDRESS
Not an Internode Routed IP
```

This tool can be accessed at the URL: https://customer-webtools-api.internode.on.net/cgi-bin/showmyspamrate

It's output is text only.

Note: ensure you present the same user agent string for this tool as you have for the XML API.

Show My IP

This tool will simply display the IP address of the originating connection in text only (not necessarily the IP address of the service).

It can be accessed at the URL: https://customer-webtools-api.internode.on.net/cgi-bin/showmyip

Note: ensure you present the same user agent string for this tool as you have for the XML API.

Unmetered IP Address List

An automatically updated list of IP subnets for which content is unmetered is available here:

https://customer-webtools-api.internode.on.net/unmetered_ip_address_list.txt

Unmetered Internode Radio List

An automatically updated list of Internode's unmetered radio stations with stream URLs is available here:

https://customer-webtools-api.internode.on.net/unmetered_radio_list.txt

Requirements for Listing on the Internode website

Note: Listing of your usage meter on the Internode website is *not guaranteed* and is subject to approval and at the discretion of Internode.

To be listed on the Internode website you and your usage meter *must* provide the following:

- an auto-update mechanism for users to easily update to new versions (i.e. one click, with popup notification of update) - for Mac we highly recommend use of the Sparkle framework;
- a user agent on all requests, in the proper format as described above;
- a webpage with support info, contact details, screen shots and download link for your usage meter, we'll link to this;
- store a users username and password in a secure (encrypted) manner;
- supply valid, working email address, preferably Internode address (internode.on.net) to Internode to contact you;
- provide your real name for listing on the Internode website;
- be willing to make updates and changes in a timely manner upon request from Internode.