

DEC, 2011

Netpas Distance Webservice

Version 3.0

User Guide

Netpas Team / Seafuture, Inc.

support@netpas.net

1. Abstract

Netpas Distance Web Services is a service based on Web Services which is transferring way of SOAP message.

If a client transfers a SOAP Request message to our Distance server, the Distance server returns SOAP Response to the client.

Web Services Client Stub makes a communication possible between server and clients. User can create Web Services Client Stub in MS .NET, Apache Axis and Delphi and Other development language easily.

You can find details of Web Services and SOAP in the sites here below.

<http://www.w3.org/2002/ws/>

<http://www.w3.org/TR/soap/>

<http://www.w3.org/TR/wsdl>

<http://msdn.microsoft.com/webservices/>

<http://ws.apache.org/axis/>

2. How to work

WSDL (Web Services Definition Language) Document contains how to use Web Services. In this document, you can find out how to send Request and Response and how to create Client Stub.

You can find WSDL document of Netpas Distance Web Services from the link here below.

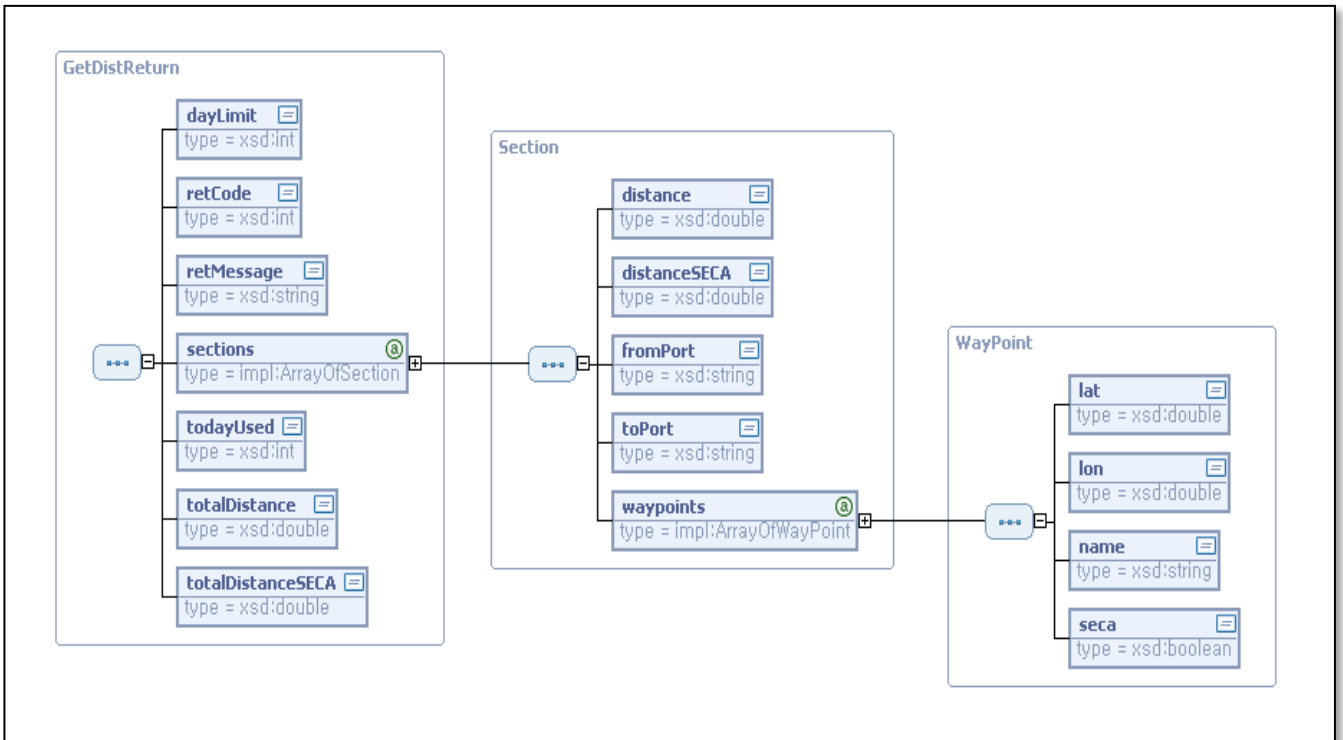
<http://dist.netpas.net/NPSystem/services/NPDistanceVersion3?wsdl>

3. License

Netpas Distance Web Service is protected copyright law and international treaties. Unauthorized reproduction, copying, storing, recording, transmitting or distribution of this program and database, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law.

4. WSDL Overview

Netpas Distance Web Services 3.0 is a "RPC / Encoded" type Web Services. Therefore, you can use this service such like "Function Call" in client side. This service has a method to get distance data from Netpas server.



<<picture4-1 : WSDL structure >>

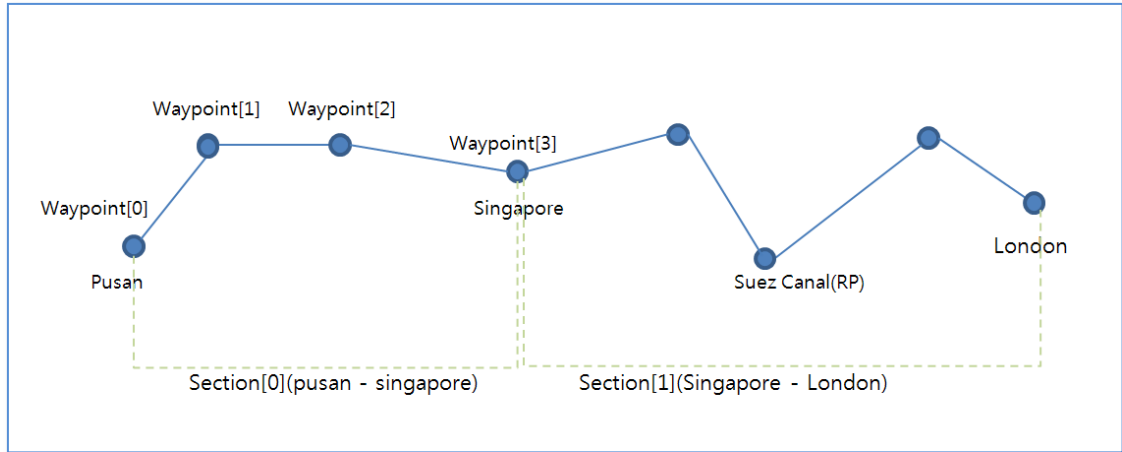
Method	getDistance		
Parameters			
	Name	Type	Description
	pinCode	String	SERVICE PIN-CODE
	accessCode	String	SERVICE ACCESS-CODE
	portNames	Array of String	Port, Routing Point, Lat/Lon. Ex) Pusan Suez(RP) 37.38W 46.40N
	piracyCode	String	Code For Piracy Area * Ref. <i>Appendix B</i>
Retrun Type	GetDistReturn		

<<table4-1: method parameters >>

5. Return Value(*GetDistReturn Element*) Overview

As calculating the distance on Distance Webservice, it allows to ask multiple port calls at one time (maximum 10port, the number of used port call is considered one time). For the convenience, it isn't offered only Total Distance, total SECA distance but the distance, SECA distance as per each section either which of one section has List of Waypoints

representing "Route". In case that the waypoint is port or Routing point has its own name otherwise does not.



<<picture5-1 : model of Return Element>>

The model below <<picture 5>> is representing the returned Elements as distance call of Pusan-Singapore-London is asked to webservice server. Regarding three ports, 2sections are returned and each section is composed of several Waypoints. The waypoints named Suez Canal(RP) is seen among the waypoints of the second section and it is "Routing Point"

Description of returned Elements

Element Name	GetDistReturn		
Sub Elements			
	Name	Type	Description
	todayUsed	int	The number of used <i>getDistance</i> today
	dayLimit	int	The number of available <i>getDistance</i> per day
	totalDistance	double	Total distance
	totalDistanceSECA	double	The distance passing SECA of whole Distance.
	Sections	Array of Section	Section Element Array In case N port Names, (N-1) sections returned
	retCode	Int	* Ref. <i>Appendix B</i>
	retMessage	String	Return message

<<table5-1: return Elements >>

Element Name	Section		
Sub Elements			
	Name	Type	Description
	fromPort	String	Departure port
	toPort	String	Arrival port
	distance	double	distance of the Section
	distanceSECA	double	SECA distance of the Section
	waypoints	Array of WayPoint	Section Element Array In case N ports, (N-1) sections returned

<<table5-2: return Elements >>

Element Name	Waypoint		
Sub Elements			
	Name	Type	Description
	lat	double	Latitude of waypoint
	lon	double	Longitude of waypoint
	name	double	Total distance
	seca	boolean	Check out whether it is SECA from waypoint to the next waypoint or not. ref. appendix A

<<table5-3: return Elements >>

6. Using Demo

You can test *Netpas Distance Web Services* with Demo License.

DEMO PIN CODE : **DEMO**
DEMO ACCESS CODE : **DEMO**

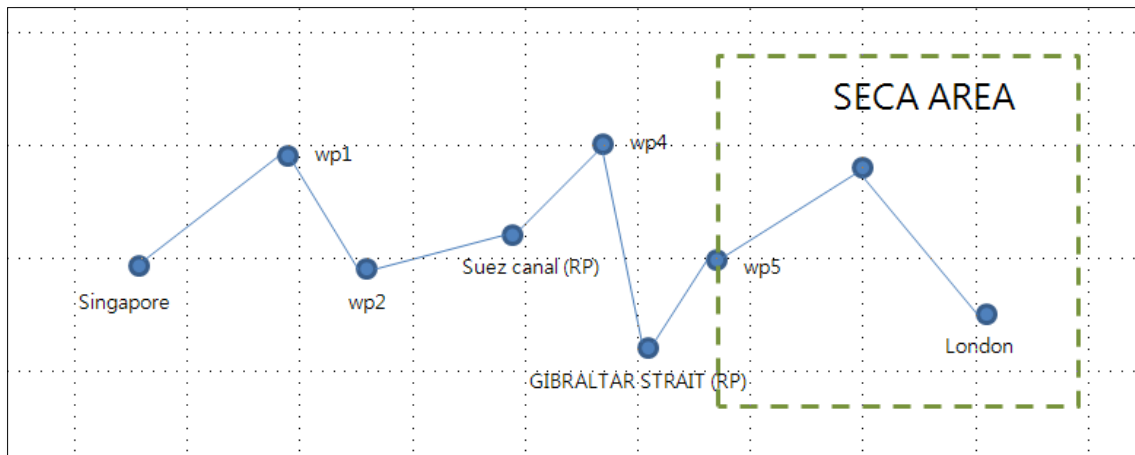
For demo users, we only provide 200 ports only(ref. *Appendix c*) and not provide coordinates to port(coordinates).

Appendix A – SECA

Here are waypoints between Singapore – London. (These numbers are not correct and just for a model)

Waypoints	lat	lon	name	seca
Singapore	1.2	103.4	Singapore	false
Wp1	5.3	80.2		false
Wp2	11.2	45.2		false
SUEZ CANAL (RP)	29.9	32.5	SUEZ CANAL (RP)	false
Wp4	30.2	15.1		false
GIBRALTAR STRAIT (RP)	35.9	-5	GIBRALTAR STRAIT (RP)	false
Wp5	40	-3		true
Wp6	45	-2		true
London	51.5	-0.1	London	N/A

<<tableA-1>>



<<pictureA-1>>

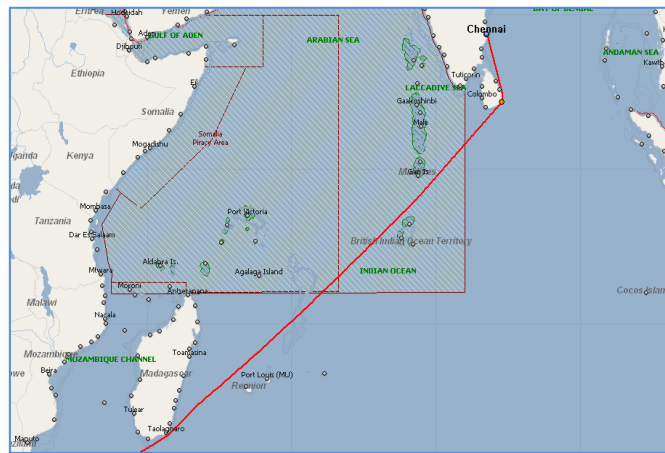
You will know the route wp5-wp6-Londo crosses SECA because "seca" values of wp6 and wp7 are true. The false in London does mean nothing because it is for a route between London – next way point. There is no next waypoint any more.

Appendix B - CODE TABLE

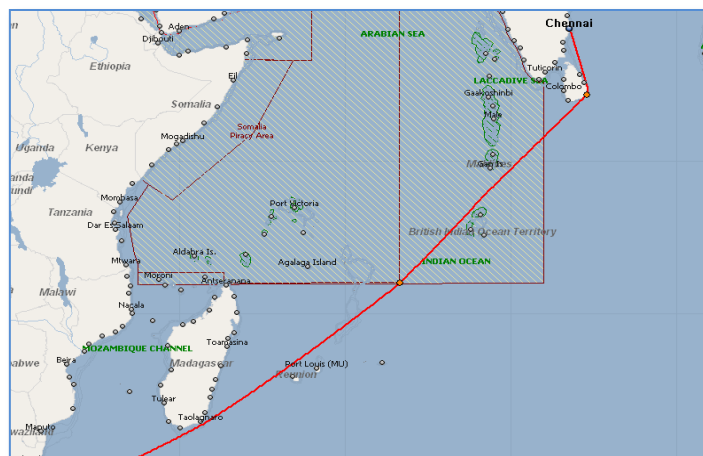
Piracy Code Table

piracyCode	Description
000	The latest update of piracy area. Identified with code 005 as of Dec, 2011
001	The shortest path
002	250nm outer route from Somalia east coast
003	600NM outer route from Somalia east coast
004	JWLA015(2nd Aug 2010)
005	JWLA016(16th Dec 2010)

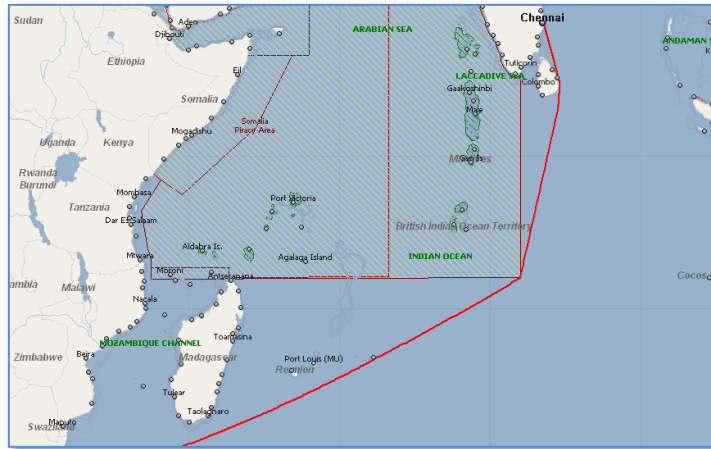
<<tableB-1: parameter code of piracy path >>



<<pictureB-1: example - the shortest path >>



<<pictureB-2: example - JWLA015(2nd Aug 2010) >>



<<pictureB-3: example - JWLA016(16th Dec 2010)>>

Return Code Table

CODE	DESCRIPTION
100	Success
200	System Error
210	Invalid Request
220	No such PINCODE
221	Invalid ACCESSCODE
222	Invalid PINCODE
225	Your ID has been stopped. Please contact Netpas support team. (support@netpas.net).
231	Your calculation number is over the day limit and blocked.
237	Invalid piracy code

<<tableB-2: return code>>

Appendix C – DEMO PORT

You can find our demo ports list table here below.

EVALUATION PORTS

COUNTRY NAME	PORT_NAME
Albania	Vlore
Algeria	Algiers
Australia - Tasma	Port Latta
Australia - Tasma	Risdon Vale
Australia - Tasma	Swansea (AU)
Australia - Victo	Geelong
Australia - Victo	Hastings (AU)
Australia - Victo	Mentone
Australia - W.A	Dampier
Australia - W.A	Elang Terminal
Australia - W.A	Esperance
Australia - W.A	Fremantle
Australia - W.A	Kwinana
Australia Queensl	Thursday Island
Australia Queensl	Urangan
Azerbaijan	Baku
Azerbaijan	Lankaran
Bahamas	Ocean Cay
Bahamas	Providence Channel
Bahrain	Bahrain
Bahrain	Off Bahrain
Bangladesh	Chalna
Belgium	Vilvoorde
Belize	Big Creek
Belize	Punta Gorda (BE)
Benin	Cotonou
Bermuda	Freeport (BM)
Brazil	Alemoa Terminal
Canada - Quebec	Matane

Canada - Quebec	Mont Louis
Canada - Quebec	New Richmond
Canada - Quebec	Sainte Croix
Canada - Quebec	Sept Iles
Canada - Quebec	St. Romuald
Cape Verde	Pedra De Lume
Chile	Antofagasta
Chile	Arica
Chile	Puerto Patache
China	Shanghai
China	Zhenzhou
China	Zhongshan
China Hongkong	Kowloon
China Hongkong	Lamma Is
Colombia	Barranquilla
Colombia	Buenaventura
Cyprus	Dhekelia
Denmark	Abenra
Denmark	Aggersund
Denmark	Alborg
Denmark	Koge
Denmark	Mariager Fjord
Denmark Greenland	Narsarsuaq
Denmark Greenland	Nuuk
Djibouti	Djibouti
Dominica	Dominica Pass
Dominica	Portsmouth (DO)
Dominican Republic	Barahona
Ecuador	Guayaquil
Egypt	Nabq
Egypt	Nuweiba
Egypt	Port Said
Egypt	Port Said East
Egypt	Ras Shukheir
El Salvador	La Union
Equatorial Guinea	Ceiba Terminal
Estonia	Roomassaar
Estonia	Virtsu

F.Y.R.O.M. (Macedonia)	Skopje
Fiji	Malau
Fiji	Vuda Point
Finland	Ajos
France	La Baule Escoublac
France	La Mailleraye
France	Yainville
France - Martinique	Fort De France
French Polynesia	Moorea
French Polynesia	Papeete
Gabon	Etame Terminal
Gabon	Gamba Terminal
Gabon	Libreville
Georgia	Poti
Germany	Bleckede
Germany	Boizenburg
Greece	Corfu Is.
Greece	Corinth
Greece	Drapetzona
Greece	Yithion
Guatemala	Puerto Barrios
Guatemala	San Jose (GT)
Guinea	Conakry
Guyana	Everton
Guyana	Georgetown (GY)
Haiti	Fond Mombin
Iceland	Hunafloi
Iceland	Hvammstangi
India	Dholera
India	Diamond Harbour
India	Dighi
India	Ennore
India	Gandhar
India	Goa
Indonesia	Arco Ardjuna
Indonesia	Arun Terminal
Indonesia	Bade
Indonesia	Gresik

Indonesia	Jakarta
Iran	Bandar Khomeini
Ireland	Whitegate
Israel	Ashdod
Israel	Elat
Israel	Haifa
Italy	Ancona
Italy	Otranto
Italy	Palau
Italy	Porto Cervo
Jamaica	Kingston (JM)
Japan	Aioi
Japan	Akitsu
Kazakhstan	Atyrau
Kenya	Kilindini
Kenya	Mombasa
Kuwait	Kuwait
Kuwait	Mina Abdulla
Lao	Vientiane
Latvia	Port of Skulte
Latvia	Ventspils
Lebanon	Tripoli (LB)
Lebanon	Zahrani Terminal
Libya	Sirte
Libya	Tripoli (LY)
Libya	Zawia Terminal
Lithuania	Butinge Terminal
Lithuania	Klaipeda
Madagascar	Antalaha
Malaysia	Sepangar Bay
Mauritania	Nouakchott
Mauritius	Port Louis (MU)
Mexico	Veracruz
Mexico	Yucatan Channel
Morocco	Al Hoceima
Morocco	Casablanca
Mozambique	Mocambique Channel
Myanmar	Elephant Point (BU)

Myanmar	Mandalay
Netherlands	Den Helder
Netherlands Antil	Curacao
New Caledonia	Babouillat
Northern Mariana	Rota (MP)
Norway	Aasgard
Norway	Agnefest
Norway	Sande
Pakistan	Fauji Oil Terminal
Panama	Taboguilla Island
Panama	Taboguilla Terminal
Papua New Guinea	Akinum
Papua New Guinea	Amio
Papua New Guinea	Wasum
Peru	Matarani
Russia	Rybinsk
Russia	Samara
Russia	Sangar
Saint Vincent And Grenadines	Kingstown
Solomon Island	Mori (SB)
South Korea	Busan
South Korea	Sokcho
South Korea	Taeon
Spain	Gijon
Spain	Pasajes
St. Lucia	St. Lucia Channel
Sudan	Marsa Bashayer
Sudan	Sawakin
Suriname	Paramaribo
Sweden	Ahus
Sweden	Kalmar
Taiwan	Chilung
Thailand	Siam Seaport
Trinidad & Tobago	San Fernando (TT)
Trinidad & Tobago	Serpiente Bay
Tunisia	Bizerte
U.K.	London
U.S.A - Alabama	Mobile

U.S.A - Californi	Los Angeles
U.S.A - Michigan	Drummond
U.S.A - Virginia	Norfolk
U.S.A - Virginia	Portsmouth (Virginia)
U.S.A - Washingto	Hoquiam
Ukraine	Sevastopol
Venezuela	Orinoco River
Venezuela	Pamatacual
Vietnam	Haiphong
Vietnam	Halong
Vietnam	Ky Ha
Yugoslavia	Kotor
	Suez Canal (RP)
	Panama Canal (RP)
Routing Porints	Magellan Strait (RP)
	Cape Horn (RP)
	Cape Good Hope (RP)