

해상 스케줄 서비스 가이드 (i-Schedule)

포워더넷

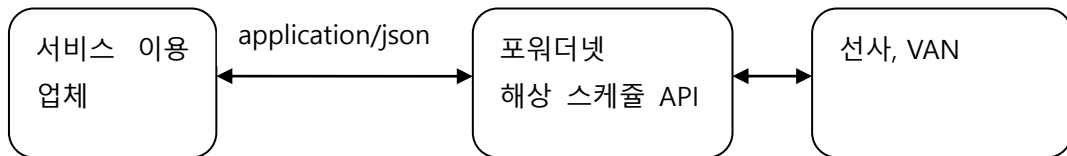
1. 소개

A. 목적

포워더넷에서 제공하는 "해상 스케줄 API" 서비스를 이용하기 위한 가이드

B. 해상 스케줄 API 서비스 개요

- i. 본 서비스를 이용하기 위해 포워더넷에 반드시 가입을 해야 된다.
- ii. 원활한 서비스 제공을 위하여 사용자의 API 요청을 임의로 제한할 수 있다.
- iii. 요청/응답 모두 Data Format은 JSON 으로 사용한다.
- iv. UTF-8 방식을 사용한다.
- v. POST 방식을 사용한다.



2. API 접속 주소

- i. 테스트 : <http://testapi.fwdnet.co.kr:19500/api/OceanSchedule>
- ii. 운영 : <http://api.fwdnet.co.kr:19500/api/OceanSchedule>

3. API 사용자 인증

A. 포워더넷으로부터 발급받은 인증키를 HTTP Header에 보내야 정상적인 연계가 가능하다. Header에 인증키 정보가 없거나, 발급받은 정보와 다르다면 인증실패 오류 응답을 받게 된다.

- HTTP Header 항목 정의

이름	설명
Schedule-API-Auth-Id	FNC 포탈 ID
Schedule-API-Auth-Key	포워더넷에서 발급한 인증키

예시)

```
URL url;
URLConnection urlConn;
url = new URL(Endpoint);
urlConn = (URLConnection)url.openConnection();
urlConn.setConnectTimeout(1000 * 3);
urlConn.setRequestProperty("Content-Type", "application/json");
// API 사용자 인증 항목 추가
urlConn.setRequestProperty("Schedule-Api-Auth-Id", "FORWARDERNETID");
urlConn.setRequestProperty("Schedule-Api-Auth-Key", "FORWARDERNETKEY");
```

4. 해상 스케줄 API 가이드

A. 요청 데이터 정의

항목 명	Type	필수여부	설명
Scacs	String	Y	선사코드 입력. 2개 이상의 선사일 경우 콤마(,)로 구분 (ALL 입력 시 전체 선사 조회)
SearchDate	String	Y	스케줄 조회 일자 YYYY-MM-DD 형태 Ex) 2018-06-15
SearchDateType	String	Y	A : 도착일 기준 D : 출발일 기준
OriginPort	String	Y	UNECE Location Code
DestinationPort	String	Y	UNECE Location Code
WeeksOut	Integer	Y	1~6 의 숫자. 주차 계산
DirectOnly	Boolean	N	false : direct와 환적 모두 검색 true : direct만 검색
IncludeNearbyOriginPorts	Boolean	N	false : OriginPort만 검색 true : OriginPort 주변도 검색
IncludeNearbyDestinationPorts	Boolean	N	false : DestinationPort만 검색 true : DestinationPort 주변도 검색

- 요청 데이터 샘플

```
[
  {
    "Scacs": "SNKO,HDMU,SMLM,ZIMU,APLU",
    "SearchDate": "2018-06-01",
    "SearchDateType": "A",
    "OriginPort": "KRPUS",
    "DestinationPort": "USLAX",
    "WeeksOut": "1",
    "DirectOnly": "false",
    "IncludeNearbyOriginPorts": "false",
    "IncludeNearbyDestinationPorts": "false"
  }
]
```

B. 응답 데이터 정의

항목 명	Type	필수여부	설명
scac	String	Y	Carrier's SCAC code
carrierName	String	Y	Carrier's name
terminalCutoff	Timestamp	N	The latest date/time cargo may be received by terminal
estimatedTerminalCutoff	Boolean	N	Terminal cutoff date estimated indicator
bkCutoff	Timestamp	N	The latest date/time a booking can be placed with a carrier
siCutoff	Timestamp	N	The latest date/time a shipping instruction can be created
hazBkCutoff	Timestamp	N	The latest date/time a booking with hazardous cargo can be placed with a carrier
vgmCutoff	Timestamp	N	The latest date/time a VGM can be sent to the carrier
reeferCutoff	Timestamp	N	The latest date/time a booking with temperature control cargo can be placed with a carrier
serviceName	String	N	Name of service
vesselName	String	Y	Name of first ocean vessel
voyageNumber	String	Y	Voyage number associated with the first ocean vessel
imoNumber	String	N	IMO number for this vessel
originUnloc	String	Y	UNECE location code for the Origin port
originCityName	String	Y	City name for this location
originSubdivision	String	N	State or province name for this location
originCountry	String	N	Country name for this location
originTerminal	String	N	Origin port's terminal name
originDepartureDate	Timestamp	N	Date/time when vessel departs Origin port
destinationUnloc	String	Y	UNECE location code for the Destination port
destinationCityName	String	Y	City name for this location
destinationSubdivision	String	N	State or province name for this location
destinationCountry	String	N	Country name for this location
destinationTerminal	String	N	Destination port's terminal name
destinationArrivalDate	Timestamp	N	Date/time when vessel arrives at Destination port
totalDuration	Integer	N	Number of transit days from Origin Port to Destination Port
scheduleType	String	Y	Type of schedule. direct - Schedules without transshipments transshipment - Schedules with transshipments unspecified - Port-pairs derived from EDI source data
legs	Array of Leg Objects	N	List of departure-arrival ports representing transshipments
sequence	Integer	Y	Sequence number of each leg, starting with 1. Sequence numbers will be consecutive.
serviceName	String	Y	Name of service
transportType	String	Y	Type of transport (Ocean Vessel)
transportName	String	Y	Name of vessel
conveyanceNumber	String	Y	Voyage number for this service and vessel
transportID	String	N	IMO number for this vessel

departureUnloc	String	Y	UNECE location code of the departure port
departureCityName	String	Y	City name for this location
departureSubdivision	String	N	State or province name for this location
departureCountry	String	N	Country name for this location
departureTerminal	String	N	Departure port's terminal name
departureDate	Timestamp	Y	Date/time when the vessel departs from the departure port
arrivalUnloc	String	Y	UNECE location code of the arrival port
arrivalCityName	String	Y	City name for this location
arrivalSubdivision	String	N	State or province name for this location
arrivalCountry	String	N	Country name for this location
arrivalTerminal	String	N	Arrival port's terminal name
arrivalDate	Timestamp	Y	Date/time when the vessel arrives at the arrival port
transitDuration	Integer	N	Number of transit days from Departure Port to Arrival Port
transshipmentIndicator	Boolean	N	Indicator identifying when a transshipment occurs (when the vessel of the previous leg is different than the vessel of the current leg) True = Departure port is transshipment port False = Departure port is not a transshipment port

*All dates are in YYYY-MM-DD hh:mm:ss format

- 응답 데이터 샘플

```
[
  {
    "scac": "XXXX",
    "carrierName": "Imperial Shipping Lines Inc.",
    "serviceName": "ISL-CF492",
    "terminalCutoff": null,
    "bkCutoff": null,
    "siCutoff": null,
    "hazBkCutoff": null,
    "vgmCutoff": null,
    "reeferCutoff": null,
    "vesselName": "Vessel - D4FF859",
    "voyageNumber": "836E",
    "imoNumber": "9267442",
    "originUnloc": "UYMVD",
    "originCityName": "MONTEVIDEO",
    "originSubdivision": null,
    "originCountry": "URUGUAY",
    "originTerminal": null,
    "originDepartureDate": "2017-07-24 16:00:00",
    "destinationUnloc": "ARROS",
    "destinationCityName": "ROSARIO",
    "destinationSubdivision": null,
    "destinationCountry": "ARGENTINA",
```

```

"destinationTerminal": null,
"destinationArrivalDate": "2017-08-01 04:00:00",
"transitDuration": 6,
"scheduleType": "unspecified",
"legs": []
},
{
  "scac": "XXXX",
  "carrierName": "Imperial Shipping Lines Inc.",
  "serviceName": "ISL-A2922",
  "terminalCutoff": null,
  "bkCutoff": null,
  "siCutoff": null,
  "hazBkCutoff": null,
  "vgmCutoff": null,
  "reeferCutoff": null,
  "vesselName": "Vessel - 4EA59A1",
  "voyageNumber": "507S",
  "imoNumber": "9788618",
  "originUnloc": "UYMVD",
  "originCityName": "MONTEVIDEO",
  "originSubdivision": null,
  "originCountry": "URUGUAY",
  "originTerminal": null,
  "originDepartureDate": "2017-07-17 16:00:00",
  "destinationUnloc": "ARROS",
  "destinationCityName": "ROSARIO",
  "destinationSubdivision": null,
  "destinationCountry": "ARGENTINA",
  "destinationTerminal": null,
  "destinationArrivalDate": "2017-07-24 04:00:00",
  "transitDuration": 6,
  "scheduleType": "transshipment",
  "legs": [
    {
      "sequence": 1,
      "serviceName": "ISL-A2922",
      "transportType": "Ocean Vessel",
      "transportName": "Vessel - 4EA59A1",
      "conveyanceNumber": "507S",
      "transportID": "9788618",
      "departureUnloc": "UYMVD",
      "departureCityName": "MONTEVIDEO",
      "departureSubdivision": null,
      "departureCountry": "URUGUAY",
      "departureTerminal": null,
      "departureDate": "2017-07-17 16:00:00",
      "arrivalUnloc": "BRRIG",

```

```
    "arrivalCityName": "RIO GRANDE",
    "arrivalSubdivision": null,
    "arrivalCountry": "BRAZIL",
    "arrivalTerminal": null,
    "arrivalDate": "2017-07-20 05:00:00",
    "transitDuration": 2,
    "transshipmentIndicator": false
  },
  {
    "sequence": 2,
    "serviceName": "ISL-51862925",
    "transportType": "Ocean Vessel",
    "transportName": "Vessel - 7D49B10",
    "conveyanceNumber": "881S",
    "transportID": "9687742",
    "departureUnloc": "BRRIG",
    "departureCityName": "RIO GRANDE",
    "departureCountry": "BRAZIL",
    "departureTerminal": null,
    "departureDate": "2017-07-20 05:00:00",
    "arrivalUnloc": "ARROS",
    "arrivalCityName": "ROSARIO",
    "arrivalCountry": "ARGENTINA",
    "arrivalTerminal": null,
    "arrivalDate": "2017-07-24 04:00:00",
    "transitDuration": 3,
    "transshipmentIndicator": true
  }
}
```


- 오류코드 및 메시지

Code	Message
0	FNC API Inner error
1	Not match Schedule-API-Auth-Id or Schedule-API-Auth-Key.
2	Missing required query param(Scacs).
3	Missing required query param(SearchDate).
4	Invalid parameter searchDateType. Must be one of [D, A]
5	Missing required query param(SearchDateType).
6	Missing required query param(OriginPort).
7	Missing required query param(DestinationPort).
8	Invalid range(WeeksOut). Must be 1 to 6.
9	NumberFormatException.(WeeksOut)
10	Missing required query param(WeeksOut).
11	Invalid parameter format for DirectOnly. Must be 'true' or 'false'.
12	Invalid parameter format for IncludeNearbyOriginPorts. Must be 'true' or 'false'.
13	Invalid parameter format for IncludeNearbyDestinationPorts. Must be 'true' or 'false'.

- 오류코드 및 메시지 샘플

```
{
  "errorCode": 0,
  "errorMessages": [
    "FNC API Inner error"
  ]
}
```

[붙임 1] 스케줄 연계 선사

No	SCAC	Carrier Account Name	국내발 전용	비고
1	AMLU	Antillean Marine Shipping		
2	ANNU	ANL CONTAINER LINE		
3	ANRM	ALIANCA		
4	APLU	APL		
5	CAMN	CROWLEY LINER SERVICES		
6	CCNR	CCNI		
7	CHNL	CNC		
8	CKCO	CK line	●	연계 예정
9	CMDU	CMA CGM		
10	COSU	COSCO		
11	DAL	DAL		
12	DJLU	DONGJIN	●	연계 예정
13	DOLQ	Dole Ocean Cargo Express, Inc		
14	EGLV	EVERGREEN LINE		
15	EPIR	EMIRATES SHIPPING LINE		
16	GDSL	Grimaldi Line		
17	GOSU	GOLD STAR LINE LTD.		
18	HASL	HEUNG-A	●	연계 예정
19	HDMU	HYUNDAI MERCHANT MARINE CO., LTD.		
20	HLCU	HAPAG-LLOYD		
21	IILU	INDEPENDENT CONTAINER LINE		
22	KMTC	KMTC	●	연계 예정
23	MAEU	MAERSK LINE		
24	MCCQ	MCC TRANSPORT		
25	MSCU	MSC		
26	NSRU	Namsung shipping		
27	ONEY	ONE		
28	OOLU	OOCL		
29	PABV	PIL		
30	PASU	PANASIA SHIPPING CO.,LTD		
31	POBU	STX PAN OCEAN	●	연계 예정
32	SAFM	SAFMARINE		
33	SEAU	SEALAND		
34	SEJJ	SEAGO LINE		
35	SMLM	SM line		

36	SNKO	SINOKOR MERCHANT MARINE	●	연계 예정
37	SPNU	Salam Pacific Indonesia Lines		
38	SUDU	HAMBURG SUD		
39	WDFC	WEIDONG FERRY	●	연계 예정
40	WECC	W.E.C. LINES B.V.		
41	WHLC	WAN HAI LINES LTD.		
42	YMLU	YANG MING (YML)		
43	ZIMU	ZIM		