AceRoute API

API is an interface for accessing your AceRoute cloud account data using HTTP and XML

ace route

Overview

① **URL & Call Limit**

② **Enable API**

③ **Token-Based Authentication**

④ **Manage Office Location**

- Create, Update, Delete, List office locations

⑤ **Manage Customer Category**

- Create, Update, Delete, List customer type options

⑥ **Manage Order Type**

- Create, Update, Delete, List order type options

⑦ **Manage Product**

- Create, Update, Delete, List part type options
- Create, Update, Delete, List service type options

⑧ **Manage Worker**

- Create, Update, Delete, List field workers

⑨ **Manage Customer**

- Create, Update, Delete, List customers, customer's locations, customer's contacts

⑩ **Manage Order**

- Create, Delete, List customer
- Quick Create customer + location + contact + order **(one call)**

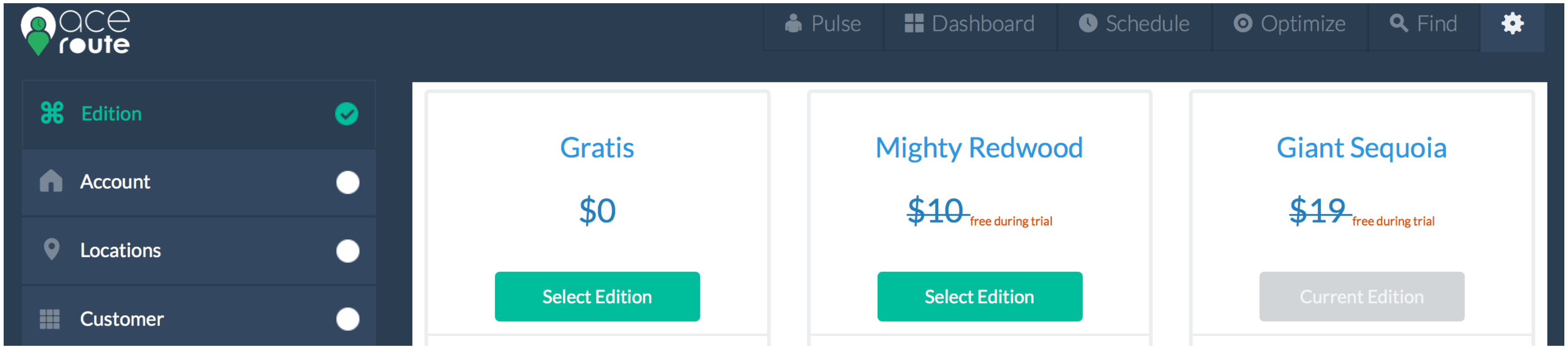
URL & Call Limit

- API URL
  - air.aceroute.com/api?token=<YOUR_TOKEN>

- API Request Limit
  - To prevent abuse, API access is limited to 5000 requests per day

Enable API

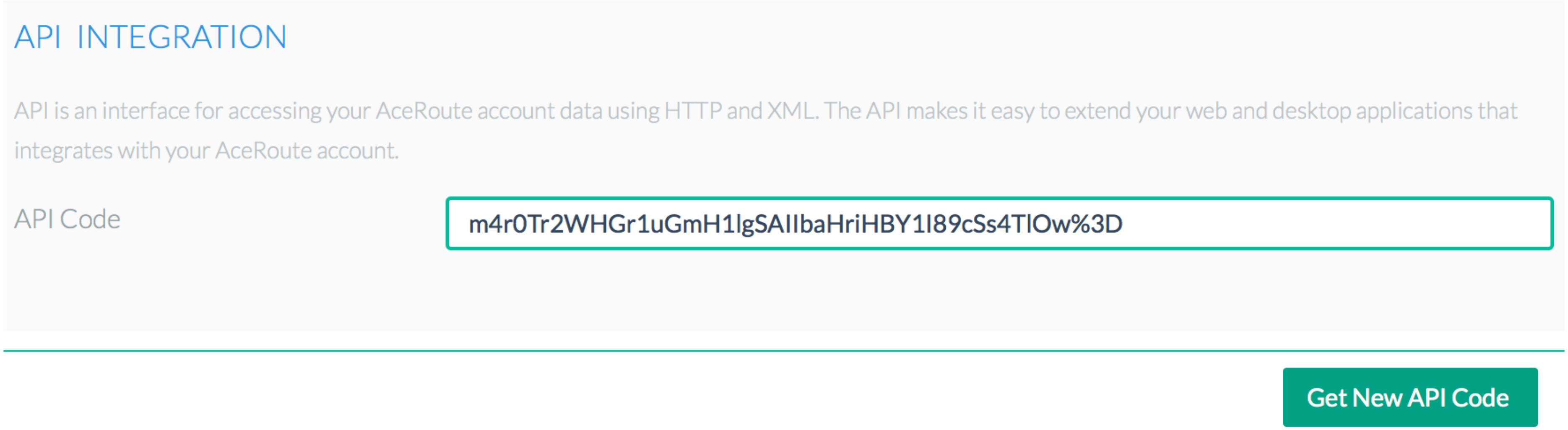
- To enable the API
  - Log into your account, and select the top right tab: Tools
  - Select left tab: Edition. API is available for Giant Sequoia and Enterprise editions only



Token-Based Authentication

- For your account, you'll be provided with an unique authentication token. For every API request you make, you'll need to use HTTP basic authorization to present the unique authentication token assigned to you.

- Keep this token secret. It should be guarded just as you would your regular account password. If you feel your token has been compromised, you can reset it



API INTEGRATION

API is an interface for accessing your AceRoute account data using HTTP and XML. The API makes it easy to extend your web and desktop applications that integrates with your AceRoute account.

API Code: m4r0Tr2WHGr1uGmH1lgSAIIbaHriHBY1l89cSs4TlOw%3D

Token-Based Authentication
(cont'd)

- To get authentication token
  - Log into your account, and select the top right tab: Tools
  - Select left tab: Integrate.
  - Select "Get New API Code" button to generate your token
  - Use this token with each API call for authentication.
  - Sample token: bs08mQnfYUFwPaUg5PPEFrscD90uCt05v2G1n0+Zgm8=
  - Token may have special characters as such please use POST and/or encode while testing from URL
  - In above example please encode properly if testing from URL. For example above encoded token will be bs08mQnfYUFwPaUg5PPEFrscD90uCt05v2G1n0%2BZgm8=

Office Location

- **This section will cover following operations:**
  - Create, Update, Delete, List
    - Office Location (loc)
    - Note: At least one location must exist for your company

Office Location create/update

- To create new or update office location , please send following parameters
- method=office.save
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=office.save&recs=<data><loc><id>123</id><nm>HQ</nm><adr>1300 Clay St, Oakland, CA 94512</adr><adr2>5th Floor</adr2><geo>37.8048678,-122.27355260000002</geo></loc></data>
- Required xml fields: id (0 for create), nm, adr
  - AceRoute will automatically find geocode for provided address if no geo is passed
- Response
  - If success, server will send back xml representation of office record. Please save id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Office Location delete

- To delete office location, please send following parameters
- method=office.delete
  - Note: At least one location must be defined for your company
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=office.delete&recs=<data><del><id>123</id></del></data>
- Required xml fields: id
- Response
  - If success, server will send back xml list of ids deleted
  - If failure, server will send back failure xml message

Office Location list

- To get list of office locations, please send following parameters
- method=
  - office.list
- updsince=1359590400000 (epoch time in milliseconds since last update). To get all records irrespective of any time use updsince=0
- Example
  - APIURL/api?token=authtoken&method=office.list&updsince=1359590400000
- Response
  - If success, server will send back xml list of office locations (loc)
  - If failure, server will send back failure xml message

Customer Category

- **This section will cover following operations:**
  - Create, Update, Delete, List
    - Customer Category List (ctype)

Customer Category create/update

- To create new or update customer category, please send following parameters
- method=customer.type.save
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=customer.type.save&recs=<data><ctype><id>123</id><nm>San Francisco South</nm></ctype></data>
- Required xml fields: id (0 for create), nm
- Response
  - If success, server will send back xml representation of customer category record. Please save id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Customer Category delete

- To delete customer category, please send following parameters
- method=customer.type.delete
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=customer.type.delete&recs=<data><del><id>123</id></del></data>
- Required xml fields: id
- Response
  - If success, server will send back xml list of ids deleted
  - If failure, server will send back failure xml message

Customer Category list

- To get list of customer categories, please send following parameters
- method=
  - customer.type.list
- updsince=1359590400000 (epoch time in milliseconds since last update). To get all records irrespective of any time use updsince=0
- Example
  - APIURL/api?token=authtoken&method=customer.type.list&updsince=1359590400000
- Response
  - If success, server will send back xml list of customer category (ctype)
  - If failure, server will send back failure xml message

Order Type

- **This section will cover following operations:**
  - Create, Update, Delete, List
    - Order Type List (otype)

Order Type create/update

- To create new or update order type, please send following parameters
- method=order.type.save
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=order.type.save&recs=<data><otype><id>123</id><nm>Repair</nm></otype></data>
- Required xml fields: id (0 for create), nm
- Response
  - If success, server will send back xml representation of order type record. Please save id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Order Type delete

- To delete order type, please send following parameters
- method=order.type.delete
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=order.type.delete&recs=<data><del><id>123</id></del></data>
- Required xml fields: id
- Response
  - If success, server will send back xml list of ids deleted
  - If failure, server will send back failure xml message

Order Type list

- To get list of order types, please send following parameters
- method=
  - order.type.list
- updsince=1359590400000 (epoch time in milliseconds since last update). To get all records irrespective of any time use updsince=0
- Example
  - APIURL/api?token=authtoken&method=order.type.list&updsince=1359590400000
- Response
  - If success, server will send back xml list of order type (otype)
  - If failure, server will send back failure xml message

Product
Part Type

- **This section will cover following operations:**
  - Create, Update, Delete, List
    - Part Type List (ptype)
    - Service Type List (stype)

Part Type create/update

- To create new or update part type, please send following parameters
- method=product.part.save
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=product.part.save&recs=<data><tp><id>123</id><nm>Steel Pipe</nm><dtl>Description of steel pipe: 5 ft long</dtl></tp></data>
- Required xml fields: id (0 for create), nm, dtl, uid (see UID types)
- Response
  - If success, server will send back xml representation of part type record. Please save id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Service Type create/update

- To create new or update part type, please send following parameters
- method=product.service.save
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=product.service.save&recs=<data><tp><id>123</id><nm>Cleaning</nm><dtl>Description of Cleaning Service</dtl></tp></data>
- Required xml fields: id (0 for create), nm, dtl, uid (see UID types)
- Response
  - If success, server will send back xml representation of service type record. Please save id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

UID

- **uid for Part (unit type)**
  - 1=Bag, 2=Box, 3=Carton, 4=Container, **5=Each**, 6=Equip, 7=Item, 9=Load, 10=Lot, 11=Pallet, 12=Part, 13=Piece, 20=Foot, 21=Inch, 22=Meter, 23=Yard, 24=Gram, 25=Pound, 26=Gallon, 27=Liter, 28=Pint, 29=Quart, 30=Cu. Ft, 31=Sq Cm, 32=Sq Ft, 33=Sq M, 37=Stock, 38=Package
- **uid for Service (unit type)**
  - **5=Each**, 8=Job, 16=Ticket, 17=Trip, 18=Visit, 19=Work Order, 34=Day, 35=Hour, 36=Person-Hr
- **Send numeric value for unit type**

Part Type delete

- To delete part type, please send following parameters
- method=product.part.delete
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=product.part.delete&recs=<data><del><id>123</id></del></data>
- Required xml fields: id
- Response
  - If success, server will send back xml list of ids deleted
  - If failure, server will send back failure xml message

Service Type delete

- To delete service type, please send following parameters
- method=product.service.delete
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=product.service.delete&recs=<data><del><id>123</id></del></data>
- Required xml fields: id
- Response
  - If success, server will send back xml list of ids deleted
  - If failure, server will send back failure xml message

Part Type & Service Type list

- To get list of part type and service type, please send following parameters
- method=
  - product.type.list
- updsince=1359590400000 (epoch time in milliseconds since last update). To get all records irrespective of any time use updsince=0
- Example
  - APIURL/api?token=authtoken&method=product.type.list&updsince=1359590400000
- Response
  - If success, server will send back xml list of part type (ptype) & service type (stype)
  - If failure, server will send back failure xml message

Worker/Resource

- **This section will cover following operations:**
  - Create, Update, Delete, List
    - Worker (res)

Worker create/update

- To create new or update worker, please send following parameters
- method=worker.save
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=worker.save&recs=<data><res><id>123</id><nm>Joe Smith</nm><tel>650-123-5670</tel><eml>joe@abc.com</eml><num>ID-100</num><rate>23</rate></res></data>
- Required xml fields: id (0 for create), nm
- Response
  - If success, server will send back xml representation of worker record. Please save id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Worker delete

- To delete worker, please send following parameters
- method=worker.delete
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=worker.delete&recs=<data><del><id>123</id></del></data>
- Required xml fields: id
- Response
  - If success, server will send back xml list of ids deleted
  - If failure, server will send back failure xml message

Worker list

- To get list of workers, please send following parameters
- method=
  - worker.list
- updsince=1359590400000 (epoch time in milliseconds since last update). To get all records irrespective of any time use updsince=0
- Example
  - APIURL/api?token=authtoken&method=worker.list&updsince=1359590400000
- Response
  - If success, server will send back xml list of worker
  - If failure, server will send back failure xml message

Customer

- **This section will cover following operations:**
  - Create, Update, Delete, List
    - Customer
      - Location
      - Contact

Customer Object

- Customer (cst) is a parent object within AceRoute
- Each customer may have any of the following child objects:
  - Locations (loc) – at least one location required
  - Contacts (cnt)
  - Orders (event)
    - Services Performed (osrv)
    - Parts Used (oprt)
- Each customer must have at least one location but can have unlimited locations such as Office, Warehouse, etc.
- Customer may have unlimited contacts
- Customer may have unlimited orders

Customer create

- To create a new customer, please send following parameters. This will create parent customer object and one child location and one child contact (optional)

- method=customer.create

- recs=<data>one or upto 10 records</data>

- Example
  - APIURL/api?token=authtoken&method=customer.create&recs=<data><cst><nm>ABC Customer</nm><locnm>Warehouse</locnm><adr>1300 Clay St, Oakland, CA 94512</adr><adr2>5th Floor</adr2><tid>1234</tid><geo>37.8048678,-122.27355260000002</geo><cntnm>Joe Smith</cntnm><tel>650-123-5670</tel><eml>joe@abc.com</eml><dt>2014/11/15</dt><onote>Beware of dog at this location</onote></cst></data>

- Required xml fields: nm, locnm, adr
  - AceRoute will automatically find geocode for provided address if no geo is passed

- Date (dt) = Customer Since field must be in yyyy/mm/dd format if not empty

- Response
  - If success, server will send back xml representation of customer record in AceRoute with id. Please save this id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Customer update

- To update customer name and customer since date, please send following parameters
- method=customer.save
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=customer.save&recs=<data><cst><nm>ABC Customer</nm><tid>1234</tid><dt>01/01/2013</dt></cst></data>
- Required xml fields: nm
- Date (dt) = Customer Since field must be in yyyy/mm/dd format
- Response
  - If success, server will send back xml representation of customer record
  - If failure, server will send back failure xml message

Customer's Location create/update

- To create new or update customer location , please send following parameters
- method=customer.location.save
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=customer.location.save&recs=<data><loc><id>123</id><cid>5555</cid><nm>Warehouse</nm><adr>1300 Clay St, Oakland, CA 94512</adr><adr2>5th Floor</adr2><geo>37.8048678,-122.27355260000002</geo></loc></data>
- Required xml fields: id (0 for create), cid (customer id), nm, adr
  - AceRoute will automatically find geocode for provided address if no geo is passed
- Response
  - If success, server will send back xml representation of location record. Please save id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Customer's Contact create/update

- To create new or update customer contact, please send following parameters
- method=customer.contact.save
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=customer.contact.save&recs=<data><cnt><id>123</id><cid>5555</cid><nm>Joe Smith</nm><tel>650-123-5670</tel><eml>joe@abc.com</eml></cnt></data>
- Required xml fields: id (0 for create), cid (customer id), nm
- Response
  - If success, server will send back xml representation of contact record. Please save this id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Customer, Location, Contact delete

- To delete customer, location, or contact, please send following parameters
- method=
  - customer.delete or customer.location.delete or customer.contact.delete
  - Note: Deleting customer (parent) will automatically delete child objects such as locations, contacts, orders
  - Note: Atleast one location must be defined per customer
- recs=<data>one or multiple records</data>
- Example
  - APIURL/api?token=authtoken&method=customer.delete&recs=<data><del><id>123</id></del></data>
- Required xml fields: id
- Response
  - If success, server will send back xml list of ids deleted
  - If failure, server will send back failure xml message

Customer, Location, Contact list

- To get list of customers (including locations & contacts), please send following parameters
- method=
  - customer.list
- updsince=1359590400000 (epoch time in milliseconds since last update). To get all records irrespective of any time use updsince=0
- Example
  - APIURL/api?token=authtoken&method=customer.list&updsince=1359590400000
- Response
  - If success, server will send back xml list of customers (cst), locations (loc), and contacts (cnt)
  - If failure, server will send back failure xml message

Order/Job

- **This section will cover following operations:**
  - Create, Delete, List
    - Order
  - Quick Create
    - Customer + Location + Contact + Order **(in one call)**

Order create

- To create new order for an existing customer, please send following parameters
- method=order.create
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=order.create&recs=<data><event><cid>724003</cid><lid>100</lid><cntid>200</cntid><rid>300</rid><tid>400</tid><pid>1</pid><dur>30</dur><start_epoch>1368176400000</start_epoch><nm>ordernum10</nm><dtl>Order summary</dtl><po>po59</po><inv>invoice 1</inv><note>order notes</note><schd>1</schd></event></data>
- Required xml fields: cid (customer id), nm, dur (order duration in minutes, must be in multiple of 5, minimum value is 5 mins), schd (0 for unscheduled, 1 for scheduled), start_epoch (order start date/time in epoch millisecs, optional if schd=0)
- Optional xml fields: lid (customer location id), cntid (customer contact id), rid (worker id), tid (order type id), pid (priority type id), dtl (order summary), po (order po), inv (order invoice), note (order notes), est (earliest order start date & time), lst (latest order start date & time)
- Response
  - If success, server will send back xml representation of order record. Please save id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Order quick create

- To create new order and customer, please send following parameters. This will create parent customer object and one child location and one child contact (optional), and one order
- method=order.qkcreate
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=order.qkcreate&recs=<data><event><cnm>ABC Customer</cnm><ctid>1234</ctid><locnm>Warehouse</locnm><adr>1300 Clay St, Oakland, CA 94512</adr><adr2>5th Floor</adr2><geo>37.8048678,-122.27355260000002</geo><cntnm>Joe Smith</cntnm><tel>650-123-5670</tel><eml>joe@abc.com</eml><dt>2014/11/15</dt><rid>300</rid><tid>400</tid><pid>1</pid><dur>30</dur><start_epoch>1368176400000</start_epoch><onm>ordernum10</onm><dtl>Order summary</dtl><po>po59</po><inv>invoice 1</inv><note>order notes</note><schd>1</schd></event></data>
- Required xml fields: cnm (customer name), locnm (location name), adr (address), onm (order name), dur (order duration in minutes, must be in multiple of 5, minimum value is 5 mins), schd (0 for unscheduled, 1 for scheduled), start_epoch (order start date/time in epoch millisecs, optional if schd=0)
- Optional xml fields: cntnm (contact name), rid (worker id), ctid (customer category id), tid (order type id), pid (priority type id), dtl (order summary), po (order po), inv (order invoice), note (order notes), est (earliest order start date & time), lst (latest order start date & time)
- AceRoute will automatically find geocode for provided address if no geo is passed
- Response
  - If success, server will send back xml representation of customer and order record. Please save id in your external app to directly manipulate this AceRoute record
  - If failure, server will send back failure xml message

Order delete

- To delete order, please send following parameters
- Method=order.delete
- recs=<data>one or upto 10 records</data>
- Example
  - APIURL/api?token=authtoken&method=order.delete&recs=<data><del><id>123</id></del></data>
- Required xml fields: id
- Response
  - If success, server will send back xml list of ids deleted
  - If failure, server will send back failure xml message

Order list

- To get list of orders, please send following parameters
- method=
  - order.list
- updsince=1359590400000 (epoch time in milliseconds since last update). To get all records irrespective of any time use updsince=0
- Example
  - APIURL/api?token=authtoken&method=order.list&updsince=1359590400000
- Response
  - If success, server will send back xml list of order (event)
  - If failure, server will send back failure xml message

Order EST & LST

- **EST & LST are piped date & time**
- **Date can be empty**
- **Date must be in format of YYYY/MM/DD if not empty**
- **Minimum time is 0:0**
- **Maximum time is 23:55**
- **Minutes should be in multiple of 5**
- **If not required, EST must be "|0:0"**
- **If not required, LST must be "|23:55"**

- **Examples**
  - EST = "|0:0"
    - Order can start on any date and can start anytime after midnight
  - LST = "|23:55"
    - Order can start on any date and can start anytime before midnight
  - EST = "2014/10/5|8:05"
    - Order can start on any date after 10th of October and can start anytime after 8:05 am local time
  - LST = "2014/11/1|18:40"
    - Order must be scheduled on any date before 1st of November and must start anytime before 6:40 pm local time