Lift Intelligent Agent API (BETA)

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Lift Intelligent Agent API (BETA)

- Currently this API permits 4000 messages per second for the 400 trusted Lift API client endpoints sending approximately 10 messages per second.
- OAuth 2.0 AccessCode Tokens Scopes
 - o lifts:all Grants read access to all lifts
 - o lifts:active Grants read access to only active lifts
 - lifts:inactive Grants read access to inactive lifts
 - people:liftoperator Grants read acces to the Lift Operator view
 - o people:shopmgr Grants read and write access to the Shop Manager mechanical view
 - people:floormgr Grants read and write access to the Lift Operations management view
 - o people:mechanic Grants read access to the Mechanic Lift maintenance view
 - o people:financialmgr Grants read and write access to the Financial Manager view

Security Definitions

AccessCode

- Web and Mobile Authenticated Users

lifts:active
 lifts:inactive
 readpublic_key
 Grants read access to only active lifts
 lifts:inactive
 List and view details for public keys

people:shopmgr
 people:floormgr
 people:mechanic
 Shop Manager mechanical view
 Lift Operations Management view
 Mechanic Lift Maintenance view

- people:financialmgr Financial Manager view

MobileApp_Implicit

- Implicitly Trusted Mobile App with Anonymous User

readpublic_keyList and view details for public keys

admin_AccessCode

administrative purposes

- admin_updateliftsGrants write access to lifts data

- admin_writepublic_key Create, list, and view details for public keys

- admin_public_key Fully manage PKI keys

Version BETA

Terms of service

https://changehost.changedomain.com (https://changehost.changedomain.com)

Privacy Policy

(https://changehost.changedomain.com/privacy)

Security

AccessCode (OAuth 2.0)

Flow accessCode

2 of 26 7/15/18, 3:34 PM

Authenticate

Authorization https://liftintelligentagent.niolabs.com/oauth/authorize

URL (https://liftintelligentagent.niolabs.com/oauth/authorize)

Token URL https://liftintelligentagent.niolabs.com/oauth/token

(https://liftintelligentagent.niolabs.com/oauth/token)

Scopes

lifts:all Grants read access to all lifts

lifts:active Grants read access to only active lifts lifts:inactive Grants read access to inactive lifts

people:liftoperator Lift Operator view

people:shopmgr Shop Manager mechanical view people:floormgr Lift Operations Management view people:mechanic Mechanic Lift Maintenance view

people:financialmgr Financial Manager view

readpublic key List and view details for public keys

MobileApp_Implicit (OAuth 2.0)

Authenticate

Flow implicit

https://liftintelligentagent.niolabs.com/oauth/authorize Authorization **URL** (https://liftintelligentagent.niolabs.com/oauth/authorize)

Scopes

readpublic_key List and view details for public keys

admin AccessCode (OAuth 2.0)

Authenticate

Flow accessCode

Authorization https://liftintelligentagent.niolabs.com/oauth/authorize URL

(https://liftintelligentagent.niolabs.com/oauth/authorize)

Token URL https://liftintelligentagent.niolabs.com/oauth/token

(https://liftintelligentagent.niolabs.com/oauth/token)

Scopes

admin_updatelifts Grants write access to lifts data

admin_writepublic_keyCreate, list, and view details for public keysadmin_public_keyFully manage PKI keys

Paths

/IntelligentAgent/oauth20/authorize

GET /IntelligentAgent/oauth20/authorize

Access Control

Description

Request a temporary code for the desired API Access Token Scope(s)

Parameters

Name	Located in	Description	Required	Schema
grant_type	query	value = authorization_code	Yes	≓string
client_id	query	a valid OAuth2 client id registered to the app authorized to use the API is required (this changes with each app store version iteration)	Yes	≓string
redirect_uri	query	App Callback URI	Yes	⇒string

Responses

```
Code Description
                                                   Schema
                                                       ▼success {
     Successful response with the code and scope
                                                         code:
                                                                  integer
200 query parameters appended to the redirect_uri
                                                    fields: string
     in the Location HTTP Header
                                                       verr {
                                                         code:
                                                                  integer
401 Unknown User, Not Authenticated
                                                         message: string
                                                         fields: string
                                                       verr {
     Not Authorized. Missing Authorization Header,
                                                         code:
                                                                  integer
                                                         message: string
403 Unknown User or App ID or incorrect password
                                                         fields: string
     or secret.
                                                      }
                                                       verr {
                                                         code:
                                                                  integer
     Tea Kettles are not currently supported in this
                                                    \rightleftharpoons
418
                                                         message: string
     version of the API
                                                         fields: string
                                                      }
```

```
Code Description
                                                      Schema
                                                          verr {
                                                                       integer
                                                             code:
     Transaction Volume Quota Exceeded, try again
429
                                                       \Longrightarrow
                                                             message: string
     in 1 minute.
                                                             fields: string
                                                          }
                                                          verr {
                                                             code:
                                                                       integer
500 Incomplete Request or Server Error
                                                             message: string
                                                             fields: string
                                                          }
Try this operation
```

/IntelligentAgent/oauth20/token

POST /IntelligentAgent/oauth20/token

Access Control

Description

Authorization Code grant types require a POST to the token endpoint after a GET for Authorization code.

Responses

```
Code Description
                                                 Schema
                                                     ▼OAuth_Token {
                                                       token:
                                                                        string
                                                       refresh_token: string
200 Successful response
                                                       token_type:
                                                                        string
                                                       expires in:
                                                                        string
                                                       scopes:
                                                                        string
                                                      verr {
                                                        code:
                                                                  integer
401 Unknown User, Not Authenticated
                                                  \rightleftharpoons
                                                        message: string
                                                        fields: string
                                                      verr {
     Not Authorized. Missing Authorization
                                                        code:
                                                                  integer
403 Header, Unknown User or App ID or
                                                        message: string
                                                        fields: string
     incorrect password or secret.
                                                     }
                                                      verr {
                                                        code:
                                                                  integer
     Transaction Volume Quota Exceeded, try
429
                                                  \rightleftharpoons
                                                        message: string
     again in 1 minute.
                                                        fields: string
                                                     }
                                                      verr {
                                                        code:
                                                                  integer
500 Incomplete Request or Server Error
                                                        message: string
                                                  \rightleftharpoons
                                                        fields: string
                                                     }
Try this operation
```

GET /IntelligentAgent/oauth20/token

Access Control

Description

Applications request an implicit token with a client id and secret prior to user authentication

Parameters

Name	Located in	Description	Required S	Schema
grant_type	query	value = implicit	Yes	ightleftarrowsstring
client_id	query	a valid OAuth2 client id registered to the app authorized to use the API is required (this changes with each app store version iteration)	Yes	≓string
client_secret	query	the client secret associated to the app client id (this changes with each app store version iteration)	Yes	≓string

Responses

```
Code Description
                                                  Schema
                                                      ▼OAuth_Token {
                                                         token:
                                                                          string
                                                         refresh_token: string
                                                        token_type:
200 Successful response
                                                   \rightleftharpoons
                                                                          string
                                                         expires_in:
                                                                          string
                                                         scopes:
                                                                          string
                                                      }
                                                       verr {
                                                         code:
                                                                    integer
                                                         message: string
401 Unknown User, Not Authenticated
                                                   \rightleftharpoons
                                                         fields: string
                                                       }
                                                       verr {
     Not Authorized. Missing Authorization
                                                         code:
                                                                    integer
                                                         message: string
403 Header, Unknown User or App ID or
                                                   \rightleftharpoons
                                                         fields: string
     incorrect password or secret.
                                                       }
```

```
Code Description
                                                   Schema
                                                         verr {
                                                           code:
                                                                      integer
     Transaction Volume Quota Exceeded, try
429
                                                     \Longrightarrow
                                                           message: string
     again in 1 minute.
                                                           fields: string
                                                        }
                                                         verr {
                                                           code:
                                                                      integer
     Bad Request (User Error, Network Packet
500
                                                           message: string
                                                     \rightleftharpoons
     Loss), Server Error
                                                           fields: string
                                                        }
Try this operation
```

/IntelligentAgent/starts

GET /IntelligentAgent/starts Schedule Description Returns the list of lifts scheduled to start next. Responses **Code Description** Schema ▼LiftInfo { code: integer LiftDescription: string LiftIPV6Id: string LiftStartTime: string LiftStartTimeUnix: string LocationId: string LiftFuelLevel: number LiftFuelType: string LiftForkPosition: number LiftDirection: string 200 Successful response LiftVibrationHz: number LiftVelocity: number LiftEngineTempC: number LiftEngineTempF: number LiftEngineTempK: number LiftEngineTempR: number LiftLatitude: number LiftLongitude: number LiftWeight: number LiftClass: string } verr { code: integer 401 Unknown User, Not Authenticated message: string \rightleftharpoons fields: string verr { Not Authorized. Expired or Missing code: integer Access Token, or Access Token 403 \rightleftharpoons message: string lacks the scope of entitlement fields: string } required

```
Code Description
                                             Schema
                                                  verr {
                                                    code: integer
      Transaction Volume Quota
429

ightleftarrows
                                                    message: string
      Exceeded, try again in 1 minute.
                                                     fields: string
                                                  }
                                                  verr {
                                                    code:
                                                               integer
500 Incomplete Request or Server Error
                                                    message: string
                                              \rightleftharpoons
                                                     fields: string
                                                  }
Security
Security Schema
                                       Scopes
                                       lifts:inactive
AccessCode
 Try this operation
```

/IntelligentAgent/starts/{LOCATION}

GET /IntelligentAgent/starts/{LOCATION}

Lifts

Description

Returns a list of lifts scheduled to start for a specific location.

Parameters

Name	Located in	Description	Required	Schema
LOCATION	path	Specify the value of the LOCATION ID as a string	Yes	ightleftarrows string

Responses

```
Code Description
                                      Schema
                                          ▼LiftInfo {
                                            code:
                                                                integer
                                            LiftDescription:
                                                                string
                                            LiftIPV6Id:
                                                                string
                                            LiftStartTime:
                                                                string
                                            LiftStartTimeUnix: string
                                            LocationId:
                                                                string
                                            LiftFuelLevel:
                                                                number
                                            LiftFuelType:
                                                                string
                                            LiftForkPosition:
                                                                number
                                            LiftDirection:
                                                                string
200 Successful response
                                            LiftVibrationHz:
                                                                number
                                            LiftVelocity:
                                                                number
                                            LiftEngineTempC:
                                                                number
                                                                number
                                            LiftEngineTempF:
                                            LiftEngineTempK:
                                                                number
                                            LiftEngineTempR:
                                                                number
                                            LiftLatitude:
                                                                number
                                                                number
                                            LiftLongitude:
                                            LiftWeight:
                                                                number
                                            LiftClass:
                                                                string
                                          }
```

Code Description			Schema				
401	Unknown User, Not Authenticate	d [∓]		: :	integer string string		
403	Not Authorized. Expired or Missir Access Token, or Access Token lacks the scope of entitlement required	ng ∓		e:	integer string string		
429	Transaction Volume Quota Exceeded, try again in 1 minute.	₹		e: sage:	integer string string		
500	Incomplete Request or Server En	ror ∓		: :	integer string string		
Security							
Secur	ity Schema	Scopes					
Acce	ssCode	lifts:ina	tive				
Try t	nis operation						

/IntelligentAgent/lifts

GET /IntelligentAgent/lifts

Lifts

Description

Returns a list of lifts based on the token entitlement scope of the client.

```
Responses
Code Description
                                         Schema
                                             ▼LiftInfo {
                                                code:
                                                                     integer
                                                LiftDescription:
                                                                     string
                                                LiftIPV6Id:
                                                                     string
                                                LiftStartTime:
                                                                     string
                                                LiftStartTimeUnix: string
                                                LocationId:
                                                                     string
                                                LiftFuelLevel:
                                                                     number
                                                LiftFuelType:
                                                                     string
                                                LiftForkPosition:
                                                                    number
                                                LiftDirection:
                                                                     string
200 Successful response
                                                LiftVibrationHz:
                                                                     number
                                                                     number
                                                LiftVelocity:
                                                LiftEngineTempC:
                                                                     number
                                                LiftEngineTempF:
                                                                     number
                                                LiftEngineTempK:
                                                                     number
                                                LiftEngineTempR:
                                                                     number
                                                LiftLatitude:
                                                                     number
                                                LiftLongitude:
                                                                     number
                                                LiftWeight:
                                                                     number
                                                LiftClass:
                                                                     string
                                             }
                                              verr {
                                                 code:
                                                          integer
401 Unknown User, Not Authenticated
                                                message: string
                                           \rightleftharpoons
                                                 fields: string
                                              verr {
     Not Authorized. Expired or Missing
                                                 code:
                                                          integer
     Access Token, or Access Token
403
                                           \rightleftharpoons
                                                message: string
     lacks the scope of entitlement
                                                 fields: string
                                              }
     required
```

```
Code Description
                                             Schema
                                                  verr {
                                                     code:
                                                              integer
      Transaction Volume Quota
429

ightleftarrows
                                                     message: string
      Exceeded, try again in 1 minute.
                                                     fields: string
                                                  }
                                                  verr {
                                                     code:
                                                               integer
500 Incomplete Request or Server Error
                                                     message: string
                                              \rightleftharpoons
                                                     fields: string
                                                  }
Security
Security Schema
                      Scopes
                                 lifts:active lifts:inactive
                      lifts:all
AccessCode
 Try this operation
```

/IntelligentAgent/Liftwork/Lift/{LiftIPV6Id}

GET /IntelligentAgent/Liftwork/Lift/{LiftIPV6Id}

Lift Work

Description

Returns a list of work for a specific lift ID.

Parameters

Name	in Located	Description	Required	Schema
LiftIPV6Id	path	Specify the Lift IPV6 address as a string in quotes.	Yes	≓ integer

Schema

Responses

```
Code Description
                                           ▼LiftWork {
                                              code:
                                                                     integer
                                              LiftWorkDescription: string
                                              LiftWorkId:
                                                                     string
                                              LiftWorkStartTime:
                                                                     string
200 Successful response
                                              LiftWorkStopTime:
                                                                     string
                                              LiftWorkLocationId:
                                                                     string
                                              LiftLoadCenter:
                                                                     number
                                              LiftWorkWeight:
                                                                     number
                                           }
                                            verr {
                                               code:
                                                         integer
                                               message: string
401 Unknown User, Not Authenticated
                                               fields: string
                                            }
                                            verr {
     Not Authorized. Expired or
                                               code:
                                                         integer
     Missing Access Token, or Access
403
                                         \rightleftharpoons
                                               message: string
     Token lacks the scope of
                                               fields: string
     entitlement required
                                            }
                                            verr {
                                               code:
                                                         integer
     Transaction Volume Quota
429
                                               message: string
                                         \rightleftharpoons
     Exceeded, try again in 1 minute.
                                               fields: string
                                            }
```

```
Code Description
                                          Schema
                                               verr {
                                                  code:
                                                           integer
      Incomplete Request or Server
500

ightleftarrows
                                                  message: string
      Error
                                                  fields: string
                                               }
Security
Security Schema
                      Scopes
                                lifts:active lifts:inactive
                      lifts:all
AccessCode
 Try this operation
```

/IntelligentAgent/Liftwork/Location/{LocationId}

GET /IntelligentAgent/Liftwork/Location/{LocationId}

Lift Work

Description

Returns a list of all lift work for a specific location.

Parameters

Name	Located in	Description	Required	Schema
LocationId	path	Specify the Location ID as a string in quotes.	Yes	

Schema

Responses

Code Description

```
▼LiftWork {
                                              code:
                                                                     integer
                                              LiftWorkDescription: string
                                              LiftWorkId:
                                                                     string
                                              LiftWorkStartTime:
                                                                     string
200 Successful response
                                              LiftWorkStopTime:
                                                                     string
                                              LiftWorkLocationId:
                                                                     string
                                              LiftLoadCenter:
                                                                     number
                                              LiftWorkWeight:
                                                                     number
                                           }
                                            verr {
                                              code:
                                                        integer
                                              message: string
401 Unknown User, Not Authenticated
                                              fields: string
                                            }
                                            verr {
     Not Authorized. Expired or
                                              code:
                                                        integer
     Missing Access Token, or Access
403
                                         \rightleftharpoons
                                              message: string
     Token lacks the scope of
                                              fields: string
     entitlement required
                                            }
                                            verr {
                                              code:
                                                        integer
     Transaction Volume Quota
429
                                              message: string
                                         \rightleftharpoons
     Exceeded, try again in 1 minute.
                                              fields: string
                                            }
```

```
Code Description
                                          Schema
                                               verr {
                                                  code:
                                                          integer
      Incomplete Request or Server
500

ightleftarrows
                                                 message: string
      Error
                                                  fields: string
                                               }
Security
Security Schema
                      Scopes
                                lifts:active lifts:inactive
                      lifts:all
AccessCode
 Try this operation
```

/IntelligentAgent/LiftLocations/{STATUS}

GET /IntelligentAgent/LiftLocations/{STATUS}

Lifts

Description

This operation returns a list of lifts and their location details

Parameters

	Name	Located in	Description	Required	Schema
STATUS pa	nath	Specify the Lift STATUS as an integer. 0	Yes	⇒ integer	
	31A103	рант	= inactive 1 = active	165	← inceger

Responses

```
Code Description
                                      Schema
                                          ▼LiftInfo {
                                            code:
                                                                integer
                                            LiftDescription:
                                                                string
                                            LiftIPV6Id:
                                                                string
                                            LiftStartTime:
                                                                string
                                            LiftStartTimeUnix: string
                                            LocationId:
                                                                string
                                            LiftFuelLevel:
                                                                number
                                            LiftFuelType:
                                                                string
                                            LiftForkPosition:
                                                                number
                                            LiftDirection:
                                                                string
200 Successful response
                                            LiftVibrationHz:
                                                                number
                                            LiftVelocity:
                                                                number
                                            LiftEngineTempC:
                                                                number
                                                                number
                                            LiftEngineTempF:
                                            LiftEngineTempK:
                                                                number
                                            LiftEngineTempR:
                                                                number
                                            LiftLatitude:
                                                                number
                                            LiftLongitude:
                                                                number
                                            LiftWeight:
                                                                number
                                            LiftClass:
                                                                string
                                          }
```

```
Code Description
                                            Schema
                                                 verr {
                                                   code:
                                                             integer
401 Unknown User, Not Authenticated
                                                   message: string
                                                   fields: string
                                                 verr {
      Not Authorized. Expired or Missing
                                                   code:
                                                             integer
      Access Token, or Access Token
403
                                             \rightleftharpoons
                                                   message: string
      lacks the scope of entitlement
                                                   fields: string
      required
                                                }
                                                 verr {
                                                   code:
                                                             integer
      Transaction Volume Quota
429
                                                   message: string
      Exceeded, try again in 1 minute.
                                                   fields: string
                                                 }
                                                 verr {
                                                   code:
                                                             integer
500 Incomplete Request or Server Error
                                                   message: string
                                             \rightleftharpoons
                                                   fields: string
                                                }
Security
Security Schema
                      Scopes
                                lifts:active lifts:inactive
AccessCode
                      lifts:all
 Try this operation
```

/IntelligentAgent/updateliftinfo/{LiftIPV6Id}

POST /IntelligentAgent/updateliftinfo/{LiftIPV6Id}

Lift Info

Description

Update Lift Information

Parameters

Name	Located in	Description	Required	Schema
LiftIPV6Id	l path	Specify the Lift IPV6 address as a string in quotes.	Yes	ightleftarrows string

Responses

```
Code Description
                                       Schema
                                          ▼LiftInfo {
                                             code:
                                                                integer
                                             LiftDescription:
                                                                string
                                             LiftIPV6Id:
                                                                string
                                             LiftStartTime:
                                                                string
                                             LiftStartTimeUnix: string
                                             LocationId:
                                                                string
                                             LiftFuelLevel:
                                                                number
                                             LiftFuelType:
                                                                string
                                             LiftForkPosition:
                                                                number
                                             LiftDirection:
                                                                string
200 Successful response
                                             LiftVibrationHz:
                                                                number
                                             LiftVelocity:
                                                                number
                                             LiftEngineTempC:
                                                                number
                                                                number
                                             LiftEngineTempF:
                                             LiftEngineTempK:
                                                                number
                                             LiftEngineTempR:
                                                                number
                                             LiftLatitude:
                                                                number
                                                                number
                                             LiftLongitude:
                                             LiftWeight:
                                                                number
                                             LiftClass:
                                                                string
                                          }
```

Code	Description					
401	Unknown User, Not Authenticated	₹	code: message: fields:			
403	Not Authorized. Expired or Missing Access Token. Or Access Token lacks the scope of entitlement required	₹ €	code: message: fields:			
429	Transaction Volume Quota Exceeded, try again in 1 minute.	₹ €	code: message: fields:			
500	Incomplete Request or Server Erro		code: message: fields:			
Secu	ırity					
Security Schema Scopes						
adm	in_AccessCode a	dmin_upo	datelifts			
Try this operation						

Models

OAuth_Token

```
▼OAuth_Token {
      token:
                       string
      refresh_token: string
      token_type:
                       string
 \rightleftharpoons
      expires_in:
                       string
      scopes:
                       string
   }
success
    ▼success {
      code:
               integer
\Rightarrow message: string
      fields: string
   }
LiftInfo
```

```
▼LiftInfo {
      code:
                          integer
      LiftDescription:
                          string
      LiftIPV6Id:
                          string
      LiftStartTime:
                          string
      LiftStartTimeUnix: string
      LocationId:
                          string
      LiftFuelLevel:
                          number
      LiftFuelType:
                          string
      LiftForkPosition: number
      LiftDirection:
                          string
 \rightleftharpoons
      LiftVibrationHz:
                          number
      LiftVelocity:
                          number
      LiftEngineTempC:
                          number
      LiftEngineTempF:
                          number
      LiftEngineTempK:
                          number
      LiftEngineTempR:
                          number
      LiftLatitude:
                          number
      LiftLongitude:
                          number
      LiftWeight:
                          number
      LiftClass:
                          string
   }
LiftWork
   ▼LiftWork {
      code:
                             integer
      LiftWorkDescription: string
      LiftWorkId:
                             string
      LiftWorkStartTime:
                             string
 \rightleftharpoons
      LiftWorkStopTime:
                             string
      LiftWorkLocationId:
                            string
      LiftLoadCenter:
                             number
      LiftWorkWeight:
                             number
   }
err
```

verr {

ightleftarrows