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
 - o 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
 Mechanic Lift Maintenance view

people:financialmgrFinancial 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)

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

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
                                                       \rightleftharpoons message: string
                                                            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
418
                                                       \rightleftharpoons 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
                                                  \rightleftharpoons
                                                        message: string
                                                        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 Schema	
grant_type	grant_type query value = implicit		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
client_secre	t 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 200 Successful response LiftDirection: string LiftVibrationHz: number LiftVelocity: number LiftEngineTempC: number LiftEngineTempF: number LiftEngineTempK: number LiftEngineTempR: number LiftLatitude: number LiftLongitude: number } verr { code: integer message: string **401** Unknown User, Not Authenticated fields: string } Not Authorized. Expired or Missing verr { code: integer Access Token, or Access Token 403 \rightleftharpoons message: string lacks the scope of entitlement fields: string } required

Code	Description		Scher	ma	
429	Transaction Volume Quota		\rightleftharpoons	<pre>verr { code:</pre>	integer
723	Exceeded, try again in 1 minute	-			
				verr {	
				code:	integer
500	Incomplete Request or Server E	rror	\rightleftharpoons	message:	string
				fields:	string
				}	
Secu	rity				
Secur	ity Schema	Scopes	;		
Acce	ssCode	lifts:i	nact	tive	
Try th	nis 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
                                                                  string
                                              LiftStartTime:
                                              LiftStartTimeUnix: string
                                              LocationId:
                                                                  string
                                              LiftFuelLevel:
                                                                  number
                                              LiftFuelType:
                                                                  string
                                              LiftForkPosition:
                                                                  number
200 Successful response
                                              LiftDirection:
                                                                  string
                                              LiftVibrationHz:
                                                                  number
                                              LiftVelocity:
                                                                  number
                                              LiftEngineTempC:
                                                                  number
                                                                  number
                                              LiftEngineTempF:
                                              LiftEngineTempK:
                                                                  number
                                              LiftEngineTempR:
                                                                  number
                                              LiftLatitude:
                                                                  number
                                              LiftLongitude:
                                                                  number
                                           }
                                            verr {
                                               code:
                                                        integer
401 Unknown User, Not Authenticated
                                         \rightleftharpoons
                                               message: string
                                               fields: string
                                            }
```

```
Code Description
                                              Schema
      Not Authorized. Expired or Missing
                                                   verr {
                                                      code:
                                                                integer
      Access Token, or Access Token
403
                                                      message: string
                                               \rightleftharpoons
      lacks the scope of entitlement
                                                      fields: string
      required
                                                   verr {
                                                      code:
                                                                integer
      Transaction Volume Quota
429
                                                      message: string
                                               \rightleftharpoons
      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/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
200 Successful response
                                              LiftDirection:
                                                                   string
                                              LiftVibrationHz:
                                                                   number
                                              LiftVelocity:
                                                                   number
                                              LiftEngineTempC:
                                                                   number
                                                                   number
                                              LiftEngineTempF:
                                              LiftEngineTempK:
                                                                   number
                                              LiftEngineTempR:
                                                                   number
                                              LiftLatitude:
                                                                   number
                                              LiftLongitude:
                                                                   number
                                            }
                                             verr {
                                               code:
                                                         integer
                                               message: string
401 Unknown User, Not Authenticated
                                               fields: string
                                             }
     Not Authorized. Expired or Missing
                                             verr {
                                               code:
                                                         integer
     Access Token, or Access Token
403
                                          \rightleftharpoons
                                               message: string
     lacks the scope of entitlement
                                               fields: string
                                             }
     required
```

```
Code Description
                                            Schema
                                                 verr {
      Transaction Volume Quota
                                                              integer
                                                    code:
429
      Exceeded, try again in 1 minute.
                                                 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	Description	Required	Schema
LiftIPV6Id	path	Specify the Lift IPV6 address as a string in quotes.	Yes	ightleftarrow integer

Responses

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

Code	Description			Schen	na	
500	Incomplete Re	quest or Se	erver	\rightleftharpoons	verr { code:	integer
	Error					
Secu	ırity					
Secur	ity Schema	Scopes				
Acce	essCode	lifts:all	lifts:acti	ive	lifts:inacti	ive
Try tl	his 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	

Responses

```
Code Description
                                      Schema
                                          ▼LiftWork {
                                             code:
                                                                    integer
                                             LiftWorkDescription: string
                                             LiftWorkId:
                                                                    string
200 Successful response
                                             LiftWorkStartTime:
                                                                   string
                                             LiftWorkStopTime:
                                                                    string
                                             LiftWorkLocationId: string
                                          }
                                           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
                                             message: string
                                        \rightleftharpoons
     Token lacks the scope of
                                              fields: string
                                           }
     entitlement required
                                           verr {
                                              code:
                                                       integer
     Transaction Volume Quota
429
                                             message: string
     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	path	Specify the Lift STATUS as an integer. 0 = inactive 1 = active	Yes	ightleftarrow integer

Responses

```
Code Description
                                        Schema
                                            ▼LiftInfo {
                                              code:
                                                                  integer
                                              LiftDescription:
                                                                  string
                                              LiftIPV6Id:
                                                                  string
                                                                  string
                                              LiftStartTime:
                                              LiftStartTimeUnix: string
                                              LocationId:
                                                                  string
                                              LiftFuelLevel:
                                                                  number
                                              LiftFuelType:
                                                                  string
                                              LiftForkPosition:
                                                                  number
200 Successful response
                                              LiftDirection:
                                                                  string
                                              LiftVibrationHz:
                                                                  number
                                              LiftVelocity:
                                                                  number
                                              LiftEngineTempC:
                                                                  number
                                              LiftEngineTempF:
                                                                  number
                                              LiftEngineTempK:
                                                                  number
                                              LiftEngineTempR:
                                                                  number
                                              LiftLatitude:
                                                                  number
                                              LiftLongitude:
                                                                  number
                                            }
                                             verr {
                                               code:
                                                        integer
401 Unknown User, Not Authenticated
                                         \rightleftharpoons
                                               message: string
                                               fields: string
                                            }
```

```
Code Description
                                              Schema
                                                   verr {
      Not Authorized. Expired or Missing
                                                                 integer
                                                      code:
      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
                                               \rightleftharpoons
      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** Located Name Description Required Schema Specify the Lift IPV6 address as a $\rightleftarrows \mathtt{string}$ LiftIPV6Id path Yes string in quotes. Responses **Code Description** Schema ▼LiftInfo { code: integer LiftDescription: string LiftIPV6Id: string LiftStartTime: string LiftStartTimeUnix: string LocationId: string LiftFuelLevel: number LiftFuelType: string LiftForkPosition: number 200 Successful response LiftDirection: string LiftVibrationHz: number number LiftVelocity: LiftEngineTempC: number LiftEngineTempF: number LiftEngineTempK: number LiftEngineTempR: number LiftLatitude: number LiftLongitude: number } verr { code: integer 401 Unknown User, Not Authenticated \rightleftharpoons message: string fields: string }

```
Code Description
                                            Schema
                                                 verr {
      Not Authorized. Expired or Missing
                                                    code:
                                                              integer
      Access Token. Or Access Token
403
                                                    message: string
                                              \rightleftharpoons
      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
                                              \rightleftharpoons
                                                    message: string
                                                    fields: string
                                                 }
Security
Security Schema
                                       Scopes
                                        admin_updatelifts
admin_AccessCode
 Try this operation
```

Models

OAuth_Token

```
vOAuth_Token {
    token: string
    refresh_token: string
    token_type: string
    expires_in: string
    scopes: string
}
```

```
▼success {
      code:
                integer
 \rightleftharpoons
      message: string
      fields: string
   }
LiftInfo
    ▼LiftInfo {
      code:
                           integer
      LiftDescription:
                           string
      LiftIPV6Id:
                           string
      LiftStartTime:
                           string
      LiftStartTimeUnix: string
      LocationId:
                           string
      LiftFuelLevel:
                           number
      LiftFuelType:
                           string
      LiftForkPosition: number
 \rightleftharpoons
      LiftDirection:
                           string
      LiftVibrationHz:
                           number
      LiftVelocity:
                           number
                           number
      LiftEngineTempC:
      LiftEngineTempF:
                           number
      LiftEngineTempK:
                           number
      LiftEngineTempR:
                           number
      LiftLatitude:
                           number
      LiftLongitude:
                           number
   }
```

LiftWork

```
▼LiftWork {
      code:
                             integer
      LiftWorkDescription: string
      LiftWorkId:
                             string
 \rightleftharpoons
      LiftWorkStartTime: string
      LiftWorkStopTime:
                             string
      LiftWorkLocationId: string
   }
err
   verr {
      code:
               integer
      message: string
      fields: string
   }
```