

# Lift Intelligent Agent API (BETA)

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## Lift Intelligent Agent API (BETA)

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- 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
  - 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 Grants read acces to the Lift Operator view
  - 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
  - people:mechanic Grants read access to the Mechanic Lift maintenance view
  - people:financialmgr Grants read and write access to the Financial Manager view

## Security Definitions

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AccessCode

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#### – Web and Mobile Authenticated Users

- |                       |   |
|-----------------------|---|
| – 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    |
| – readpublic_key      | List and view details for public keys   |
| – 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                  |

## MobileApp\_Implicit

#### – Implicitly Trusted Mobile App with Anonymous User

- |                  |                                       |
|------------------|---------------------------------------|
| – readpublic_key | List and view details for public keys |
|------------------|---------------------------------------|

## admin\_AccessCode

- |                           |  |
|---------------------------|--|
| – administrative purposes |  |
| – admin_updatelifts       | Grants 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 URL	<a href="https://liftintelligentagent.niolabs.com/oauth/authorize">https://liftintelligentagent.niolabs.com/oauth/authorize</a> ( <a href="https://liftintelligentagent.niolabs.com/oauth/authorize">https://liftintelligentagent.niolabs.com/oauth/authorize</a> )
Token URL	<a href="https://liftintelligentagent.niolabs.com/oauth/token">https://liftintelligentagent.niolabs.com/oauth/token</a> ( <a href="https://liftintelligentagent.niolabs.com/oauth/token">https://liftintelligentagent.niolabs.com/oauth/token</a> )

## Scopes

<b>lifts:all</b>	Grants read access to all lifts
<b>lifts:active</b>	Grants read access to only active lifts
<b>lifts:inactive</b>	Grants read access to inactive lifts
<b>people:liftoperator</b>	Lift Operator view
<b>people:shopmgr</b>	Shop Manager mechanical view
<b>people:floormgr</b>	Lift Operations Management view
<b>people:mechanic</b>	Mechanic Lift Maintenance view
<b>people:financialmgr</b>	Financial Manager view
<b>readpublic_key</b>	List and view details for public keys

## MobileApp\_Implicit (OAuth 2.0)

Authenticate

Flow	implicit
Authorization URL	<a href="https://liftintelligentagent.niolabs.com/oauth/authorize">https://liftintelligentagent.niolabs.com/oauth/authorize</a> ( <a href="https://liftintelligentagent.niolabs.com/oauth/authorize">https://liftintelligentagent.niolabs.com/oauth/authorize</a> )

## Scopes

<b>readpublic_key</b>	List and view details for public keys
-----------------------	---------------------------------------

## admin\_AccessCode (OAuth 2.0)

Authenticate

Flow	accessCode
Authorization URL	<a href="https://liftintelligentagent.niolabs.com/oauth/authorize">https://liftintelligentagent.niolabs.com/oauth/authorize</a> ( <a href="https://liftintelligentagent.niolabs.com/oauth/authorize">https://liftintelligentagent.niolabs.com/oauth/authorize</a> )
Token URL	<a href="https://liftintelligentagent.niolabs.com/oauth/token">https://liftintelligentagent.niolabs.com/oauth/token</a> ( <a href="https://liftintelligentagent.niolabs.com/oauth/token">https://liftintelligentagent.niolabs.com/oauth/token</a> )

## Scopes

<b>admin_updatelifts</b>	Grants write access to lifts data
--------------------------	-----------------------------------

<b>admin_writepublic_key</b>	Create, list, and view details for public keys
<b>admin_public_key</b>	Fully 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
<b>200</b>	Successful response with the code and scope query parameters appended to the redirect_uri in the Location HTTP Header	⇒ <pre> ▼ success {   code:    integer   message: string   fields:  string } </pre>
<b>401</b>	Unknown User, Not Authenticated	⇒ <pre> ▼ err {   code:    integer   message: string   fields:  string } </pre>
<b>403</b>	Not Authorized. Missing Authorization Header, Unknown User or App ID or incorrect password or secret.	⇒ <pre> ▼ err {   code:    integer   message: string   fields:  string } </pre>
<b>418</b>	Tea Kettles are not currently supported in this version of the API	⇒ <pre> ▼ err {   code:    integer   message: string   fields:  string } </pre>

Code	Description	Schema
429	Transaction Volume Quota Exceeded, try again in 1 minute.	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div><div>}</div></div></div>
500	Incomplete Request or Server Error	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div><div>}</div></div></div>

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
200	Successful response	<div>↔</div> <div>▼OAuth_Token {     token: string     refresh_token: string     token_type: string     expires_in: string     scopes: string }</div>
401	Unknown User, Not Authenticated	<div>↔</div> <div>▼err {     code: integer     message: string     fields: string }</div>
403	Not Authorized. Missing Authorization Header, Unknown User or App ID or incorrect password or secret.	<div>↔</div> <div>▼err {     code: integer     message: string     fields: string }</div>
429	Transaction Volume Quota Exceeded, try again in 1 minute.	<div>↔</div> <div>▼err {     code: integer     message: string     fields: string }</div>
500	Incomplete Request or Server Error	<div>↔</div> <div>▼err {     code: integer     message: string     fields: string }</div>

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	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_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
200	Successful response	<pre>▼OAuth_Token {   token:      string   refresh_token: string   token_type:  string   expires_in:  string   scopes:     string }</pre>
401	Unknown User, Not Authenticated	<pre>▼err {   code:    integer   message: string   fields:  string }</pre>
403	Not Authorized. Missing Authorization Header, Unknown User or App ID or incorrect password or secret.	<pre>▼err {   code:    integer   message: string   fields:  string }</pre>



Code	Description	Schema
429	Transaction Volume Quota Exceeded, try again in 1 minute.	<div><div>⇔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div><div>}</div></div></div>
500	Bad Request (User Error, Network Packet Loss), Server Error	<div><div>⇔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div><div>}</div></div></div>

Try this operation

/IntelligentAgent/starts

GET /IntelligentAgent/starts

Schedule

Description

Returns the list of lifts scheduled to start next.

Responses

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

Code	Description	Schema
429	Transaction Volume Quota Exceeded, try again in 1 minute.	<pre>▼err {   code: integer   message: string   fields: string }</pre>
500	Incomplete Request or Server Error	<pre>▼err {   code: integer   message: string   fields: string }</pre>

### Security

Security Schema	Scopes
AccessCode	lifts:inactive

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	⇔ string

Responses

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

Code	Description	Schema
401	Unknown User, Not Authenticated	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div></div></div>
403	Not Authorized. Expired or Missing Access Token, or Access Token lacks the scope of entitlement required	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div></div></div>
429	Transaction Volume Quota Exceeded, try again in 1 minute.	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div></div></div>
500	Incomplete Request or Server Error	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div></div></div>
Security		
Security Schema		Scopes
AccessCode		lifts:inactive
<div>Try this operation</div>		

/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
200	Successful response	<pre>▼LiftInfo {   code: integer   LiftDescription: string   LiftIPV6Id: string   LiftStartTime: string   LiftStartTimeUnix: string   LocationId: string   LiftFuelLevel: number   LiftFuelType: string   LiftForkPosition: number   LiftDirection: string   LiftVibrationHz: number   LiftVelocity: number   LiftEngineTempC: number   LiftEngineTempF: number   LiftEngineTempK: number   LiftEngineTempR: number   LiftLatitude: number   LiftLongitude: number   LiftWeight: number   LiftClass: string }</pre>
		<pre>⇒ ▼err {   code: integer   message: string   fields: string }</pre>
401	Unknown User, Not Authenticated	<pre>⇒ ▼err {   code: integer   message: string   fields: string }</pre>
403	Not Authorized. Expired or Missing Access Token, or Access Token lacks the scope of entitlement required	<pre>⇒ ▼err {   code: integer   message: string   fields: string }</pre>

Code	Description	Schema
429	Transaction Volume Quota Exceeded, try again in 1 minute.	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div><div>}</div></div></div>
500	Incomplete Request or Server Error	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div><div>}</div></div></div>

### Security

Security Schema	Scopes
AccessCode	lifts:all lifts:active lifts:inactive

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	Located in	Description	Required	Schema
LiftIPv6Id	path	Specify the Lift IPV6 address as a string in quotes.	Yes	⇒ integer

## Responses

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



Code	Description	Schema
<b>500</b>	Incomplete Request or Server Error	<pre>▼ err {   code: integer   message: string   fields: string }</pre>

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### Security

Security Schema	Scopes
AccessCode	<b>lifts:all</b> <b>lifts:active</b> <b>lifts:inactive</b>

---

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	⇔ integer

Responses

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

Code	Description	Schema
<b>500</b>	Incomplete Request or Server Error	<pre>▼ err {   code: integer   message: string   fields: string }</pre>

---

### Security

Security Schema	Scopes
AccessCode	<b>lifts:all</b> <b>lifts:active</b> <b>lifts:inactive</b>

---

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	⇔ integer

Responses

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

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

/IntelligentAgent/updateliftinfo/{LiftIPV6Id}

POST /IntelligentAgent/updateliftinfo/{LiftIPV6Id}

Lift Info

Description

Update Lift Information

Parameters

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

Responses

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

Code	Description	Schema
401	Unknown User, Not Authenticated	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div></div></div>
403	Not Authorized. Expired or Missing Access Token. Or Access Token lacks the scope of entitlement required	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div></div></div>
429	Transaction Volume Quota Exceeded, try again in 1 minute.	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div></div></div>
500	Incomplete Request or Server Error	<div><div>↔</div><div><div>▼err {</div><div>code: integer</div><div>message: string</div><div>fields: string</div></div></div>
Security		
Security Schema		Scopes
admin_AccessCode		admin_updatelifts
<div>Try this operation</div>		

Models

OAuth\_Token

```
▼ OAuth_Token {  
  token:      string  
  refresh_token: string  
⇒ token_type:  string  
  expires_in:  string  
  scopes:      string  
  
}
```

## SUCCESS

```
▼ success {  
  code:  integer  
⇒ 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
  ⇌ 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
  LiftWorkStopTime: string
  LiftWorkLocationId: string
  LiftLoadCenter: number
  LiftWorkWeight: number
}
```

err

**▼ err {**

