

IN THE UNITED STATES DISTRICT COURT
FOR DISTRICT OF DELAWARE

SMART LOCKING TECHNOLOGIES LLC)	
)	
Plaintiff,)	
)	Civil Action No. 1:19-cv-993-LPS
v.)	
)	JURY TRIAL DEMANDED
LOCKSTATE, INC.)	
)	
Defendant.)	
_____)	

AMENDED COMPLAINT

For its Complaint, Plaintiff Smart Locking Technologies LLC ("Smart Locking Technologies"), by and through the undersigned counsel, alleges as follows:

THE PARTIES

1. Smart Locking Technologies is a Delaware limited liability company with a place of business located at 3511 Silverside Road, Suite 105, Wilmington, Delaware 19810.
2. Defendant LockState, Inc. d/b/a RemoteLock is a Delaware company, with, upon information and belief, a place of business located at 2170 South Delaware Street, Denver, Colorado 80223.

JURISDICTION AND VENUE

3. This action arises under the Patent Act, 35 U.S.C. § 1 *et seq.*
4. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338.
5. Upon information and belief, Defendant conducts substantial business in this forum, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals

in this district.

6. Venue is proper in this district pursuant to 28 U.S.C. § 1400(b).

THE PATENTS-IN-SUIT

7. On February 24, 2014, U.S. Patent No. 6,696,918 (the "'918 patent"), entitled "Locking Mechanism for Use with Non-Permanent Access Code," was duly and lawfully issued by the U.S. Patent and Trademark Office. A true and correct copy of the '918 patent is attached hereto as Exhibit A.

8. On October 9, 2001, U.S. Patent No. 6,300,873 (the "'873 patent"), entitled "Locking Mechanism for Use with One-Time Access Code," was duly and lawfully issued by the U.S. Patent and Trademark Office. A true and correct copy of the '873 patent is attached hereto as Exhibit B.

9. The '918 patent is a continuation-in-part of the '873 patent and shares substantially the same specification.

10. The claims of the '918 and '873 patents ("patents-in-suit"), including the asserted claims, when viewed as a whole, including as ordered combinations, are not merely the recitation of well-understood, routine, or conventional technologies or components. The claimed inventions were not well-known, routine, or conventional at the time of the invention, over approximately twenty years ago, and represent specific improvements over the prior art and prior existing systems and methods.

11. At the time of the patented inventions, known methods of using a code to access a secured door, secured access point, and/or secured container were less than secure.

12. As explained in the patents-in-suit, there were several drawbacks with then existing security technologies that used codes to access secured areas or containers.

13. For example,

U.S. Pat. No. 5,774,053, which is hereby incorporated by reference, describes a storage device for the delivery and pickup of goods. As recognized in that disclosure, home delivery of goods has become more and more popular with the rise of shopping over the Internet, by catalog, and so on. In addition to clothing, appliances, furniture, books and other materials previously available from catalogs and the like, the Internet has spawned e-shopping services for groceries and other items. Similarly, in many areas local merchants such as dry cleaners offer residential pickup and delivery services for their customers.

The storage device described in U.S. Pat. No. 5,774,053 provided a means for such home pickups and deliveries even when the homeowner was absent. Briefly, the storage device provided a secure environment for the goods and included a communication apparatus for providing notification that the goods had been picked up or delivered. Access to the storage device was gained by entering a so-called vendor code into a controller via a keypad. The controller oversees locking/unlocking of the storage device. Entering a valid vendor code unlocks the storage device, allowing couriers and/or others to pickup and/or deliver goods from/to the storage device.

One shortcoming with the storage device described by U.S. Pat. No. 5,774,053 concerns the use of the vendor codes. As contemplated, the vendor codes are static, reusable codes assigned to each vendor that delivers and/or picks up goods to/from the storage device. "For example, a laundry and drycleaning (sic) business may be assigned a vendor code of 333, whereas a local grocery store may be assigned a vendor code of 444." U.S. Pat. No. 5,774,053 at col. 5, ll. 39-45. The use of such vendor codes presents a security risk in that once an unauthorized person learns one of the codes, that individual has access to the storage device until such time as the code is removed from the list of authorized vendor codes stored in the controller's memory. This presents a problem inasmuch as several days or weeks may pass before a storage box owners learns that one or more of the vendor codes has been compromised and has time to reprogram the controller with new vendor codes. During this time, the security of the storage box is questionable at best. Moreover, the assigning, canceling and reassigning of the vendor codes requires what could be a significant amount of time and effort (key management) on the part of a storage device owner/end-user. Also, the vendors are required to keep track of codes for different customers and, presumably, must take steps to ensure that the security of these codes are maintained.

'918 patent at 1:23-2:4; '873 patent at 1:23-2:3.

14. Among other things, the inventors of the patents-in-suit wanted to increase security of locking devices by preventing compromised codes from being used to gain unauthorized access. Indeed, as explained in the specification, quoted above, "several days or

weeks may pass before a storage box owners learns that one or more of the vendor codes has been compromised and has time to reprogram the controller with new vendor codes. During this time, the security of the storage box is questionable at best." '918 patent at 1:60-64; '873 patent at 1:59-64. There was thus a need to improve the security of locking devices, and existing technology did not permit one-time use codes or keys to unlock locking devices.

15. The asserted claims of the patents-in-suit are directed to specific improvements in electronic security device functionality and capabilities. Among other things, the asserted claimed inventions improve functionality of locking devices and methods, systems and networks comprising those devices. Including as noted in the patents-in-suit, the claimed technologies comprise innovative systems and processes that provide increased security over those existing at the time and result in a better user experience. The patents-in-suit thus provide concrete applications that improved locking devices and networking, including for issuing to a person needing to unlock a locking device a non-permanent or one-time use access code issued by a remote server.

16. Additionally, the inventions of the asserted claims of the patents-in-suit comprise improvements in the security of locking devices, including that a unique one-time access code to allow access to a locking mechanism associated with a secured door, secured access point, and/or secured container is issued by a server for each access, pickup or delivery, thus reducing opportunities for theft and/or tampering and providing for the tracking of each access.

17. The claimed inventions provide and achieve improved network and security functionality and efficiency with remote locking devices by allowing one time access and non-permanent codes to be received by an access code entry unit that can be automatically generated without the need of expensive hosting of key information or third parties maintaining the use,

accuracy and tracking of the codes. The inventors did more than simply apply current technology to an existing problem. Their invention, as embodied in the asserted claims, was a significant advancement in remote locking technology. The inventions covered by the asserted claims comprise use of wireless networks or the Internet that includes a remote server to form a system that allows for the automatic issuance of unlock codes that are one-time and/or non-permanent, which is known today as "smart locking technology." The claimed inventions encompass such smart locking/unlocking products as those accused in the present action and other actions filed by Smart Locking Technologies, which were described in a 2018 industry analysis, well after the patents-in-suit were filed, as "a novel technology introduced and commercialized in recent past." Smart Lock Market Size, Share, Analysis, Industry Report (May 2018) (available at <https://www.securitysales.com/research/smart-door-locks-sales-2021/>).

18. Accordingly, the patents-in-suit describe "a scheme for providing locking mechanisms (that may be used in a variety of applications) for use with one-time access codes." '918 patent at 2:7-9; '873 patent at 2:6-8. The use of one-time access avoids several drawbacks known in prior art systems and provides increased security in situations where unlock codes need to be provided remotely to an access code entry unit. "[B]ecause the access codes are intended for one-time use only, vendors and others are freed from the responsibility of maintaining the security of a number of keys for different customers for indefinite periods. Keys (or access codes) may be distributed to the locking mechanism in a variety of ways (including via a RF network and/or at the time of manufacture)." '918 patent at 2:15-21; '873 patent at 2:14-21.

19. Further, as explained in the patents-in-suit:

In a further embodiment, a storage device that includes an enclosure adapted to allow for the storage of goods and having a door fitted with a locking mechanism; and a locking mechanism controller coupled to the locking mechanism and adapted to unlock the locking mechanism upon receipt of an entry code . . . is

provided. . . . The locking mechanism controller preferably includes a micro-controller configured to operate an actuator in response to receiving the entry code and may be adapted to receive the entry code via at least one of a keypad, a bar code scanner, a magnetic stripe reader, a wireless (e.g., RF or IR receiver) or a smart card reader. In some cases, the locking mechanism controller may be configured to communicate with a server (e.g., via at least one of the Internet, a wireless network or the public switched telephone network) configured to provide the entry code.

'918 patent at 2:39-67; '873 patent at 2:39-61.

20. "In one embodiment, the present system allows for the secure delivery and/or pickup of goods, thereby increasing the efficiency of courier personnel by providing means for unattended pickup/delivery. In addition, means for verifying such delivery/pickup are incorporated within the system. One embodiment of the present system is composed of storage devices (adapted to be placed at locations where pickup/delivery services are desired, e.g., residences, office buildings, condominium and/or apartment developments, etc.), one or more computer servers, communications devices, human interface components and software. Features of the system include package tracking, electronic signatures, payment transfer, delivery scheduling, unattended transfer/storage of parcels and event notification to multiple parties. In addition, the present system allows for confirmation of deliveries/access to the storage device as well as confirmation of acceptance of the items delivered. As will be more fully described below, a unique one-time access code to allow access to a locking mechanism associated with a storage device is issued by a server for each access, pickup or delivery, thus reducing opportunities for theft and/or tampering and providing for the tracking of each access." '918 patent at 3:66-4:21; '873 patent at 3:46-67.

21. "The one-time access codes may be provided through the use of code books that are personalized for each locking device. For example, at the time each locking device (or its access code entry unit) is manufactured, a number of access codes may be stored in memory in a

particular sequence. For example, the access codes may be stored in a table, similar to that shown in FIG. 4. Each access code may be N-digits long (e.g., 4-10 digits and in one embodiment 5-7 digits) and up to P (e.g., 1024-2048 or more) such access codes may be stored in a table 50 resident in memory (see below for a more detailed discussion of the access controller). These codes may be generated by a cryptographically strong random (e.g., pseudo-random) number (using a unique seed number for each individual locking device) generator at the time of manufacture and a replica of the access code table 50 for each locking device may be maintained at server 30 (e.g., as part of a customer database and/or a key database). Each time a delivery service, merchant and/or other person/entity requests an access code for a particular locking device, an unused code from the table for that locking device is selected and provided to the requester (preferably only after authenticating the identity of the requestor through the use of a previously assigned pass-code or the like)." '873 patent at 7:42-65; *see also* '918 patent at 8:19-42.

22. These noted improvements over the prior art represent meaningful limitations and/or inventive concepts based upon the state of the art approximately twenty years ago. Further, including in view of these specific improvements, the inventions of the asserted claims, when such claims are viewed as a whole and in ordered combination, are not routine, well-understood, conventional, generic, existing, commonly used, well known, previously known, typical, and the like over approximately twenty years ago, including because, until the inventions of the asserted claims of the patents-in-suit, the claimed inventions were not existing or even considered in the field.

23. The asserted claims, including as a whole and where applicable in ordered combination, comprise, *inter alia*, a non-conventional and non-generic arrangement of

communications between locking mechanism and a one-time electronic access code that is delivered remotely over a network to access control device that is a technical improvement to the communications between the devices and provides increased security, including those improvements noted above.

24. The claimed inventions are necessarily rooted in computer technology, i.e., remote security access device technology using one-time access codes, and comprise improvement over prior technologies in order to overcome the problems, including those noted above, specifically arising in the realm of computer networks. The claimed solutions amount to an inventive concept for resolving the particular problems and inefficiencies noted above, including in connection with accessing secured areas and/or containers remotely using a computing device to receive a one-time access code.

25. Smart Locking Technologies is the assignee and owner of the right, title and interest in and to the '918 and '873 patents, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 6,696,918

26. Smart Locking Technologies repeats and realleges the allegations of paragraphs 1 through 25 as if fully set forth herein.

27. Without license or authorization and in violation of 35 U.S.C. § 271(a), Defendant is liable for infringement of at least claim 32 of the '918 patent by making, using, importing, offering for sale, and/or selling locking devices and systems and methods therefor, including, but not limited to, OpenEdge Smart Locks, because each and every element is met either literally or equivalently.

28. Upon information and belief, Defendant used the OpenEdge Smart Locks via its internal use and testing in the United States, directly infringing one or more claims of the '918 patent.

29. For example, to create its video "Door Lock, Meet the Internet" (available at <https://youtu.be/BX2i6nv16mo>), Defendant used OpenEdge Smart Locks.

30. More specifically, OpenEdge Smart Locks are locking mechanisms.

OpenEdge Smart Locks by RemoteLock

RemoteLock, the leader in WiFi enabled smart locks, is perfect for Airbnb properties, office buildings, rental properties, residential, industrial, and any location needing remote monitoring and management of locks.

Connect directly to existing routers with no additional equipment needed. This robust Wi-Fi enabled device allows users to manage access remotely, know when people unlock doors, and even receive alerts when codes are used.

Scheduled Access
Complete Reporting
Manage Anywhere

Product Name	Price	Link
New RemoteLock OpenEdge BG for business and rentals.	\$399.00	BUY NOW >
RemoteLock OpenEdge CG (7i) Satin Nickel Commercial WiFi Smart Lock	\$479.00	BUY NOW >
RemoteLock OpenEdge CG (7i) Black WiFi Commercial Smart Lock	\$479.00	BUY NOW >
RemoteLock OpenEdge RG (5i) Deadbolt Satin Nickel	\$249.00	BUY NOW >
RemoteLock OpenEdge RG (5i) Deadbolt Polished Brass	\$249.00	BUY NOW >

<https://www.remotelock.com/smart-locks>.

31. OpenEdge Smart Locks include an actuator configured to unlock in response to entry of an authorized access code.

Access Schedule

Finally, an Access Schedule can be selected from the Access schedule drop-down at the bottom of the Guest Access Screen. This is optional and less common for Guest Access users. Access Schedules are used to limit a users access to the doors & locks they are given access to and can also be applied to Guests. For example, an employer may create a schedule for Monday - Friday from 9 AM to 5 PM each day. Selecting this schedule for the Guest would send this schedule to the lock as part of their credential. When this user's pin number is entered on the lock, the door will only unlock if within the parameters of the schedule.

If providing access to an entire location or group of locks, the schedule that is selected will be sent to all locks and doors within the location or group.

Access Schedules must be created prior to the Access Schedule selection and can be created by going to the Access User main menu, then selecting the Schedules tab.

Note: Access schedule application for Guest Access users does not work on the 500i. This feature is compatible with the 5i, 6i, 7i and ACS system.

<https://support.remotelock.com/hc/en-us/articles/360001749712-Access-Guests-and-Users>.

Q: How can I lock the door from the keypad?

A: To lock the door, press the "*" key twice from the keypad.

<https://support.remotelock.com/hc/en-us/articles/360001773351-OpenEdge-BG-Formerly-3i->

FAQs

STEP 20

Test your lock.

Enter the factory default code **1234**, followed by the # button to unlock the lock.











The keypad will flash green and the outside handle will now retract the latch. Auto lock is enabled and the lock will re-lock after 5 seconds. These settings can be configured in the portal after connecting your lock to Wi-Fi.

To lock the lock, press the * button twice.

Please note that, for security purposes, the default access code will be deleted after 24 hours or when your first access user is created. If you do not change the code yourself, it will be set to a randomized code for your protection. You can find this new code in the RemoteLock app.

OpenEdge BG Hardware Installation at p. 26 (available at [https://www.remotelock.com/sites/default/files/RemoteLock%20OpenEdge%20BG%20Hardware%20Installation%20\(Digital\).pdf](https://www.remotelock.com/sites/default/files/RemoteLock%20OpenEdge%20BG%20Hardware%20Installation%20(Digital).pdf)).

32. OpenEdge Smart Locks include an access code entry unit configured to accept a non-permanent use access code issued by a remote server.

 <p>New RemoteLock OpenEdge BG for business and rentals. \$399.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge CG (7) Satin Nickel Commercial WiFi Smart Lock \$479.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge CG (7) Black WiFi Commercial Smart Lock \$479.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge RG (5i) Deadbolt Satin Nickel \$249.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge RG (5i) Deadbolt Polished Brass \$249.00 BUY NOW ></p>
 <p>RemoteLock OpenEdge RG (5i) Deadbolt Rubbed Bronze \$249.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge RG (5i) Lever Rubbed Bronze \$269.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge RG (5i) Lever Satin Nickel \$269.00 BUY NOW ></p>	 <p>ResortLock RL-4000 Algorithmic Smart Lock \$399.00 BUY NOW ></p>	 <p>ResortLock 2000 Algorithmic Lock Silver \$299.00 BUY NOW ></p>

<https://www.remotelock.com/smart-locks>.

Vacation Rental Smart Lock Management

Eliminate the Hassle of Key Exchanges

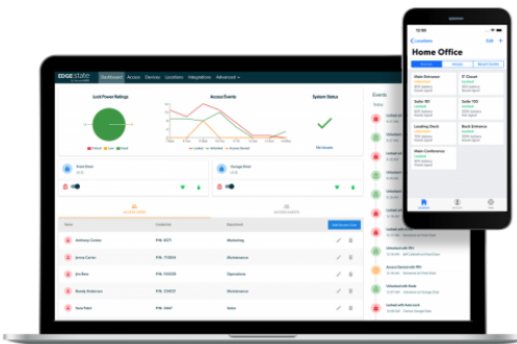
Save time and resources by assigning temporary codes for the time of stay. Use keypad instead of downloading an app. No more lost keys or rekeying. Manage and monitor the lock from long distance.

Temporary Access Codes

Access codes are temporary so they only work during your guests stay, not before or after. Provide directly the EdgeState by RemoteLock system or with Airbnb, HomeAway or property management software integrations.

Alerts & Notifications

Stay in the know by receiving email or text alerts when your guest's check-in or cleaner arrives. Get this piece of mind immediately through the EdgeState by RemoteLock.




<https://www.remotelock.com/rentals>.

Add Access Guest

To add an Access Guest, click on the Add Access Guest button.

Add Access Guest

Name	Jen Richardson	Email	jrichardson@email.com
Card Number		PIN	3854
Start date	2016-08-11 04 00 PM	End date	2016-08-12 11 00 AM

 Door Access

- Location
- Lock
- ACS Reader
- Door Group

Lock

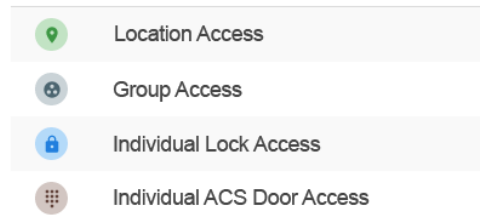
CANCEL CREATE

<https://support.remotelock.com/hc/en-us/articles/360001772491-Door-Locks-Access-Guests>.

Door Access List

The Door Access list shows all access currently granted to the user. To add new access, click on Add Door Access and follow the instructions above for [Add Access User](#).

Each access granted in the list is accompanied by a logo to show the type of access granted.



- **Location Access:** Gives the User access to all of the locks and doors associated with a particular location. The user's credentials are then sent to all locks assigned to that Location. If a new lock is added to the Location, the Access User will be automatically added to the new lock.
- **Door Group:** Provides access to a specific group of locks and doors. If a new lock is added to the Group, the Access User will be automatically added to the new lock.
- **Individual Lock:** Provides access to an individual door lock.
- **ACS Reader:** If you have an account with the Building Access Control System module (ACS), this selection will provide access to an individual ACS door.

<https://support.remotelock.com/hc/en-us/articles/360001749672-Access>.



Cut costs and save time.

Everything In One Dashboard

Don't waste time managing different software and systems. EdgeState's centralized, easy to use dashboard puts everything in one place.

Automate Access

Take advantage of EdgeState's robust integrations to automate guest access.

No Lost Keys, No Rekeying

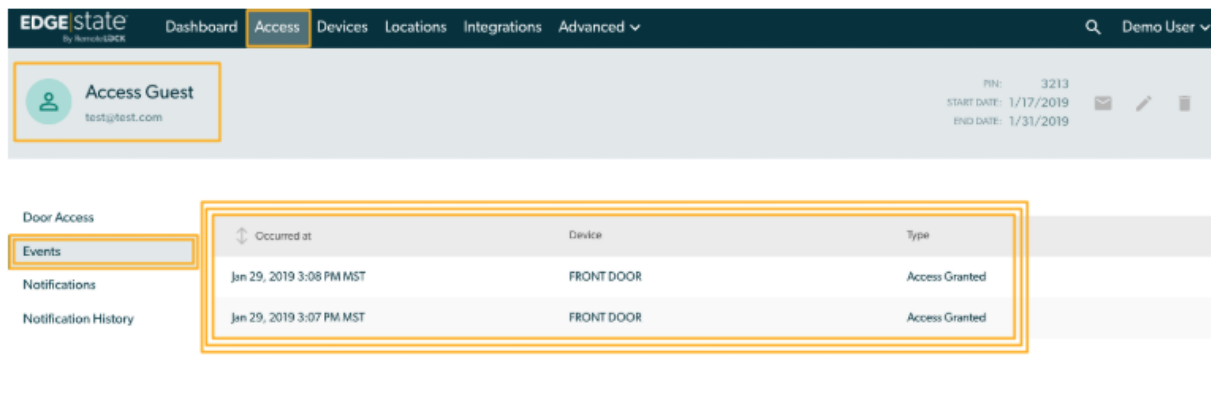
Remove the hassle of rekeying doors and handing off keys to employees and guests.

Use Your Existing WiFi Network

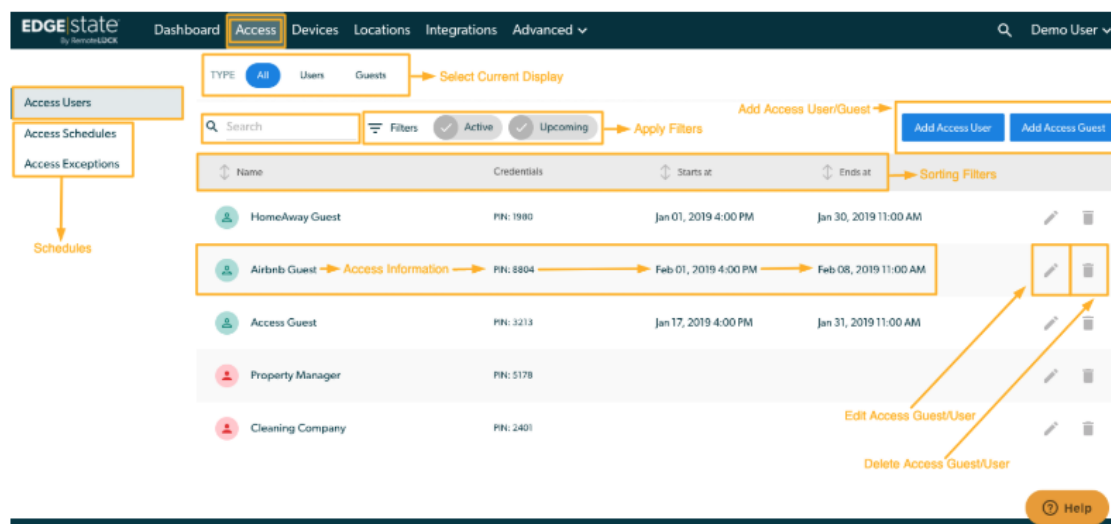
No need for additional gateways or a secondary network in your buildings. RemoteLock OpenEdge locks directly connect to WiFi.

<https://www.remotelock.com/access-control-remotelock>.

Events



<https://support.remotelock.com/hc/en-us/articles/360001749672-Access>.



Access & Guest User creation can be initiated either from an individual lock's management page or via the 'Access' section.

Select the current view you would like displayed by selecting 'All', 'Guests', or 'Users'.

Access Users can be viewed separately from Access Guests in order to provide a clear distinction between users that are given long-term access (Access Users) and those with temporary access (Access Guests). They are also differentiated by a red icon (users) or green icon (guests).

Id.

Temporary access should be given to Access Guests. This allows property owners and managers to provide temporary access codes that start and expire on a specific date and time. For example, a rental property owner may want to create an Access Guest who's guest code will start working on the lock this upcoming Friday at 4 PM and expire 2 days later at 11 AM.

<https://support.remotelock.com/hc/en-us/articles/360001749712-Access-Guests-and-Users>.

Access Guest and Access User Detail

The Access User and Guest Management views provide complete management of an Access User or Guest, including the ability to modify their information, credentials, Door Access and view their Access Events.

The screenshot displays the 'EDGE state' interface for managing access. The top navigation bar includes 'Dashboard', 'Access', 'Devices', 'Locations', 'Integrations', and 'Advanced'. The user is logged in as 'Demo User'. The main content area shows an 'Access Guest' profile for 'test@test.com' with a PIN of 3213, a start date of 1/17/2019, and an end date of 1/31/2019. Below the profile is a table of 'Door Access' events. The table has columns for 'Name', 'Access schedule', 'Start time', and 'End time'. A single row is visible for 'FRONT DOOR' with a start time of 4:00 PM and an end time of 11:00 AM. The interface includes various action buttons and icons for managing users and door access.

Name	Access schedule	Start time	End time
FRONT DOOR		4:00 PM	11:00 AM

<https://support.remotelock.com/hc/en-us/articles/360001749672-Access>.

From the Access tab, you can Add Access Guests, Add Access Users, Edit and Delete current Access Guests and Users, View current Access credential information, Search, and Filter your results to narrow your view.

- **To Edit:** click the pencil icon right of the Access User row to edit the user's information (name and email) and credentials (pin and card #).
- **To Delete:** click on the trash icon to delete an Access User.
- **To View:** Click on the user's name to view the Access User and add/or modify their existing access. This will bring up the Access User Management view covered below.

Access Schedules and Access Exceptions can also be created in the Access sub-tabs to limit access to specific days of the week and hours of the day.

Id.

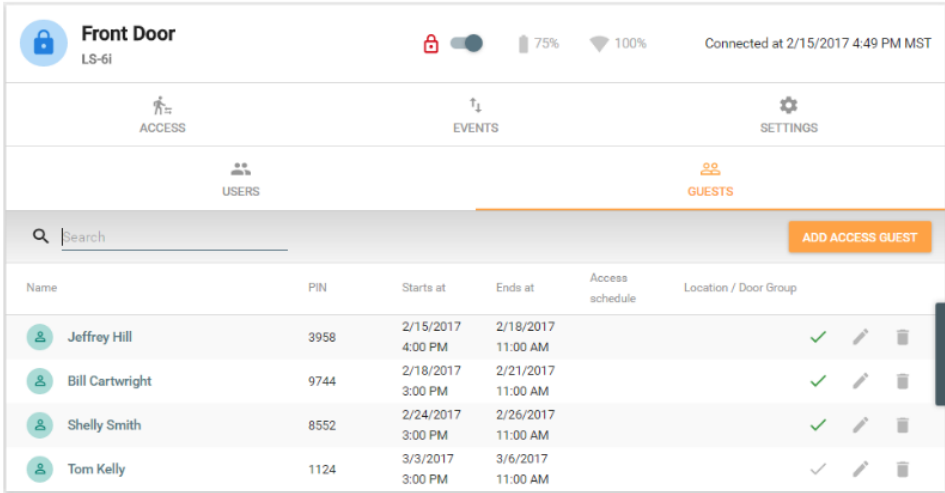
33. The access code includes identification information to indicate who accessed the locking mechanism.

Door Locks: Access Guests

 **Christian Lewis**
March 14, 2018 21:14

FOLLOW

From the Lock Detail View, click on the Access Guest sub-tab to view, edit or add an Access Guest. Access Guests are intended to be temporary. For example, if you have a rental property and have rented to a guest for the weekend, you can create a limited duration guest code that only provides access within the time and dates specified.



Front Door
LS-6i

75% 100% Connected at 2/15/2017 4:49 PM MST

ACCESS EVENTS SETTINGS

USERS **GUESTS**

Search **ADD ACCESS GUEST**

Name	PIN	Starts at	Ends at	Access schedule	Location / Door Group
Jeffrey Hill	3958	2/15/2017 4:00 PM	2/18/2017 11:00 AM	✓	
Bill Cartwright	9744	2/18/2017 3:00 PM	2/21/2017 11:00 AM	✓	
Shelly Smith	8552	2/24/2017 3:00 PM	2/26/2017 11:00 AM	✓	
Tom Kelly	1124	3/3/2017 3:00 PM	3/6/2017 11:00 AM	✓	

<https://support.remotelock.com/hc/en-us/articles/360001772491-Door-Locks-Access-Guests>.

Guest Email Template Preview

From: Jane Roe
Reply to:
Cc:
Bcc:
Subject: Access instructions for your stay at Denver Holiday House

Dear John Doe,

Here is the access code for your upcoming stay at Denver Holiday House.

Access Code: 1234
Access Dates: 09-11-2016 9:56 PM to 09-18-2016 9:56 PM
Address: 1400 Welton St, Denver
City: Denver
State: CO

Lock: Front door

The property is equipped with a keyless entry lock (push button). To unlock the door, enter the above access code followed by the "#" key. To lock the door, press the "*" key twice or press the "Lock" button from the inside.

If you have any questions, please feel free to call us at 555-333-4422 or email at jane.roe@coloradoholidays.com.


<https://youtu.be/VcVXcQlItPk?t=2>.

Add Access Guest

To add an Access Guest, click on the Add Access Guest button.

Add Access Guest

Name	Jen Richardson	Email	jrichardson@email.com
Card Number		PIN	3854
Start date	2016-08-11	End date	2016-08-12
	04 ▾ 00 ▾ PM ▾		11 ▾ 00 ▾ AM ▾

 **Door Access**

- Location
- Lock
- ACS Reader
- Door Group

Lock ▾

CANCEL CREATE

<https://support.remotelock.com/hc/en-us/articles/360001772491-Door-Locks-Access-Guests>.

Events

The screenshot shows the 'EDGEstate' interface for an 'Access Guest' (test@test.com). The 'Events' tab is selected, displaying a table of access attempts. The table has three columns: 'Occurred at', 'Device', and 'Type'. Two events are listed, both for 'FRONT DOOR' with 'Access Granted' status.

Occurred at	Device	Type
Jan 29, 2019 3:08 PM MST	FRONT DOOR	Access Granted
Jan 29, 2019 3:07 PM MST	FRONT DOOR	Access Granted

The Events tab shows all access attempts made with the specific user's credentials, the time of the attempt (Occurred at time), the door or lock it was made on (Device), and the result of the access attempt (Type = Access Granted or Denied).

For WiFi door locks with the Wake Wifi on Keypress setting enabled (it is enabled by default), events should appear on this view within 5-10 seconds after the event takes place on the lock.

<https://support.remotelock.com/hc/en-us/articles/360001749672-Access>.



<https://youtu.be/BX2i6nv16mo?t=37>.

34. OpenEdge Smart Locks include a locking mechanism controller programmed to transmit a message to a server and/or user indicating a non-permanent use access code has been accepted.

RemoteLock — the Smartest Lock for Your Property

RemoteLock, the first and leading WiFi keypad door lock, gives hosts, property owners and managers the ability to monitor and manage access control for their guests. With the RemoteLock you can:

- Give temporary codes to guests through the Airbnb booking system’s full integration with RemoteLock
- Issue new codes or delete codes from your computer or phone.
- Know who enters your property and when.
- Receive email or text alerts when codes are used.
- No need for key exchanges or rekeying lock when keys are lost.

Providing security solutions for over a decade, RemoteLock offers multiple locks that will work for Airbnb hosts:

<https://www.remotelock.com/blog/airbnb-host-assist-adds-remotelock-wifi-smartlocks>.

Notification



Notification

None

First Access Only

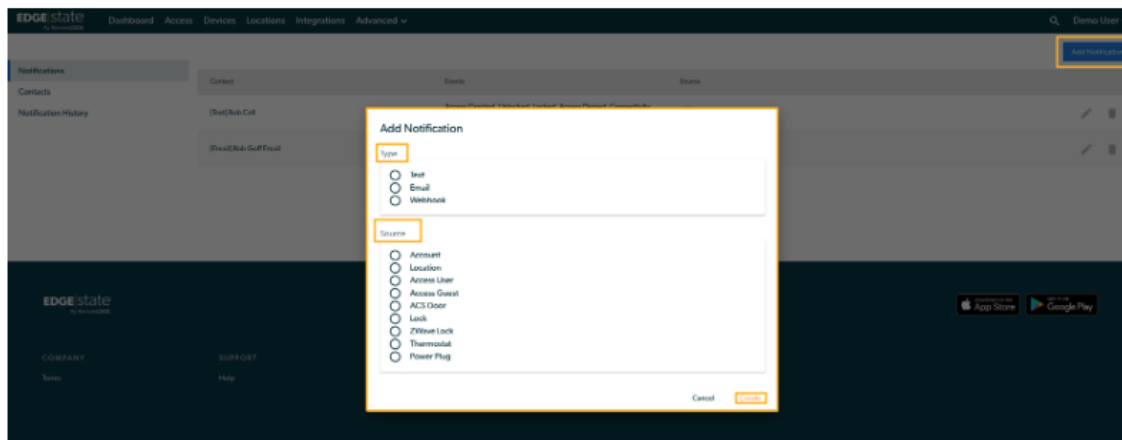
Every Access

The final field in the Add Access Guest information is to select your [notification option](#). Select either None, First Access Only, or Every Access. Your notification details are configured in the Notifications tab but quick select option streamlines the process for new users.

<https://support.remotelock.com/hc/en-us/articles/360001749712-Access-Guests-and-Users>.

Add Notification

To begin, click on the Add Notification button. In the pop-up screen, select the Contact type (Email, Text message or webhook), then select the contact from the drop-down.



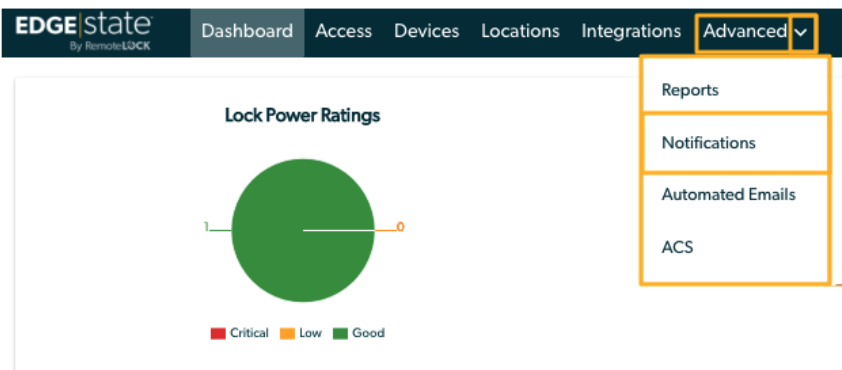
Source

Next, select the "Source". This is the entity that will trigger the notification. You can select "Account" if you want anything from the account to trigger an alert for the chosen event. Or, you can select an individual lock, location, access user, access guest, ACS reader, Thermostat, or Power Plug if you want the events that the user or device trigger to create a notification.

Events

Finally, select the type of Events that you want to be notified on out of the available list. For example, click on Access granted to receive a notification when a particular access user unlocks a door. The list of events available will depend on the source selection.

<https://support.remotelock.com/hc/en-us/articles/360001749072-Notifications>.



You will see a list of any notifications already created for the account. You can also Add new notifications by clicking the Add Notification button. The Contacts tab allows you to edit or add the email and cell phone numbers where notifications can be sent. The Notification History tab shows a history of any notification sent out from your account.

Id.



<https://youtu.be/BX2i6nv16mo?t=37>.

35. Smart Locking Technologies is entitled to recover from Defendant the damages sustained by Smart Locking Technologies as a result of Defendant's infringement of the '918 patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 6,300,873

36. Smart Locking Technologies repeats and realleges the allegations of paragraphs 1 through 35 as if fully set forth herein.

37. Without license or authorization and in violation of 35 U.S.C. § 271(a), Defendant is liable for infringement of at least claim 36 of the '873 patent by making, using, importing, offering for sale, and/or selling locking mechanisms and systems and methods therefor, including, but not limited to, OpenEdge Smart Locks, because each and every element is met either literally or equivalently.

38. Upon information and belief, Defendant used the OpenEdge Smart Locks via its internal use and testing in the United States, directly infringing one or more claims of the '918 patent.

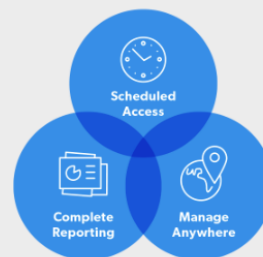
39. For example, to create its video "Door Lock, Meet the Internet" (available at <https://youtu.be/BX2i6nv16mo>), Defendant used OpenEdge Smart Locks.

40. More specifically, OpenEdge Smart Locks are locking mechanisms.

OpenEdge Smart Locks by RemoteLock

RemoteLock, the leader in WiFi enabled smart locks, is perfect for Airbnb properties, office buildings, rental properties, residential, industrial, and any location needing remote monitoring and management of locks.

Connect directly to existing routers with no additional equipment needed. This robust Wi-Fi enabled device allows users to manage access remotely, know when people unlock doors, and even receive alerts when codes are used.



New RemoteLock OpenEdge BG for business and rentals.

\$399.00

[BUY NOW >](#)



RemoteLock OpenEdge CG (7i) Satin Nickel Commercial WiFi Smart Lock

\$479.00

[BUY NOW >](#)



RemoteLock OpenEdge CG (7i) Black WiFi Commercial Smart Lock

\$479.00

[BUY NOW >](#)



RemoteLock OpenEdge RG (5i) Deadbolt Satin Nickel

\$249.00

[BUY NOW >](#)



RemoteLock OpenEdge RG (5i) Deadbolt Polished Brass

\$249.00

[BUY NOW >](#)

<https://www.remotelock.com/smart-locks>.

41. OpenEdge Smart Locks include an actuator configured to unlock in response to entry of an authorized access code.

Access Schedule

Finally, an Access Schedule can be selected from the Access schedule drop-down at the bottom of the Guest Access Screen. This is optional and less common for Guest Access users. Access Schedules are used to limit a users access to the doors & locks they are given access to and can also be applied to Guests. For example, an employer may create a schedule for Monday - Friday from 9 AM to 5 PM each day. Selecting this schedule for the Guest would send this schedule to the lock as part of their credential. When this user's pin number is entered on the lock, the door will only unlock if within the parameters of the schedule.

If providing access to an entire location or group of locks, the schedule that is selected will be sent to all locks and doors within the location or group.

Access Schedules must be created prior to the Access Schedule selection and can be created by going to the Access User main menu, then selecting the Schedules tab.

Note: Access schedule application for Guest Access users does not work on the 500i. This feature is compatible with the 5i, 6i, 7i and ACS system.

<https://support.remotelock.com/hc/en-us/articles/360001749712-Access-Guests-and-Users>.

Q: How can I lock the door from the keypad?

A: To lock the door, press the "*" key twice from the keypad.

<https://support.remotelock.com/hc/en-us/articles/360001773351-OpenEdge-BG-Formerly-3i->

FAQs

STEP 20

Test your lock.

Enter the factory default code **1234**, followed by the # button to unlock the lock.

The keypad will flash green and the outside handle will now retract the latch. Auto lock is enabled and the lock will re-lock after 5 seconds. These settings can be configured in the portal after connecting your lock to Wi-Fi.




To lock the lock, press the * button twice.

Please note that, for security purposes, the default access code will be deleted after 24 hours or when your first access user is created. If you do not change the code yourself, it will be set to a randomized code for your protection. You can find this new code in the RemoteLock app.

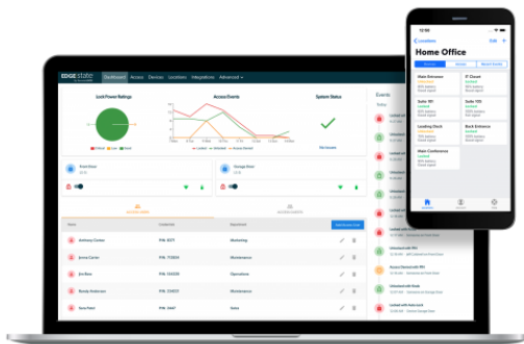
OpenEdge BG Hardware Installation at p. 26 (available at

[https://www.remotelock.com/sites/default/files/RemoteLock%20OpenEdge%20BG%20Hardware%20Installation%20\(Digital\).pdf](https://www.remotelock.com/sites/default/files/RemoteLock%20OpenEdge%20BG%20Hardware%20Installation%20(Digital).pdf)).

42. OpenEdge Smart Locks include an access code entry unit configured to accept a one-time use access-code issued by a remote server.

 <p>New RemoteLock OpenEdge BG for business and rentals. \$399.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge CG (7i) Satin Nickel Commercial WiFi Smart Lock \$479.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge CG (7i) Black WiFi Commercial Smart Lock \$479.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge RG (5i) Deadbolt Satin Nickel \$249.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge RG (5i) Deadbolt Polished Brass \$249.00 BUY NOW ></p>
 <p>RemoteLock OpenEdge RG (5i) Deadbolt Rubbed Bronze \$249.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge RG (5i) Lever Rubbed Bronze \$269.00 BUY NOW ></p>	 <p>RemoteLock OpenEdge RG (5i) Lever Satin Nickel \$269.00 BUY NOW ></p>	 <p>ResortLock RL-4000 Algorithmic Smart Lock \$399.00 BUY NOW ></p>	 <p>ResortLock 2000 Algorithmic Lock Silver \$299.00 BUY NOW ></p>

<https://www.remotelock.com/smart-locks>.



Vacation Rental Smart Lock Management

Eliminate the Hassle of Key Exchanges

Save time and resources by assigning temporary codes for the time of stay. Use keypad instead of downloading an app. No more lost keys or rekeying. Manage and monitor the lock from long distance.

Temporary Access Codes

Access codes are temporary so they only work during your guests stay, not before or after. Provide directly the EdgeState by RemoteLock system or with Airbnb, HomeAway or property management software integrations.

Alerts & Notifications

Stay in the know by receiving email or text alerts when your guest's check-in or cleaner arrives. Get this piece of mind immediately through the EdgeState by RemoteLock.


<https://www.remotelock.com/rentals>.

Add Access Guest

To add an Access Guest, click on the Add Access Guest button.

Add Access Guest

Name	Jen Richardson	Email	jrichardson@email.com
Card Number		PIN	3854
Start date	2016-08-11	End date	2016-08-12
	04 ▾ 00 ▾ PM ▾		11 ▾ 00 ▾ AM ▾

 Door Access

- Location
- Lock
- ACS Reader
- Door Group

Lock ▾

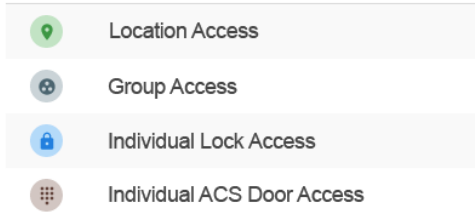
CANCEL CREATE

<https://support.remotelock.com/hc/en-us/articles/360001772491-Door-Locks-Access-Guests>.

Door Access List

The Door Access list shows all access currently granted to the user. To add new access, click on Add Door Access and follow the instructions above for [Add Access User](#).

Each access granted in the list is accompanied by a logo to show the type of access granted.



- **Location Access:** Gives the User access to all of the locks and doors associated with a particular location. The user's credentials are then sent to all locks assigned to that Location. If a new lock is added to the Location, the Access User will be automatically added to the new lock.
- **Door Group:** Provides access to a specific group of locks and doors. If a new lock is added to the Group, the Access User will be automatically added to the new lock.
- **Individual Lock:** Provides access to an individual door lock.
- **ACS Reader:** If you have an account with the Building Access Control System module (ACS), this selection will provide access to an individual ACS door.

<https://support.remotelock.com/hc/en-us/articles/360001749672-Access>.



Cut costs and save time.

Everything In One Dashboard

Don't waste time managing different software and systems. EdgeState's centralized, easy to use dashboard puts everything in one place.

Automate Access

Take advantage of EdgeState's robust integrations to automate guest access.

No Lost Keys, No Rekeying

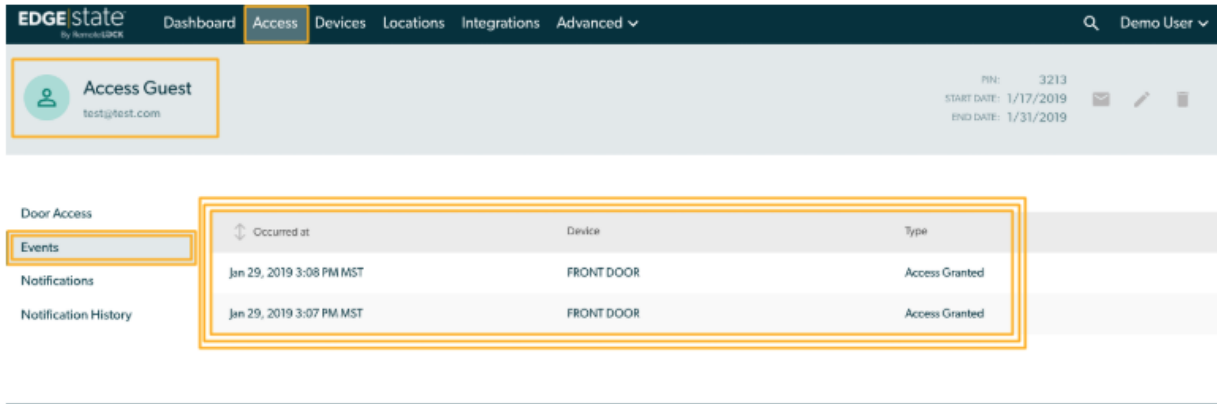
Remove the hassle of rekeying doors and handing off keys to employees and guests.

Use Your Existing WiFi Network

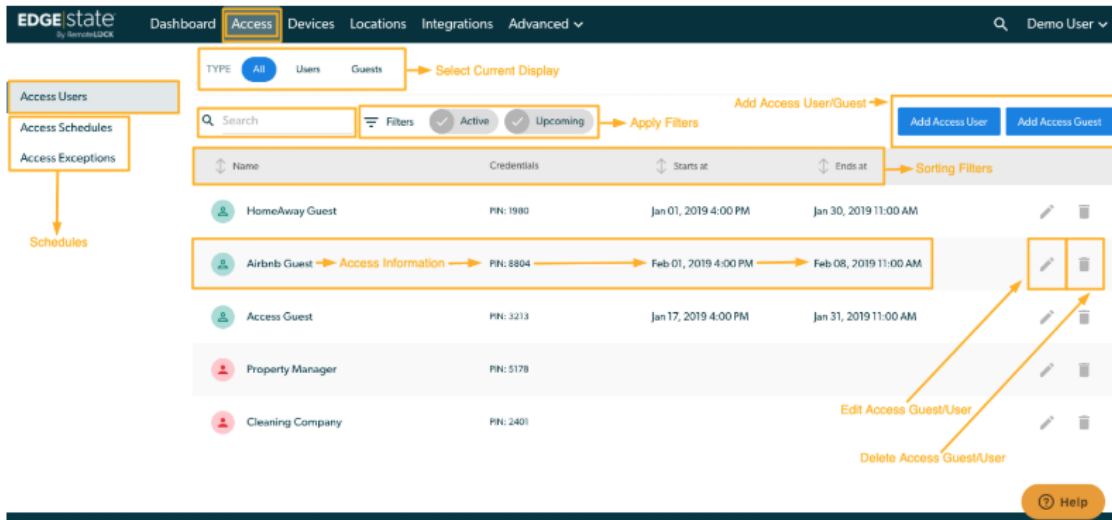
No need for additional gateways or a secondary network in your buildings. RemoteLock OpenEdge locks directly connect to WiFi.

<https://www.remotelock.com/access-control-remotelock>.

Events



<https://support.remotelock.com/hc/en-us/articles/360001749672-Access>.



Access & Guest User creation can be initiated either from an individual lock's management page or via the 'Access' section.

Select the current view you would like displayed by selecting 'All', 'Guests', or 'Users'.

Access Users can be viewed separately from Access Guests in order to provide a clear distinction between users that are given long-term access (Access Users) and those with temporary access (Access Guests). They are also differentiated by a red icon (users) or green icon (guests).

Id.

Temporary access should be given to Access Guests. This allows property owners and managers to provide temporary access codes that start and expire on a specific date and time. For example, a rental property owner may want to create an Access Guest who's guest code will start working on the lock this upcoming Friday at 4 PM and expire 2 days later at 11 AM.

<https://support.remotelock.com/hc/en-us/articles/360001749712-Access-Guests-and-Users>.

Access Guest and Access User Detail

The Access User and Guest Management views provide complete management of an Access User or Guest, including the ability to modify their information, credentials, Door Access and view their Access Events.

The screenshot displays the 'EDGE state by REMOTELOCK' interface. The top navigation bar includes 'Dashboard', 'Access', 'Devices', 'Locations', 'Integrations', and 'Advanced'. The user is logged in as 'Demo User'. The main content area is titled 'Access Guest' and shows details for a user named 'test@test.com' with a PIN of 3213. The user's access schedule is defined by a start date of 1/17/2019 and an end date of 1/31/2019. Below this, the 'Door Access' section is active, showing a table with columns for 'Name', 'Access schedule', 'Start time', and 'End time'. A single row is visible for 'FRONT DOOR' with a start time of 4:00 PM and an end time of 11:00 AM. The interface includes several action buttons: 'Send or Schedule Email', 'Delete User', 'Edit and Update User', 'Add Door Access', 'Access Synced Confirmation', 'Add additional door access', 'Edit Door Access', and 'Delete Door Access'.

<https://support.remotelock.com/hc/en-us/articles/360001749672-Access>.

From the Access tab, you can Add Access Guests, Add Access Users, Edit and Delete current Access Guests and Users, View current Access credential information, Search, and Filter your results to narrow your view.

- **To Edit:** click the pencil icon right of the Access User row to edit the user's information (name and email) and credentials (pin and card #).
- **To Delete:** click on the trash icon to delete an Access User.
- **To View:** Click on the user's name to view the Access User and add/or modify their existing access. This will bring up the Access User Management view covered below.

Access Schedules and Access Exceptions can also be created in the Access sub-tabs to limit access to specific days of the week and hours of the day.

Id.

43. Upon information and belief, the one-time use access code comprises a number generated by a cryptographically strong random number generator.

6. Select the **Start Date & time** and **End Date & time** that you want to provide access to the property.

The screenshot shows the 'Create Code' window in the RemoteLock software. It includes the following elements:

- Lock Name:** RMV Front Door
- Code Type:** Guest Temporary Code
- Guest First Name:** Joe
- Guest Last Name:** Smith
- Start Date:** October 30, 2009, 4:00:00 PM
- End Date:** November 1, 2009, 11:00:00 AM
- Access Code:** 1876420942
- Date Created:** 10/29/2009 9:55:06 PM
- Created By:** Dallas
- Access Code Version:** 1
- Buttons:** Create Code (circled in blue), Print

7. Finally, click the **Create Code** button to generate your temporary code.

The 10 digit (for 30 days or less) or 12 digit (for 31 days or more) Access Code will be generated and displayed in the Results section. Your guest will then enter the access code followed by the # key to unlock the door.

Sub-Access Codes

Your guest can enter a sub-access code (short code) during their stay. Here are the steps to set the sub-access code:

- Press the "*" key until a solid green light appears on the iButton reader.
- Enter the Access code followed by the # key on the lock keypad. The green light will start flashing.
- While the light is flashing, enter the desired code (3 to 6 digits) followed by the # key. You should hear a double confirmation beep and see a green light if successful. Up to 10 sub-access codes can be added to each temporary remote code.

One Time Service code

Up to 16 one-time service codes can be generated within the same time window. To issue one-time service codes, select "One Time Service Code" in the Code Type drop down box within the remote code window.

Software User Guide at p. 11 (available at <https://www.remotelock.com/sites/default/files/RL-SoftwareManual-Web.pdf>).

WILLFULNESS AND INDIRECT INFRINGEMENT

44. Smart Locking Technologies repeats and realleges the allegations of paragraphs 1 through 43 as if fully set forth herein.

45. Smart Locking Technologies' initial complaint was filed on May 29, 2019.

46. Defendant was served the complaint on May 30, 2019.

47. Defendant has been on notice of the '918 and '873 patents since, at the latest, its receipt of the complaint.

48. Thus, Defendant has been on notice of the '918 and '873 patents since, at the latest, the date it was served the Complaint.

49. Upon information and belief, Defendant has not altered its infringing conduct after receiving the initial complaint.

50. Upon information and belief, Defendant's continued infringement despite its knowledge of the '918 and '873 patents and the accusations of infringement has been objectively reckless and willful.

51. In particular, Defendant's customers' and end-users' use of Defendant's products that include a locking mechanism or locking device, including, but not limited to, OpenEdge Smart Locks, that is facilitated by the use of the technology patented under the '918 and '873 patents. Thus, Defendant's customers and end-users are able to use and benefit from a locking mechanism or locking device that is able to use a non-permanent use or one-time use access code.

52. On information and belief, in order to generate profits and revenues, Defendant markets and promotes, e.g., through its websites, advertising and sales personnel, the use of its

products that infringe the '918 and '873 patents when used as intended by Defendant's customers and end-users. Defendant's customers and end-users use such products (including, e.g., OpenEdge Smart Locks). Defendant further instructs its customers and end-users how to use such products in a manner that infringes the '918 and '873 patents (e.g., through on-line technical documentation, instructions, and technical support). Defendant further instructs its customers and end-users to infringe the '918 and '873 patents through the products themselves, e.g., through instructions.

53. In particular, Defendant instructs its customers and end-users through at least on-line support instructions and documentation over the Internet how to use the OpenEdge Smart Locks.

54. Defendant still further makes such products accessible to its customers and end-users via the Internet, thus enabling and encouraging its customers and end-users to use such products to infringe the '918 and '873 patents.

55. On information and belief, even though Defendant has been aware of the '918 and '873 patents and that its customers and end-users infringe the '918 and '873 patents since no later than the date it was served the Complaint and Defendant has neither made any changes to the functionality, operations, marketing, sales, technical support, etc. of such products to avoid infringing the '918 and '873 patents nor informed its customers or end-users how to avoid infringing the '918 and '873 patents. To date, Defendant has not identified a single action that it has taken to avoid infringement (e.g., by designing around or notifying its customers or end-users how to avoid infringement) by itself or its customers or end-users since it became aware of the '918 and '873 patents.

56. On information and belief, Defendant itself is unaware of any legal or factual basis that its actions solely, or in combination with the actions of its customers and end-users, do not constitute direct or indirect infringement of the '918 and '873 patents. To date, Defendant has not produced any opinion of counsel, request for opinion of counsel relating to the scope, interpretation, construction, enforceability, unenforceability, or the infringement or potential infringement of any claim of the '918 and '873 patents. In addition, Defendant has not produced any complete evaluation, analysis, or investigation relating to the validity of the '918 and '873 patents.

57. As such, on information and belief, despite the information Defendant obtained from the original complaint in this action, Defendant continues to specifically intend for and encourage its customers and end-users to use its products in a manner that infringes the claims of the '918 and '873 patents. In addition, since at least the filing of the original complaint in this action, Defendant has deliberately avoided taking any actions (e.g., designing around, or providing notice to its customers) to avoid confirming that its actions continue to specifically encourage its customers and end-users to use their products in a manner that infringes the claims of the '918 and '873 patents.

58. Defendant's actions of, *inter alia*, making, importing, using, offering for sale, and/or selling such products constitute an objectively high likelihood of infringement of the '918 and '873 patents, which were duly issued by the United States Patent and Trademark Office and are presumed valid. Since at least the filing of the original complaint, Defendant is aware that there is an objectively high likelihood that its actions constituted, and continue to constitute, infringement of the '918 and '873 patents and that the '918 and '873 patents are valid. Despite Defendant's knowledge of that risk, on information and belief, Defendant has

not made any changes to the relevant operation of its accused products and has not provided its users and/or customers with instructions on how to avoid infringement of the '918 and '873 patents. Instead, Defendant has continued to, and still is continuing to, among other things, make, use, offer for sale, and/or sell products and/or services patented under the '918 and '873 patents. As such, Defendant willfully, wantonly and deliberately infringed and is infringing the '918 and '873 patents in disregard of Smart Locking Technologies' rights under the '918 and '873 patents

JURY DEMAND

Smart Locking Technologies hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Smart Locking Technologies requests that this Court enter judgment against Defendant as follows:

- A. An adjudication that Defendant has infringed the '918 and '873 patents;
- B. A judgment that Defendant has induced infringement of the '918 and '873 patents;
- C. An award of damages to be paid by Defendant adequate to compensate Smart Locking Technologies for Defendant's past infringement of the '918 and '873 patents and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- D. An award of enhanced damages pursuant to 35 U.S.C. § 284 for Defendant's willful infringement of the '918 and '873 patents subsequent to the date of its notice of the '918 and '873 patents;

E. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Smart Locking Technologies' reasonable attorneys' fees; and

F. An award to Smart Locking Technologies of such further relief at law or in equity as the Court deems just and proper.

Dated: September 3, 2019

STAMOULIS & WEINBLATT LLC

/s/ Richard C. Weinblatt

Stamatios Stamoulis (#4606)

Richard C. Weinblatt (#5080)

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weinblatt@swdelaw.com

Attorneys for Plaintiff

Smart Locking Technologies LLC

CERTIFICATE OF SERVICE

I hereby certify that on September 3, 2019, I electronically filed the above document(s) with the Clerk of Court using CM/ECF which will send electronic notification of such filing(s) to all registered counsel.

/s/ Richard C. Weinblatt
Richard C. Weinblatt #5080