

Gateway/NDE Manual



DNA Fusion[™] is a trademark of Open Options, L.L.C.

The DNA Fusion[™] Access Control and Security Management System uses equipment that generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this installation manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference, in which case the user will be required to correct the interference at the user's expense.

The DNA Fusion[™] Access Control and Security Management System shall be installed in accordance with this installation manual and in accordance with the National Electric Code (N.E.C), ANSI and NFPA 70 Regulations and recommendations.

This manual is proprietary information of Open Options, L.L.C.

Unauthorized reproduction or distribution of this manual is strictly forbidden without the written consent of Open Options, L.L.C.

The information contained within this manual is for informational purposes only and is subject to change at any time without notice.

Open Options, L.L.C. assumes no responsibility for incorrect or outdated information that may be contained in this publication.

This manual has been written for DNA Fusion[™] version 6.0 or higher

Print Date: February 19, 2020 Manual Number: GNDE-I-1.1

©Copyright 2002-2020 Open Options, L.L.C. All rights reserved.

Warranty

All Open Options products are warranted against defect in materials and workmanship for one year from the date of shipment. Open Options will repair or replace products that prove defective and are returned to Open Options within the warranty period with shipping prepaid. The warranty of Open Options products shall not apply to defects resulting from misuse, accident, alteration, neglect, improper installation, unauthorized repair, or acts of God. Open Options shall have the right of final determination as to the existence and cause of the defect. No other warranty, written or oral is expressed or implied.



16650 Westgrove Dr | Suite 150 Addison, TX 75001 Phone: (972) 818-7001 Fax (972) 818-7003 www.ooaccess.com

Open Options, L.P. Software License Agreement and Warranty

THE ENCLOSED SOFTWARE PACKAGE IS LICENSED BY Open Options, L.P. TO CUSTOMERS FOR THEIR NON-EXCLUSIVE USE ON A COMPUTER SYSTEM PER THE TERMS SET FORTH BELOW.

DEFINITIONS: Open Options shall mean Open Options, Inc., which has the legal right to license the computer application known as DNA Fusion[™] herein known as the Software. Documentation shall mean all printed material included with the Software. Licensee shall mean the end user of this Open Options Software. This Software Package consists of copyrighted computer software and copyrighted user reference manual(s).

LICENSE: Open Options, L.P. grants the licensee a limited, non-exclusive license (i) to load a copy of the Software into the memory of a single (one) computer as necessary to use the Program, and (ii) to make one (1) backup or archival copy of the Software for use with the same computer. The archival copy and original copy of the Software are subject to the restrictions in this Agreement and both must be destroyed or returned to Open Options if your continued possession or use of the original copy ceases or this Agreement is terminated.

RESTRICTIONS: Licensee may not sub license, rent, lease, sell, pledge or otherwise transfer or distribute the original copy or archival copy of the Software or the Documentation. Licensee agrees not to translate, modify, disassemble, decompile, reverse engineer, or create derivative works based on the Software or any portion thereof. Licensee also may not copy the Documentation. The license automatically terminates without notice if Licensee breaches any provision of this Agreement.

TRANSFER RIGHTS: Reseller agrees to provide this license and warranty agreement to the end user customer. By installation and acceptance of the software package, the end user customer and reseller agree to be bound by the license agreement and warranty.

LIMITED WARRANTY: Open Options warrants that it has the sole right to license the Software to licensee. Open Options further warrants that the media on which the Software is furnished will be free from defects in materials and workmanship under normal use for a period of ninety (90) days following the delivery of the Software to the licensee. Open Options' entire liability and your exclusive remedy shall be the replacement of the Software if the media on which the Software is furnished proves to be defective. This warranty is void if the media defect has resulted from accident, abuse, or misapplication. Open Options does not warrant that the Software will meet the end user customer requirements or that operation of the Software will be uninterrupted or that the Software will be error-free.

THE ABOVE WARRANTIES ARE THE ONLY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. NEITHER OPEN OPTIONS, NOR ITS VENDORS SHALL BE LIABLE FOR ANY LOSS OF PROFITS, LOSS OF USE, INTERRUPTION OF BUSINESS, NOR FOR INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND WHETHER UNDER THIS AGREEMENT OR OTHERWISE.

IN NO CASE SHALL OPEN OPTIONS' LIABILITY EXCEED THE PURCHASE PRICE OF THE SOFTWARE. The disclaimers and limitations set forth above will apply regardless of whether you accept the Software.

TERMINATION: Open Options may terminate this license at any time if licensee is in breach of any of its terms or conditions. Upon termination, licensee will immediately destroy the Software or return all copies of the Software to Open Options, along with any copies licensee has made.

APPLICABLE LAWS: This Agreement is governed by the laws of the State of Texas, including patent and copyright laws. This Agreement will govern any upgrades, if any, to the program that the licensee receives and contains the entire understanding between the parties and supersedes any proposal or prior agreement regarding the subject matter hereof.

Table of Contents

Chapter 1: Introduction

DNA Fusion/ENGAGE Overview	1-3
Mercury Gateway	1-3
Native IP Gateway	1-3
Configuration Steps	1-3
ENGAGE Hardware Installation Overview	1-5
Mercury Gateway (RSI) Configuration	1-5
Native IP Gateway Configuration	1-5

Chapter 2: RSI NDE Integration

ENGAGE Account Log In	2-1
NDE Mercury IP Gateway (RSI Integration) Configuration	2-3
Commissioning the NDE Gateway (RS-485)	2-3
Adding the Gateway to DNA Fusion	2-5
Commissioning NDE Doors	2-7
Linking NDE Devices in DNA Fusion	2-11
Configuring a Door to Follow a Time Schedule	2-13
Configuring a Door to Use First Person Unlock	2-14
Firmware Downloads	2-15
Functionality	2-17
Time Schedules	2-17
Access Levels	2-17
Door Modes	2-17
Direct Commands	2-17
Triggers and Macros	2-17

Chapter 3: IP NDE Integration

ENGAGE Account Creation and Mobile App	3-1
ENGAGE Portal Account	3-1
ENGAGE App Account	3-2
ENGAGE Integration Considerations	3-2
Native IP Gateway Configuration	3-3
DNA-ENGAGE Integration Installation	3-3
DNA Fusion Engage Driver	3-4
ENGAGE Site Setup	3-5
Commissioning the NDE IP Native Gateway	3-7
Commissioning NDE Doors	3-11
Syncing the Gateway & NDE Devices in DNA	3-13
Firmware Updates	3-14
Inviting Users	3-14
Configuring the Gateway	3-15
Linking the NDE Doors	3-16

To link the doors:	
Configuring a Door to Follow a Time Schedule	
Configuring ENGAGE IP Card Formats	
Configuring an ENGAGE IP Cardholder	
The Hardware Browser (IP Gateway)	
Door Control Options	
Door Control Dialog	
Scheduling Commands	
Supported Features	
Future Supported Features	
Chapter 4: NDE in DNA Fusion	
Configuring Access Levels in DNA Fusion	4-1
Creating a Global Access Level Group	4-1

Creating a Global Access Level Group	4-1
Assigning an Access Level to a Cardholder	4-3
Assign From the Context Menu	4-3
Assign From the Personnel Record	4-3
Drag & Drop to an Individual Card or Cardholder	4-3
Configuring ENGAGE IP Card Formats (IP Gateway Integrations Only)	4-4
Configuring an ENGAGE IP Cardholder (IP Gateway Integrations Only)	4-4
NDE Door Features	4-5
Trace History	4-5
Who Has Access	4-5
Who Does Not Have Access	4-6
Where Used	4-6

Introduction

In This Chapter √ Section Organization √ DNA Fusion / ENGAGE Overview √ Supply List

This section is designed to introduce you to DNA Fusion[™] and the NDE lock as well as the ENGAGE integration.

How This Section is Organized

This section contains information on the DNA installation and configuration of hardware:

Chapter 1, "Introduction," gives an overview of the integration.

Chapter 2, "RSI NDE Integration," provides information on configuring the RS-485 (RSI) gateway and NDE hardware through the DNA Fusion application.

Chapter 3, "IP NDE Integration," gives installation information on the IP NDE integration.

Chapter 4, "NDE in DNA Fusion," covers the various programming and features available in DNA Fusion.

ICONS AND CONVENTIONS USED IN THIS MANUAL

This manual uses the following icons to help you find useful or important information easily:

	This icon highlights time-saving hints, helpful shortcuts, and advice that you'll find especially helpful.
í	This icon marks information that is important enough for you to keep it filed in an easily accessible portion of your gray matter.
•	If something you're doing could damage the system, end up costing big bucks, lock you out of the system, or otherwise bring an end to civilization as we know it, you'll find it highlighted with the icon.

In addition to these icons, this manual uses several other conventions that make the instructions easy to understand:

A Special Font: Text that look like this indicates a menu item, toolbar selection, button, or a message from the system.

Boldface: Boldface text, which usually appears in numbered steps, tells you about specific actions that you should take.

This Page Intentionally Left Blank

DNA Fusion/ENGAGE Overview

The Schlage® NDE Series wireless lock with ENGAGE[™] technology is designed for ease of installation. The NDE locks seamlessly integrate with DNA Fusion to provide a cost effective and scalable access control solution. The NDE locks use Bluetooth Low Energy (BLE) and WiFi for communication.

DNA Fusion can integrate with the Allegion Gateway and NDE lock hardware in 2 manners: via the Gateway using the RS-485 port or direct using the native IP Gateway. It's important to remember the differences between running NDE locks under the Mercury integration using the RSI Gateway interface versus running without the Mercury controller via the IP Gateway. See page 1-5 for comparison information. The NDE lock and ENGAGE integrations are licensed features.

Beginning with DNA Fusion version 6.5.0, the Allegion NDE locks are supported via the Allegion Engage Gateway using the RS-485 port connected to a SSP-EP or DController. As of version 7.0.2.24, all Mercury intelligent controllers now support the ENGAGE IP integration as well as the RFI RS-485 integration. The integration also requires controller firmware of 1.25.6 or higher. Please note that not all DNA Fusion features are fully supported by the NDE lock integration. See page 1-5 for more information on supported features.

Mercury Gateway

Open Options connects to the NDE Series locks via the Mercury-powered NDE Gateway. The gateway connects via RS-485 to an Open Options DController, SSP-EP, SSP-LX, or SSP-D2 controller. A controller can support eight (8) gateways per port (sixteen (16) total for the SSP-EP and SSP-LX). Each gateway supports ten (10) NDE locks within a 30-foot radius.

When the hardware is configured using the Mercury controller, the lock behaves more like a reader and not a controller. All cardholders are stored on the Mercury panel and all the higher-level access control functionality is configured through the DNA Fusion system. See page 2-1 for more information.

Native IP Gateway

When integrating the NDE locks using the native IP Gateway, the lock serves as a controller and stores the cardholder database, time schedules, and other programming information. It makes all the access decisions locally and reports those events to DNA Fusion. It is essentially an offline lock, but with some amount of real-time event reporting along with control of downloads, credentials and time schedules. See page 3-1 for more details.

> The ENGAGE[™] Mobile application is utilized for initial commissioning of the gateway and NDE locks. An account is required to register the devices. Once registered, the lock will be linked to the account and will not be available for commissioning on a different account.

> When commissioning a lock, the device with the ENGAGE application should be within 10-15 feet of the door. Bluetooth communication is limited in range and the device should be as close as possible to the lock for robust Bluetooth communication.

Configuration Steps

The following items/steps are required prior to configuring the ENGAGE integration.

- An Apple or Android mobile device with Bluetooth. 1.
- Download and install the ENGAGE Mobile App on the mobile device. 2.



Android

- 3. For Mercury RS-485 integrations, wire the Allegion ENGAGE Gateway to the desired controller.
- Verify DNA Fusion NDE or ENGAGE licensing in the DNA Fusion system (Help/About DNA). 4.
- 5. **Confirm** DNA Fusion version 6.4 or 7.0.2.24 or higher (depends on the controller and integration type).
- 6. **Install** the NDE lock.
- 7. **Add** the Gateway to the ENGAGE app.
- **Add** the NDE to the ENGAGE app. 8.
- Add the Gateway to DNA Fusion or link to the ENGAGE site (IP only). 9.
- 10. Create and link the NDE door in DNA Fusion (RFI / RS-485 only).

NOTES:		

ENGAGE Hardware Installation Overview

Open Options connects to the NDE Series locks via the Mercury-powered NDE Gateway. The gateway connects via RS-485 to an Open Options DController, SSP-EP, SSP-LX, or SSP-D2 controller. A controller can support eight (8) gateways per port (sixteen (16) total for the SSP-EP and SSP-LX). Each gateway supports ten (10) NDE locks within a 30-foot radius.

DNA Fusion can integrate with the Allegion Gateway and NDE lock hardware in 2 manners: via the RS-485 Gateway or by using the IP Gateway. There are a number of differences between running NDE locks under the Mercury integration using the RSI Gateway interface and configuring the system without the Mercury controller via the IP Gateway.

Mercury Gateway (RSI) Configuration

When the hardware is configured using the Mercury controller, the lock behaves more like a reader and not a controller. All cardholders are stored on the Mercury panel and all the higher-level access control functionality is configured through the DNA Fusion system. See page 2-5 for installation information.

Native IP Gateway Configuration

When integrating the NDE locks using the native IP Gateway, the lock serves as a controller and stores the card database, time schedules, and other programming information. It makes all the access decisions locally and reports those events to DNA Fusion. See Chapter 3 for IP Gateway installation information.

Feature	NDE Mercury IP Gateway (RSI Integration)	Native NDE IP Gateway
Cardholders	Limited by the Controller	5000
Download Speeds (To Lock)	20,000 cardholders in 22 seconds	BLE - 15 to 20 minutes to download a fully loaded lock
Download Issues	None	Single download
Triggers and Macros	Yes	No
Auto Unlock	Yes	Yes
First Person Unlock	Yes	Yes
Anti Passback	Yes	No
Time Schedules	255	16
Time Schedule Intervals	16 per Time Schedule	1 per Time Schedule
Max Offline Events	Limited by the Controller	2000
Holidays	255	32
Vacation	Yes	No
Lockdown	Yes	Yes
ADA	Yes	Yes
Access Areas	Yes	No
Use Limit	Yes	No
Direct Commands	Yes	Yes
DNA Fusion Web and Mobile	Yes	No
Card Formats	16 at Controller Level	Card Level

Below is a chart that provides a comparison of the two (2) integrations.

This Page Intentionally Left Blank

RSI NDE Integration 2



The RSI NDE integration is supported by DNA Fusion version 6.5.0 or higher. The integration requires the proper licensing to be in place prior to the configuration of the lock in DNA Fusion. This chapter covers the installation and configuration of the gateway in RS-485 installation as well as NDE lock configuration.

The NDE locks use Bluetooth Low Energy (BLE) and WiFi for communication. DNA Fusion can integrate with the Allegion Gateway and lock hardware in 2 manners: via the Gateway (RSI) or direct using the IP Gateway.



There are numerous steps involved in configuring the gateway and NDE lock. These steps vary depending on the type of integration: RS-485 or IP Gateway. Both installations require the Allegion ENGAGE application however the app is used differently depending on the type of integration installation.

ENGAGE Account Log In

The ENGAGE[™] Mobile application is utilized for initial commissioning of the gateway and NDE lock. An Open Options account has been created on the ENGAGE site. Once commissioned, the hardware will not be available for configuration on a different account.

1. **Download** the ENGAGE app to the mobile device.

The ENGAGE mobile application is available for free download for both iOS and Android devices. Search the app store for "Allegion ENGAGE."

This app is used to commission the gateways and locks in the Allegion portal. Gateways and NDE locks must be commissioned under the same account.

2. Once the app is installed, **log in** to the site using the credentials and password provided by Open Options.

The account has been configured to use the Open Options 'ooengage' email plus the site number. For example, ooengage+DNA-001122@gmail.com. This combination is used to create a unique identifier for the account.

If the OO Engage account has not been created, please contact the dealer or the Open Options sales manager.

3. **Continue** to NDE Mercury IP Gateway (RSI Integration) Configuration on page 2-3. For IP Gateway Configuration, see Chapter 3.





This Page Intentionally Left Blank

NDE Mercury IP Gateway (RSI Integration) Configuration

Open Options connects to the NDE Series locks via the Mercury-powered NDE Gateway. The gateway connects via RS-485 to an Open Options DController, SSP-EP, SSP-LX, or SSP-D2 controller. A controller can support eight (8) gateways per port - sixteen (16) total for the SSP-EP and SSP-LX. Each gateway supports ten (10) NDE locks within a 30-foot radius.

A controller's RS-485 port will not support both Mercury hardware and NDE gateways. The selected port can only be used to connect other IP gateways, AD-300 locks and PIM 400 subcontrollers.

Commissioning the NDE Gateway (RS-485)

1. Wire the NDE Gateway to the controller.

NDE Gateway	Mercury Controller	DController
TX-	TR+	TB2-4 (TR+)
RX+	TR-	TB2-5 (TR-)
GND	GND	GND



2. **Apply** power to the Gateway.

The Gateway will complete a self test upon power up. During this process, the LED on the Gateway will appear solid amber. Once the light turns solid red, the Gateway is ready to be commissioned.



If the Gateway does not turn red, a Factory Default Reset may be performed. To factory reset the device, press and hold the Reset button. Hold the button until the LED flashes green twice and then remains solid. Release the Reset button to complete the process.

My Team

My Account

- 3. **Open** the ENGAGE app and log in with the credentials provided by Open Options.
- 4. From the Devices tab, **select** the + sign.



5. Select the Gateway (GWE) device type from the list.



6. **Select** the ENGAGE Gateway from the list.

The Gateway is placed in linking mode and the light will begin to blink. The Gateway can be identified by the serial number.

A screen will appear inquiring about the light status.

ENGAGE Gateway B10000000003190 7. **Click** Yes to link the Gateway.

The app will search for devices in range.



- 8. **Enter** a Name for the device and **click** the Next button. The communication mode screen will appear.
- 9. Select the RSI option.





The RSI Configuration screen will appear.

10. Set the Physical Address.

This must be a unique value. If the controller has an on-board subcontroller, address 0 will have been utilized. This value must match the subcontroller Physical Address setting in DNA Fusion.

11. Enter the Low and High Door Address values and tap Next.

If additional Gateways will be installed, the door range must be unique to the controller. In the example, the Gateway will use address 0 for the low address value and 15 for the high address value. If another Gateway was installed, the low address value would start at 16. Door address values should never match across Gateways.

The Preparing your device screen will be displayed.

Once commissioned, a large check will appear.



12. Tap the Finish option, close the app, and proceed to Adding the Gateway to DNA Fusion on page 2-5.



Adding the Gateway to DNA Fusion

Once the Gateway has been configured in the ENGAGE app, it can be added to DNA Fusion.

1. From the Hardware Browser, right-click on the desired controller and select Add / Subcontroller.

The Properties Sub-controller dialog opens.

Hardware Properties: Sub-co	ontroller 1.3.0				×
Sub-controller Advanced	ub-controller				
	Site:	Site 1: 00 Training	SSP:	1.3: Desktop SSP-EP	
	Sub-controller (SIO):	SIO: 3 💽 🕅 Ma	tch Physical	Disable SIO	
	Description:	SIO: 3			
	Home Page:				
	Attributes Physical Address:	3	Type / Previev		
	Reply Channel:	Port 3	Engage Gatew	ay -	
	Send Channel:	Port 3	Inputs: 2	20	
	4-Wire Configurati	on	Readers: 1	0	
	IP Addr.				
	MAC Addr:				
	Mode: Cont	roller DHCP			
	Alarm Text:				
V OK					
Cancel					
e Help					

- 2. Enter a Description for the Gateway.
- 3. Verify the Physical Address.

If needed, uncheck Match Physical and select the Physical Address from the drop down.

This value must match the Physical Address set in step 10 on page 2-4.

- 4. If needed, select the Reply Channel to match the port.
- 5. Select the Engage Gateway from the Type/Preview drop down.
- 6. **Click** the Ok button to save settings.

The Gateway will appear under the controller in the Hardware Browser. If wired and configured correctly, the subcontroller will come online and the diamond next to the subcontroller will turn green. If the diamond stays black, verify that the wiring and address settings are correct.

7. Proceed to Commissioning NDE Doors on page 2-7.



Commissioning NDE Doors

Once the NDE locks have been installed, they will need to be commissioned in the ENGAGE app prior to linking the locks in DNA Fusion. The NDE lock must be fully assembled with the battery connector plugged in and the battery cover in place. If the battery cover is not installed, the lock will NOT enter linking mode.

If the Lock has been in Standalone/Construction Mode, a Factory Default Reset will need to be performed. To factory reset the lock, remove the battery cover and hold the Reset button for 5 seconds. Release the Reset button. The LED will flash green twice and the lock will beep twice. Turn the interior door handle slowly three (3) times within 20 seconds to complete the process. The lock will beep once and the LED will turn red each time the handle is turned.

The ENGAGE app is used to commission the NDE locks in the Allegion portal. It is critical that the gateway and NDE locks must be commissioned under the same account. Only one NDE lock can be linked at a time. If linking multiple locks, leave the battery cover off all uncommissioned locks.

- 1. **Open** the ENGAGE app and log in.
- 2. From the Devices tab, **select** the + sign.

Verify that the Gateway has been added to the ENGAGE app.

III AT&T L	TE	9:44 AM		🗑 🕈 85% 💷)
	All Devices		In Range	+
Q Sea	rch Devices			
Trainin A10000	g 1 000F134AF1			
Trainin B10000	gGateway			

3. **Select** the NDE device type from the list.



4. Select the unique Door Number and tap Next.



Follow the on-screen instructions and tap Next.
 Turn and release the Interior door handle.



The NDE lock will appear in the list. It can be identified by the serial number.



6. **Select** the NDE lock.

A screen will appear inquiring about the reader LED's status. The light should start to blink.



Tap Yes if the light is blinking.
 If the light is not blinking, repeat steps 5 and 6.
 The Device Name dialog will appear.

8. Enter a name for the NDE device and tap the Next option.



The door calibration screen will appear.

9. Verify that the door is closed or apply the door magnets and touch the Next option.



B10000000003190

12. Close the app, and proceed to Linking NDE Devices in DNA Fusion on page 2-11.



Linking NDE Devices in DNA Fusion

Once the Gateway and NDE locks have been commissioned in the ENGAGE app, they will need to be linked in DNA Fusion.

1. From the Hardware Browser, right-click on the Gateway's controller and select Properties.

The Controller Properties dialog opens.

Stored Quantities	Controller propertie	S		
irds and Dual Comm	Channels			
	SSP Channel:	Channel 3 (Ethernet (1	(CP/IP))	Properties
	Attributes Site:	Site 1: OO Training		Download On Demand Exem
	SSP Number:	SSP: 3	Physical Ac	ddress: 0
	SSP Description:	Desktop SSP-EP		
	Controller Type:	SSP-EP	Controller Enabled Serial N	lumber: 1003499
			Force LP Controller Identity	
	Home Page:			
	Time Sched Set	Default		
	Holiday Set	Default	Host Response	e Time: 0 Seconds
Ok	Holiday Set	Default	Host Response	e Time: 0 Seconds 💽
Ok	Holiday Set Connection Connection Type:	Default Ethernet (TCP/IP)	Host Response	e Time: 0 Seconds 💌 10.0.21.200
Ø Ok	Holiday Set Connection Connection Type: Poll Delay:	Default Ethernet (TCP/IP) 5000 ms (default)	Host Response	e Time: 0 Seconds
Ok Cancel	Holiday Set Connection — Connection Type: Poll Delay: Baud Rate:	Default Ethernet (TCP/IP) 5000 ms (default) 38400	Host Response	e Time: 0 Seconds • 10.0.21.200 Ping 3
Ok Cancel	Holiday Set Connection — Connection Type: Poll Delay: Baud Rate: Offline Time:	Ethernet (TCP/IP) 5000 ms (default) 38400 15000 ms (default)	Host Response PAddress SSP Channel: Retry Count	a Time: O Seconds
Ok Cancel	Holiday Set Connection Connection Type: Poll Delay: Baud Rate: Offline Time: Downstream P	Ethernet (TCP/IP) 5000 ms (default) 38400 15000 ms (default) orts	Host Response IP Address SSP Channel: Retry Count	a Time: 0 Seconds
Ok Cancel Help	Holiday Set Connection Connection Type: Poll Delay: Baud Rate: Offline Time: Downstream P Port 1 Baud Rate:	Default Ethernet (TCP/IP) 5000 ms (default) 38400 15000 ms (default) orts 38400	Host Response IP Address SSP Channel: Retry Count Port2 Baud Rate:	a Time: 0 Seconds 10.0.21.200 3 retries (default) 9600 •
Ok Cancel Help	Holiday Set Connection Connection Connection Type: Poll Delay: Baud Rate: Offline Time: Downstream P Port 1 Baud Rate: PIV Authentic:	Default Ethernet (TCP/IP) 5000 ms (default) 38400 15000 ms (default) 0rts 38400	Host Response P Address: SSP Channet Retry Count Port2 Baud Rate:	e Time: 0 Seconds 10.0.21.200 3 3 retries (default) 9500

- 2. Set the Baud Rate on the Gateway's Downstream Port to 9600 and click the OK button.
- 3. From the Hardware Browser, **expand** the Gateway and **right-click** on the first reader. The doors must be added in numerical order.



4. Select Add Door / Create NDE Door X.

The Door Properties dialog will appear.

Door Objects	Common Properties	
- Advanced - Macros - Auto Unlock - Notes	Address Site: Controller: Door Number:	Site 1: OO Training 1.3: Desktop SSP-EP ACM 2 Door Type: Normal
	Other	
	Description:	ACM 2
	Home Page:	
	Point Alarm Pr	operties
	Alternate Priority:	0 - Security Level: Normal -
		Do Not Load Home Page on Alarm
	Alarm Media File:	
	Alarm Text	

- 5. Enter a Description for the Door.
- 6. Select the Door Objects tab from the menu on the left.

The door objects are preconfigured for the NDE lock.

ommon Properties	Door Objects						
dvanced	- Door Proper	ties					
acros	Type:	Single	LED Mode:	No Change		-	Edit
otes	Pre-Alarm:	0 sec		Held Time:	10 sec	-	
	Ext. Mode:	None 🔹					
	Reader						
	Address:	1.3.1.R2:					Edit
	Default Mode:	Card Only		Type: Norma	al		-
	Offline Mode:	Facility Code 💌					
	Contact						
	Address:	1.3.1.I3:					Edit
	- Request To	Exit (REX)					
	Address:	1.3.1.I4:					Edit
ok 🗸	Strike					<u></u>	
	Address:	1.3.1.02:					Edit
🗱 Cancel	Activation:	3 sec	Mode:	No impact or	strike	-	
	ADA Setting	S					
Help	Strike Time:	56 sec 💌	H	leld Time: 0	sec	-	

7. If needed, **change** the door properties and **click** the Ok button.

The door will be added to the Hardware Browser and will appear under the Doors header.



8. **Right click** on the door and **select** Link Door to NDE.

The Linking NDE Door dialog will open.

_		
Door:	1.3.D2 NDE Classroom Door 2	
Status:	n/a	
Caution: A	Aborting the link process once i in a non-linked state. Closing th	t is started will lea is dialog will also
bort link		

9. Select the Start Link option.

The Linking process will begin.

Linking	NDE Door	Х
Door: Status:	1.3.D2 NDE Classroom Door 2	

- 10. **Place** the NDE door in Link mode.
 - a. Hold down the Interior handle.
 - b. **Present** a credential to the reader.
 - c. Continue to hold down the handle until the LEDs start to flash red and green.
 - d. **Release** the interior handle.

Once linked, the door will beep 3 times and the LED will flash green. The dialog will display Successfully Linked.

۲	Linking	NDE Door	\times
	Door:	1.3.D2 NDE Classroom Door 2	
	Status:	Successfully Linked	
Ca thi ab	ution: A s door i ort linki	borting the link process once it is started will le n a non-linked state. Closing this dialog will also ing.	ave D
		Done	

11. Click the Done button.

The door will appear with a green diamond next to the linked door.

To verify the linking process, cycle the interior handle and check the DNA Fusion Event grid for a Door Opened event.

12. Continue to Chapter 4: NDE in DNA Fusion.

Configuring a Door to Follow a Time Schedule

The Unlock Schedule option provides a quick way to configure a door(s) to adhere to a specified unlock time schedule. The time schedule must be created prior to the setting up the unlock feature.

1. **Right-click** on the Door and **select** the Properties option.

The Door Properties dialog opens.

Hardware Properties: NE	W Door		
Common Properties Door Objects Advanced Macros Auto Unlock Notes	Common Properties Address Site: Controller: Door Number:	Site 1: 00 Training 1.3: Desktop SSP-EP ACM 2 Door Type: Normal	ons
	Other Description:	ACM 2	
	Home Page:		
	Alternate Priority:	O Security Level: Normal On Not Load Home Page on Alarm	

- 2. **Select** the Auto Unlock option from the menu on the left. The Auto Unlock dialog opens.
- 3. In the Follows Schedule section, select the Enable checkbox to activate the feature.

Bardware Properties: D	OOR 1.3.D2
Common Properties	Auto Unlock
Advanced Macros Auto Unlock Notes	✓ Follows Schedule ✓ Enable
	Time Schedule To Follow. TS 002: Business Hours - Main Entrance Schedule 🔹
	Reader Mode on Activate:
	Reader Mode: Unlocked
	Reader Mode on Deactivate:
	Reader Mode: Card Only

- 4. Select the desired time schedule from the Time Schedule to Follow drop-down list.
- 5. **Select** the Door Mode from the Reader Mode on Activate drop-down.
- 6. Select the Door Mode from the Reader Mode on Deactivate drop-down.
- 7. **Click** OK to save the changes.

Configuring a Door to Use First Person Unlock

The First Person Unlock feature allows the operator to configure a door that will unlock during a specified time schedule after the first cardholder is granted access to the door. If enabled, the system will generate a trigger-and-macro combination and store it in the controller's memory.



The door will remain in a secured mode even when the designated time schedule is active if no cardholders have accessed the door. Likewise, if a cardholder presents their card to the door when the time schedule is inactive, the door will remain secured.

1. From the Door Properties dialog, **select** the Auto Unlock option from the dialog menu.

The Auto Unlock dialog opens.

- Door Objects - Advanced - Macros - Auto Unlock - Notes	Auto Uniock Follows Schedule ☑ Enable Time Schedule To Follow:	
	TS 002: Business Hours - Main Entrance Schedule	
	Reader Mode on Activate:	
	Reader Mode: Unlocked	
	Reader Mode on Deactivate:	
	Reader Mode: Card Only	
	First Person Unlock	
	TS 002: Business Hours - Main Entrance Schedule	
	Operations:	
- Ok	Require Match 1	
	Trigger Codes:	
🗶 Cancel	*None*	
Help		

2. In the First Person Unlock section, select the Enable checkbox to activate the feature.



- 3. Select the desired time schedule from the Time Schedule to Unlock drop-down list.
- Select an Operation from the drop-down list.
 See the DNA Fusion User Manual page 10-11 for more information.
- Select a Trigger Code from the drop-down list.
 See page 10-11 in the User Manual for more information.
- 6. **Click** OK to save the changes.

Firmware Downloads

Once the Gateway and NDE lock(s) are online, the firmware should be updated. This process is performed in DNA Fusion and the ENGAGE app depending on the device being updated.

To update the Gateway Firmware:

1. From the Hardware Browser, **right click** on the Gateway and **select** Reload Firmware. The firmware on the Gateway will be updated.

To update the NDE Lock Firmware:

2.

3.

1. **Sign in** to the ENGAGE app on the mobile device.

The All Devices screen op	ens.			
••I AT&T LTE 8:56 AM				
All Devices In Range +				
Q Search Devices				
Training 1 A10000000F134AF1				
Training 2 A10000000F13BCA0				
TrainingGateway B100000000003190		■II AT&T LTE	9:09 АМ TrainingGateway	4 🖉 91% 🔲
Select the Gateway from	n the list.			
The Gateway options wil	l appear.	છ ા	_inked Devices	
Tap the Linked Devices o	ption.			
The Linked Devices dialog	opens.) iii ,	Audits	
			Indata Firmwara	
Update Firmware				
Control Locks LE Locks NDE Locks RM/RU	E Linked Device	PS 1/28/2020, 09:09 AM		
Linked Devices Page last refreshed: 01/28/2020, 09:09 AM	Training 1 : 0			
Training 1 : 0	a10000000f134	laf1	-	
a1000000f134af1	FW Version: 02.	.11.25 Not available		
Training 2 : 1	Firmware Status	s: Update availa	able	
a1000000f13bca0				

Tapping the device will display the current firmware version and update availability.

4. From the Update Firmware header, **tap** the NDE lock option and **tap** the Update option.

The Send Firmware over WiFi dialog will appear.





5. **Open** Settings for the mobile device with the ENGAGE app and **select** the WiFi option. The available Wi-Fi Networks will appear in the list.



- 6. If not selected, **tap** the Gateway name in the list.
- If prompted for a password, **paste** the copied information and **click** Join.
 A check will appear next to the Gateway network.
- Return to the ENGAGE app and select the Send option. Or

Select the NDE icon from the Update Firmware header.

The Downloading NDE Firmware dialog will appear.

Control Locks Update Image: Control Locks Image: Control Control Locks Image: Contr	III AI&I 🖘	10:06 AM	70	/9% 🛄	AT&T LTE	10:06 AM	7 🗃	79% 🔲
Update Firmware Firmware Firmware Firmware Firmware Firmware Firmware Firmware	〈 TrainingGa	ateway	Up	odate	< TrainingGat			pdate
Image: Instruction of the sector of the s	Update Firm	nware			Update Firm	vare		
Linke Page las Train a100 Train a100 Cancel Close	Control Locks	LE Locks	NDE Locks	RM/RU E	Control Locks	LE Locks	NDE Locks	RM/RU E
Cancel Close Ok	Linke Page las Train a100 Train a100	Downloadin NDE Firmwa	ng are		Linke Page lai Traii a100 Firm Confir Traii a100	mware Dov Complet ware is being m successful ving the Manag Devices Scree	vnload e updated. updates by ge Linked een.	
	Ca	ancel	Close			Ok		

Once if is complete, the Firmware Download Complete dialog will open.

9. **Click** the Ok button.

Tap the Linked NDE device to view the update status.

This process can take up to 45 minutes per NDE lock.

10. **Close** the ENGAGE app.

The locks will continue to update and the Gateway will resume normal once all the firmware has been updated.



Functionality

The RSI Gateway Integration provides access the full range of Open Options features. See the User Manual for management information.

Time Schedules

When utilizing the RSI communication mode for the Gateway, the lock can be programmed with up to 255 time schedules. For more information on time and holiday schedules, see chapter 5 in the DNA Fusion User Manual.

Access Levels

The NDE locks can be configured as either part of a Legacy Access Level or a Global Access Level. See page 6-3 in the DNA Fusion User Manual.

Door Modes

The RSI integration provides access to standard door modes as well as scheduled commands. The ${\sf Door}$ ${\sf Mode}$ indicates the state of a door.

Below is an explanation of the various door modes. For more information see page 8-3 in the User Manual.

To change the door mode, right click on the Door and select the Control option. Select the desired Mode.

1	Reader Mode: Disabled Icon - Disables the reader. The door and all associated hardware objects remain locked without REX capability.
2	Reader Mode: Unlocked Icon - Unlocks the selected point and allows unlimited access. All cardholders will be granted access.
3	Reader Mode: Locked Icon - Locks the selected door. Card access will not be allowed, but the door can be used from the inside using the REX button.
4	Reader Mode: Facility Code Icon - Matches the facility code(s) stored in the SSP to approve entry. See page 8-81 for more information on facility codes.
5	Reader Mode: Card Only Icon - Requires a card with the correct card format and access level to be presented.
6	Reader Mode: PIN Icon - Requires a PIN code to be entered to gain access. PIN numbers are set in the Card Tab of the Cardholder's Record.
	Reader Mode: Card AND PIN Icon - Both a card AND a PIN code are required to gain access to the associated point.
8	Reader Mode: Card OR PIN Icon - Either a card OR a PIN code is required to gain access to the associated point.
0	Override Mode Icon - Opens the Temporary ACR Override dialog. See page 8-5 for more information.
0	Cancel Override Mode Icon - Cancels the Temporary Override command. See page 8-6 for more information.

Direct Commands

The Gateway integration offers full functionality for configuring direct commands. Page 8-27 in the User Manual provides more details.

Triggers and Macros

The Gateway RSI integration allows for traditional triggers and macros as well as Host Based Macros. See chapter 10 in the User Manual for detailed information.

This Page Intentionally Left Blank

IP NDE Integration



The IP NDE integration is supported by DNA Fusion version 7.6. or higher. The integration requires the proper licensing to be in place prior to the configuration of the ENGAGE site in DNA Fusion. This chapter covers the installation and configuration of the gateway as well lock configuration.

The NDE locks use Bluetooth Low Energy (BLE) and WiFi for communication. DNA Fusion can integrate with the Allegion Gateway and lock hardware in 2 manners: via the Gateway (RSI) or direct using the IP Gateway.



There are numerous steps involved in configuring the Gateway and NDE lock. These steps vary depending on the type of integration. Both installations require the Allegion ENGAGE application however the Native IP configuration requires an account be created in the Allegion portal.

ENGAGE Account Creation and Mobile App

The Native IP Gateway setup requires the user to create an account on the ENGAGE portal as well as download the ENGAGE app on a mobile device.

ENGAGE Portal Account

1. **Visit** the ENGAGE Portal (https://portal.allegionengage.com) and **create** an account.

A registration email containing a link will be sent to the registered email address.

	Email Address e.g. myname@example.net	(=) ENGAG	E
1	Password	TECHNOLO	GΥ
Į.	Confirm Password	Email	ב
	First Name	Password	
	Last Name	Forgot Password?	
1	I have read and accept the Terms and Conditions.	Sign In	
	Steel In	Need an Account? Create Account	

If you already have an account, enter the user name and password.

A window will open confirming the devices are being managed through DNA Fusion.

The	devices in OO Training are being managed with software from one of our Alliance Partner
Use t	he free ENGAGE™ mobile app to commission and configure devices in this site.
	Set the ENGAGE TM mobile app from the iTunes App Store (IOS)
	Set the ENGAGE™ mobile app from the Google Play Store (Android)

ENGAGE App Account

The ENGAGE[™] Mobile application is utilized for initial commissioning of the gateway and NDE lock. An account has been created on the ENGAGE site. Once commissioned, the hardware will not be available for configuration on a different account.

1. **Download** the ENGAGE app to the mobile device.

The ENGAGE mobile application is available for free download for both iOS and Android devices. Search the app store for "Allegion ENGAGE."

This app is used to commission the gateways and locks in the Allegion portal. Gateways and NDE locks must be commissioned under the same account.

- 2. Once the app is installed, **log in** to the app using the credentials and password created on page 3-1.
- 3. **Continue** to page 3-3 to install the integration files.

ENGAGE Integration Considerations

The ENGAGE IP Gateway integration provides a quick seamless lock solution. When integrating the NDE locks using the native IP gateway, the lock serves as a controller and stores the card database, time schedules, and other programming information. It makes all the access decisions locally and reports those events to DNA Fusion.

There are a few limitations when using the Native IP ENGAGE integration. For example, the NDE lock only accepts 16 time schedules and may require the use of Time Schedule Sets in DNA Fusion. There is also no way to store card formats in the NDE so the format must be selected in the Personnel Record on the Card tab. The ENGAGE integration is not currently supported in the web or mobile versions of DNA Fusion.

Feature	Native NDE IP Gateway
Cardholders	5000
Download Speeds (To Lock)	BLE - 15 to 20 minutes to download a fully loaded lock
Download Issues	Single download
Triggers and Macros	No
Auto Unlock	Yes
First Person Unlock	Yes
Anti Passback	No
Time Schedules	16
Time Schedule Intervals	1 per Time Schedule
Max Offline Events	2000
Holidays	32
Vacation	No
Lockdown	Yes
ADA	Yes
Access Areas	No
Use Limit	No
Direct Commands	Yes
DNA Fusion Web and Mobile	No
Card Formats	Card Level

EMAIL				
Password		SHOW		
	Log In			
Forg	ot password?			

Native IP Gateway Configuration

When integrating the NDE locks using the native IP gateway, the lock serves as a controller and stores the card database, time schedules, and other programming information. It makes all the access decisions locally and reports those events to DNA Fusion.

The following steps should be performed to complete the integration:

- 1. Install the ENGAGE Gateway and NDE locks.
- 2. Create an account on the Allegion Portal.
- 3. **Download** the ENGAGE app.
- 4. Run the DNA Fusion-ENGAGE Integration application.
- 5. **Create** the ENGAGE Site in DNA Fusion.
- 6. **Discover** the ENGAGE hardware in DNA Fusion.
- 7. **Configure** the access level and card format.

DNA-ENGAGE Integration Installation

Once the ENGAGE Gateway and NDE locks have been installed and configured, the DNA integration can be performed. The installation process is very straightforward and can be performed without any knowledge of the software.

1. **Obtain** the dnaFusion Engage Install application from Open Options Technical Support.

The setup procedure must be performed with an administrator login.

2. Verify the DNA Fusion DNADrvr32 Service Permissions.

The DNA driver and the Engage driver need to run under the same identity. The account running the services will be used later in the installation process and should be noted for reference. For more information on DNA Fusion services, see page 2-7 in the DNA Fusion Technical Manual.

3. Run the dna Fusion Engage Installation.

The Destination Location dialog appears.

4. **Click** the Next button to continue the installation or **select** the Browse button and specify a different location.

The default location is C:\Program Files (x86)\dnaFusion Engage.

The Startup Credentials screen appears.

5. Select This Account, enter the credentials, and click Next.

😽 Setup - dnaFusion Engage 1.0.	0.28		-		×
Startup Credentials Specify the credentials to use for	or the service ad	count.			
Log on as:					
O Local System account					
This account:	.\sbarrow]	
Credential should be f accounts ".\Username	formatted as "De e" or "Computer	omainName Name\User	\Userame" or name"	for local	
Password:	•••••				
	Verify				
	Verifying the c multiple failed	redentials n attempts. F	nay lock the ac Proceed with ca	count fo ution.	r
Test successful					
		< Back	Next >	(Cancel

🔂 Setup - dnaFusion Engage 1.0.0.28 — 🗌 🗙
Select Destination Location Where should dnaFusion Engage be installed?
Setup will install dnaFusion Engage into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files (x86)\dnaFusion Engage Browse
At least 128.5 MB of free disk space is required.
Next > Cancel

The Engage driver requires a service account to run the application; this account must be a local machine administrator in order to operate.

The Ready to Install screen appears.

6. Click the Install button to start the process.

When the installation is complete, the Install Complete screen opens.

7. **Click** the Finish button to complete the installation.



8. **Configure** the ENGAGE Site within the DNA Fusion application. See page 3-5 for information on configuring the ENGAGE Site.

DNA Fusion Engage Driver

The Engage driver runs as a service on the DNA Fusion server.

	Services							-	0	×
	File Action View	Help								
	🕈 🔿 🔝 🖾 🍳	🔒 🛛 🖬 🕨 🖩 🖬 🗈								
[Services (Local)	O Services (Local)								
		dnaFusion Engage	Name	Description	Status	Startup Type	Log On As			^
		Start the service	Device Management Wireless Application Protocol (WAP) Push me Device Setup Manager Device Setup Manager Device Association Broker: basif4	Routes Wireless Application Protocol (WAP) Push messages recei Enables the detection, download and installation of device-relat Enables and to pair devices		Manual (Trigg Manual (Trigg Manual	Local System Local System			
		Description: dnaFusion Engage	DevicePicker_baaf4 DeviceFlow_baaf4 DevicerRow_baaf4 DevicerRow_baaf4	This user service is used for managing the Miracast, DUNA and Allows ConnectUX and PC Settings to Connect and Pair with WiF Enables anos to discover devices with a background task		Manual Manual Manual (Tring	Local System Local System			
			DHCP Client Dignostic Execution Service	Registers and updates IP addresses and DNS records for this co Executes diagnostic actions for troubleshooting support	Running	Automatic Manual (Trigg	Local Service Local System			
			Diagnostic Policy Service Diagnostic Service Host	The Diagnostic Policy Service enables problem detection, troubl The Diagnostic Service Host is used by the Diagnostic Policy Ser	Running Running	Automatic Manual	Local Service Local Service			
			Diagnostic System Host Display Enhancement Service	The Diagnostic System Host is used by the Diagnostic Policy Ser A service for managing display enhancement such as brightnes Manages the connection and configuration of local and contents	Running	Manual Manual (Trigg	Local System Local System			
			Distributed Link Tracking Client Distributed Transaction Coordinator	Maintains links between NTFS files within a computer or across Coordinates transactions that span multiple resource managers	Running Running	Automatic Manual	Local System			
			DNA Service Agent DNADrvr32	Allows DNAFusion dients to manage DNA Driver.	Running Running	Automatic Manual	Local System Local System			
			anaFusion Bosch	dnaFusion Bosch	Running	Automatic (De_	Local System			
			😭 dnaFusion Engage 🖗 dnaFusion Isonas	dnaFusion Engage dnaFusion Isonas	Running	Automatic (De., Automatic (De.,	Local System Local System			

The Engage driver status is reflected by the color of the diamond in the DNA Fusion Hardware Browser. Below is a list of the various driver colors and states.

- Green The driver is running and all systems are functional. All is right in the world.
- Black The driver is not running.
 - □ Verify the DNADrvr32 and Engage services are running under the correct identity.
- Yellow The driver is running but unable to open the connection used to communicate status to DNA.
 The oo.Engage.status queue cannot be opened by the DNA Driver. Verify that the Engage Driver is configured to run under a local administrators' group account.
- Red The driver is running but unable to open the connection used to relay events to DNA.
 The oo.dnafusion.event queue cannot be opened by the DNA Driver.
- Purple The driver is running but unable to open either the events or status connections to DNA.
 Both the oo.Engage.staus or oo.dnafusion.event queues cannot be opened by the DNA Driver.

ENGAGE Site Setup

The ENGAGE IP configuration will require the name and password created in the Allegion portal on page 3-1.

Once the site is created in DNA Fusion, the associated hardware will be linked to the specified account.

1. From the Hardware Browser, **right click** on the Engage Hardware header and **select** Add New Engage Account.

The Engage Site Creation dialog opens.

- 2. Enter the desired Site Name.
- 3. Enter the email account and password for the registered account on page 3-1 and click the Add Site button.

If an account has not been created on the Allegion portal, **click** the Allegion Portal option and the registration page will open in the DNA Fusion HTML Viewer. **Select** the Create Account option and complete the registration.

The system will start the process of adding the site.



◆■ Site: 1: 00 Training
■ 12: Deskton D2 (225)
■ ■ 13: Deskton SSP-EP
Axis Controllers
Charage Hardware
🔁 Site 1: OO Training Engage IP
ngage Site Creation
ngage Site Parameters
Site Name
Engage Operator Email
Operator Password Show Passw
Confirm Password
assword Rules:
* At least 10 characters * At least 1 uppercase letter
* At least 1 lowercase letter
* At least 1 number or symbol:/@#\$% ()==_<>? * No spaces allowed
* Not more than 2 identical characters in a row
Note: If you have not already created an account with these credentials at the Engage Portal, it is highly recommended that you create one via this link.
Allegion Portal
Allegion Portal

4. Once the site is successfully added to DNA Fusion, click the Close button.

Engage Site Creation	×
Engage Site Parameters	
Site Name	
OO Training Engage IP	
Engage Operator Email	
training@ooaccess.com	
Operator Password	Show Passw
OOtraining1	
Confirm Password	
OOtraining1	
Password Rules:	
* At least 10 characters * At least 1 uppercase lette * At least 1 lowercase lette * At least 1 number or syml * No spaces allowed	ər ər boll@#\$%^[)-=_<>?
* Not more than 2 identical Note: If you have not al credentials at the Engag you create one via this Allegion Portal	characters in a row ready created an account with these ge Portal, it is highly recommended that link:
Site Added Successfully	
	Close Cancel

The Site will appear in the Hardware Browser and an invitation email will be sent to the registered email.

5. **Open** the email and **select** the Accept This Invite link.

You have been invited by Sherinda Barrow to manage OO Training Engage IP. Please click on the link below to accept this invitation.
Accept This Invite

This invitation will expire on 02-04-2020.

An Engage web page opens.

- 6. Scroll down to the bottom of the page and accept the Terms and Conditions.
- 7. **Continue** to page 3-7 to commission the gateway and locks.



Commissioning the NDE IP Native Gateway

Open Options connects to the NDE Series locks via the ENGAGE NDE IP Gateway. The ENGAGE Gateway enables these devices to be connected in real-time with Open Options DNA Fusion. The ENGAGE gateway connects using the existing network architecture and can be powered over Ethernet or from the provided power supply. It supports up to ten (10) NDE locks within a 30-foot radius.

1. **Connect** the NDE Gateway to the network.

If utilizing Power over Ethernet, skip to step 3.

2. **Apply** power to the Gateway: PoE or Wired Power Supply.

The Gateway will complete a self test upon power up. During this process, the LED on the Gateway will appear solid amber. Once the light turns solid red, the Gateway is ready to be commissioned.

3. Once the Gateway LED is solid red, **open** the ENGAGE app.

If the Gateway does not turn red, a Factory Default Reset may be performed. To factory reset the device, press and hold the Reset button. Hold the button until the LED flashes green twice and then remains solid. Release the Reset button to complete the process.

- 4. **Open** the ENGAGE app and log in.
- 5. From the Devices tab, **select** the + sign.



6. Select the Gateway (GWE) device type from the list.



7. **Select** the ENGAGE Gateway from the list.

The Gateway is placed in linking mode and the light will begin to blink. The Gateway can be identified by the serial number.

A screen will appear inquiring about the light status.

8. **Click** Yes to link the Gateway.

The app will search for devices in range.





9. Enter a Name for the device and click the Next button.



The communication mode screen will appear.

10. **Select** the IP option.

Back	1:57 PM	-7 🖉 84% 🗩
con	Select Gatewa	ly lode
	RSI	
	IP	

The IP Configuration screen will appear.

11. Select the Static IP or DHCP tab.

It is important to work with the IT department to gather the required network information.



If needed, toggle the IP Behind Firewall option to the ON position.

12. If required, enter the Network Information and tap Next.

If the IP Behind Firewall option is ON, the IP Behind Firewall dialog will appear. This allows the DNA Fusion Engage service to act as a server for the Gateway. Utilized when the Gateway is behind a firewall. **Enter** the required information and **tap** Next.

•••I AT&T	LTE	10:02 AM	1 🖉 🖉 869	6 🗆
Back				
IP	Be	hind Firewall		
	SERVE	ER URL		
	https:	//		
	CA SE	ERVER URL		
	http://	1		
	KEEP	ALIVE (IN SECONDS)		
	300			

The Preparing your device screen will be displayed. Once commissioned, a large check will appear.



13. **Tap** the Finish option.

The Gateway will appear in the Device List.



14. Close the app, and proceed to Commissioning NDE Doors on page 3-11.

Commissioning NDE Doors

Once the NDE locks have been installed, they will need to be commissioned in the ENGAGE app prior to syncing the hardware in DNA Fusion. The NDE lock must be fully assembled with the battery connector plugged in and the battery cover in place. If the battery cover is not installed, the lock will NOT enter linking mode.



If the Lock has been in Standalone/Construction Mode, a Factory Default Reset will need to be performed. To factory reset the lock, remove the battery cover and hold the Reset button for 5 seconds. Release the Reset button. The LED will flash green twice and the lock will beep twice. Turn the interior door handle slowly three (3) times within 20 seconds to complete the process. The lock will beep once and the LED will turn red each time the handle is turned.

The ENGAGE app is used to commission the NDE locks in the Allegion portal. It is critical that the gateway and NDE locks are commissioned under the same account. Only one NDE lock can be linked at a time. If linking multiple locks, leave the battery cover off all uncommissioned locks.

1. **Open** the ENGAGE app and log in.

Verify that the Gateway has been added to the ENGAGE app.

2. From the Devices tab, **select** the + sign.



 Select the NDE device type from the list. The Settings option will open.

Do you want to use default NDE settings for this Site?	
Use Default Settings	
Customize Settings	



4. Select the desired method.

Open Options recommends selecting the Default Settings option. The NDE lock settings can be changed at any point. The appropriate dialog will open.

.II AT&T_LTE	2:01 PM	🕈 🖉 82% 💷	at AT&T LTE	2:01 PM	🕫 🖉 82% 💷						
Back		Next	< Back	Device Settings	Save						
			Control CTE	LE NDE	RM/RU MTB						
			Beeper Enab	led							
	2		Relock Delay	/	3 sec						
			ADA Relock	Delay	30 sec						
			Propped Doc	or Delay	20 sec						
			Power Fail M	ode	Secure						
			MOBILE C	REDENTIAL				and A	T&T LTE	2:01 PM	🕈 🖉 82% 💷
Pleas the	e turn and rele interior lever a	ease nd	Mobile Crede	ential				Ba			
	Select Next.		Communicat	ion Range	Short				Select a	n NDE Lock	
Turn an	d release	e the Inf	erior doo	r handle.					Classr	oom NDE 1	
The doo	will beep	o once a	nd the N	IDE lock w	ill appea	r list. The ND	E lock can		A10000	0000F134AF1	

be identified by the serial number.

5.

6. **Select** the NDE lock.

A screen will appear inquiring about the reader LED's status. The light should start to blink.

- Tap Yes if the light is blinking.
 If the light is not blinking, repeat steps 5 and 6.
 The Device Name dialog will appear.
- 8. Enter a name for the NDE device and tap the Next option.





The door calibration screen will appear.

9. Verify that the door is closed or apply the door magnets and touch the Next option.



Set door to closed position and touch next

The Select Wi-Fi screen will open.

10. Tap the Skip option.

Once commissioned, a large check will appear.

11. **Tap** the Finish option.

The lock will appear in the Device List.





12. Close the app, and proceed to Syncing the Gateway and NDE Devices in DNA Fusion on page 3-13.

Syncing the Gateway & NDE Devices in DNA

After the Gateway and NDE locks are commissioned in the ENGAGE portal, they will need to be synchronized with DNA Fusion.

- 1. Log in to DNA Fusion and open the Hardware Browser.
- 2. Locate the ENGAGE Site created on page 3-5.



3. Right click on the Site and select Resync Hardware.

Engage Hardware	g	
🚽 🛅 Site 2: Open Op	one Training	
- Stentofon	Properties	
Bosch Panels	Invite New User	
🗄 📲 1.P1: OO Bosch	Resync Hardware	
	Refresh Status	
🗄 💩 Users	Unlink All Doors	
	Info 🕨	
📟 ALL Objects 🔹 Input P	Remove Site	🔛 ASSA

The ENGAGE hardware will auto populate after a moment and the ENGAGE Gateway and NDE locks will appear in the Hardware Browser. The diamond next to the Gateway will turn green. This indicates that the Gateway is online.

lardware	>
🗈 📲 Site: 1: OO Training	
u →■ 1.1: DController (101)	
🖶 📲 1.2: Desktop D2 (225)	
🗄 📲 1.3: Desktop SSP-EP	
Axis Controllers	
sonas Doors	
🖮 📲 Engage Hardware	
🖨 📴 Site 1: Open Options Training	
* 🔁 1.G2: Training Gateway	
Devices (Unlinked)	
📶 1.G0.D1: NDE Classroom Door 1	
I.GO.D2: Training NDE Door 2	
Bosch Panels	
• • 1.P2: OO Training	
- Jevels	
🗄 📲 👗 Users	

4. Continue to Configuring the Gateway on page 3-15.

Firmware Updates

The Gateway and NDE locks firmware should be updated after the integration is complete. Both tasks can be accomplished through the DNA Fusion software.

To upgrade the firmware on the Gateway:

- 1. From the Hardware Browser, **right click** on the Gateway.
- 2. **Select** the Update Gateway Firmware option.

The firmware on the Gateway will be updated.

To upgrade the NDE lock firmware:

- 1. Right click on the Gateway.
- 2. Select the Update Lock(s) Firmware option.

The firmware for all the linked locks will be updated.



Inviting Users

Engage User's must be invited to "collaborate" on the ENGAGE site. After accepting the invitation and loading the app, the user will have access to the DNA Fusion Engage Site in the Engage app. The user will be able to commission hardware to the site from their ENGAGE phone app.

- 1. From the Hardware Browser, **right click** on the ENGAGE Site.
- 2. Select the Invite New User option.

The Engage Invite New User dialog opens.

😻 Engage I	nvite New User		Х
User Inf	ormation		
Email			
Role:	Operator 🔹		
	Operator		
	Manager Site Administrator	OK Cance	

- 3. Enter the user's Email address.
- 4. **Select** the user's Role.

Site Administrators - Unrestricted access to create, modify and delete users, devices and to manage device settings. Administrators can invite other Administrators, Managers or Operators to the ENGAGE app.

Managers - Unrestricted access to create, modify and delete users, devices and manage property and device settings. Managers CANNOT invite new Administrators to the site however they can add new Operators.

Operators - Operators have the most restricted permissions. They can manage daily maintenance operations such as updating door files and uploading Audits at the door into the ENGAGE app. Operators may also perform some maintenance items like updating a device's firmware. Operators CANNOT invite other users to the site.

5. **Click** OK.

The User will receive an email with the Invitation. The receipt will need to open the email and verify their identity by clicking on the link.

If the new user does not open and verify their invite email before the expiration date listed in the email, the invitation is automatically cancelled and another invite must be resubmitted.



Inviting Users to the ENGAGE app does not grant access or affect operator permissions in DNA Fusion. Privileges within DNA Fusion are based on the Operator Profile applied to the designated operator in DNA. See Chapter 4: Operator in the DNA Fusion User Manual for more information on configuring operator settings.



Page 3-15

Configuring the Gateway

After the ENGAGE hardware has been populated in DNA Fusion, the Gateway Properties will need to be configured.

1. From the Hardware Browser, right click on the Gateway and select Properties.

Or

Double click on the Gateway.

The Gateway Properties opens.

way	Engage Gatewa	ay Properties		
Gene	ral			
Id:		1	Firmware Version:	N/A
Nan	ne:	Training Gateway		
Des	cription:	Training Gateway		
Tim	e Zone:	(UTC-06:00) Central Time (US & Canada)	- Day	light Savings
Seri	al (Short):	B10000000003190		
Seri	al (Long):	000000000000000B1000000003190		
Comr	nunications			
Hos	t	Server		
Add	ressing Mode:	Static		
MA	Adress:	00-40-9D-BB-7E-A6		
IP A	ddress:	10.0.21.250		
Gate	eway:			
Sub	net Mask:			
DNS	Address:			
Alt	ONS:			

If desired, change the Name or Description.

- Verify the Time Zone and if needed, check the Daylight Savings option. 2.
- Under the Communications Header, verify the Host is set to Server. 3.
- In the Addressing Mode field, select the IP Configuration set on page 3-8. Addressing Mode: 4. Open Options recommends uses Static Addressing.
- If Static addressing is selected, enter information in the required Network Address fields. 5.
 - IP Address This field will auto populate when the Gateway is linked to DNA Fusion. •
 - Gateway Enter the network's Gateway address.
 - Subnet Enter the correct Subnet Mask for the gateway.
 - DNS Address Enter the DNS Address. •
 - Alt DNS If available, enter the Alt (Alternative) DNS address.
- **Click** the Ok button to save the changes. 6.
- 7. **Continue** to Linking the NDE Doors on page 3-16

IP Address:	10.0.21.50
Gateway:	
Subnet Mask:	
DNS Address:	
Alt DNS:	



DHCP

Linking the NDE Doors

Prior to linking the doors, the ENGAGE Doors header will display an Unlinked status.

To link the doors:

1. **Right-click** on the Gateway and **select** Link Doors option.





The Link Engage Doors to Gateway dialog will appear. DNA Fusion will start to scan for NDE doors. Once complete, the doors will be displayed in the dialog.

Iink Engage Doors to Training Gateway							
Scan On Start							
	Select	Serial Number	Door Name	Signal Quality	Model Type	Status	
		A1000000F13BCA0	Training NDE Door	High	nde	Unlinked	
		A1000000F134AF1	NDE Classroom Doo	Med	nde	Unlinked	

The dialog will indicate the lock's signal quality as well as the device type and link status.

2. Select the desired doors to link to the Gateway.

A checkbox will appear in the Selected column.

Uink Engage Doors to Training Gateway						
Scan On Start						
Select Serial Number Door Name Signal Quality Model Type Status						
A 10000000F13BCA0 Training NDE Door High nde Unlinked						
A 10000000F134AF1 NDE Classroom Doo Med nde Unlinked						
Scanned Scan for Unlinked Doors Link Selected Door(s) Close						

3. Once the NDE locks are selected, click the Link Selected Door(s) option.

The doors will appear with a green checkbox in the Selected column and the Status will update to Linked. Once linked, the door will beep three (3) times and the LED will flash green.

Link Engage Doors to Training Gateway							
V :	🖉 Scan On Start						
	Select Serial Number Door Name Signal Quality Model Type Status				Status		
	A1000000F13BCA0 Training NDE Door nde Linked		Linked				
	_	A1000000F134AF1	NDE Classroom Doo		nde	Linked	

4. **Click** the Close button.

The locks appear as confirmed in the DNA Fusion application.

5. **Continue** to Chapter 4: NDE in DNA Fusion.

Engage Hardware	
🖶 📴 Site 1: Open Options Training	
🖶 📲 📩 1.G2: Training Gateway	

Configuring a Door to Follow a Time Schedule

The Unlock Schedule option provides a quick way to configure a door(s) to adhere to a specified unlock time schedule. The time schedule must be created prior to the setting up the unlock feature.

The Native IP Gateway integration is limited to 16 active time schedules. In this case, the first 16 default time schedules programmed in the DNA Fusion system will be available for selection or Time Schedule Sets can be created and applied to the NDE lock.

1. **Right-click** on the Door and **select** the Properties option.

The Door Properties dialog opens.

Engage Door Prop	erties					
General	Engage Door	Properties				
Advanced	General					
Alarm Config	ld:	1	-		Device Type:	nde
	Serial Number:	A1000000F	134AF1		Database:	Sorted
	Name:	NDE Classr	oom Door 1			
	Description:	NDE Classro	oom Door 1			
	Time Zone:	(UTC-06:00)	Central Time (US & Can	ada) 💽	🔲 Daylight Sa	vings
	Time Set:	Default				
	Home Page:					
	Host Macro:	*None*		-	Edit	
	Auto					
	Door Follows Time	Schedule:	*None*			-
	Lock			Reader		
	Manufacturing Dat	e:	N/A	Manufacturing	Date:	N/A
	Hardware Version:		N/A	Hardware Versi	ion:	N/A
	Firmware Version:		N/A	Firmware Versi	on:	N/A
					ок	Canc

2. In the Auto section, select the Door Follows Time Schedule drop down.

The Time Schedules list appears.



Time Schedule information can be found in the DNA User Manual in Chapter 5. Keep in mind the ENGAGE IP NDE lock integration is limited to 16 time schedules.

- 3. Select the desired Time Schedule from the list.
- 4. If desired, check the First Man In option.



The door will remain in a secured mode even when the designated time schedule is active if no cardholders have accessed the door. Likewise, if a cardholder presents their card to the door when the time schedule is inactive, the door will remain secured.

If selected, the door will unlock after the first person badges at the reader within the time schedule specified in step 3.

5. **Click** OK to save the changes.

Configuring ENGAGE IP Card Formats

The NDE locks does not store card formats. The integration requires DNA Fusion to send a fully encoded card number to the lock in order for the card to validate access. To format the cards the exact format of the card must be known. DNA Fusion comes preconfigured with common card formats.

To configure additional card formats:

- 1. From the Hardware Browser, **right click** on the ENGAGE Hardware main node.
- 2. Select Card Formats from the menu.

The External Card Formats dialog opens.

External Card Formats			×
Card Format]
Card Format			•
Default Facility Code:	0		
Set as <u>d</u> efault		ОК	Cancel



🖃 📲 Site: 1: 00 Training

• • 1.3: Desktop SSP-EP

- 3. **Select** the Card Format from the drop down list.
- 4. Enter the Default Facility Code for the card format(s).

Each card format can have a default Facility Code. The Facility Code will automatically be populated when a new card is issued for the selected Card Format.

5. If desired, check the Set as default option.

External Card Formats		×
Card Format		
Card Format	26 Bit-No Sentinel	-
Default Facility Code:	55	
Set as <u>d</u> efault	ОК	Cancel

6. **Click** the Ok button to save the card format settings.

NOTE: If additional card formats are required, contact Open Options Technical Support.

Configuring an ENGAGE IP Cardholder

The IP Gateway integration requires the Card Format be identified at the card level.

1. From the cardholders record, **select** the Card Tab.

۲	dnaFusior	n - Barro	w, Sherinda													
4.0	ile View	DNA	Hardware Pe	ersonnel F	Reports Tools	Window	Help									
1	0	E		8				0		۲		0	•			
	DNA	Perso	nnel Hardwar	e Access	Time	Triggers	Events	Alarms	DVR	Video	Update	Postman	Postman RTN	All Clear	Lockdown	
	Properties	7		Levels	Schedules	Macros	Manager		Manager	Manager	Cardholder	Button			7	
8		Events	Barrow, Shi	erinda ×												
Pera	🎄 Empl	loyee Info	- B+ Employee	Info (Page 2)	🖪 ID Badgin	g 💷 Card:	1205									
ionnel	Mode:		Auto		🖲 Enroll 💌			E. Trac	a History	- Hare A	CONTE TO	Cituat	ionr			
	Card Fo	irmat:	26 Bit-No Senti	inel 🔹	F/C: 55				e Barrah	1102 1		Situat				
0	Card:		1205		Issue: 0				Last Used							
P	Hot Sta	imp:	0					Date/Time:	02/06/20 :	12:22:25						
Ces	PIN:							ecotion:	Passage							
sLev	Card Ty	pe:	Normal					Operator:	Admin							
3	Activati	ion:	3/13/2019	□▼ 10:4	5:00											
	Deactiv	ation:	3/13/2039	□ ▼ 00:0	0:00			ASSA Cred	ential Forma	at: None		-				
	Vacatio	n Start:	2/ 7/2020	🗐 🕈 for	0 Day(s)			ASSA Facil	ity Code:	0						
Hard	Non-Us Exclusio	e on:	1/ 1/2000													
vare			Advanced A	Access Contr	ol										Access Levels	
	Use Lim	nit: Unl	mited 🖂	A	PB Location:	0		Acc	ess Levels							
	Activ	vate Car	d	E	Auto Activat	e Card		Acc	ess Level G RT - All Doc	roups ors						
	PIN I	Exempt	Card	E	Auto Deactiv	ate Card										
	VIP	(APB Exe	impt)	E	Time/Attenda	ince Card										
	Ahva	ays Down	beoli	E	ADA Mode											
	Over	rriđe Car	d		1 Free APB P	ass										

The Card Type will auto default to the selected format. If no format is set as default, **select** the card format from the drop down list.



- 2. If needed, **enter** the Facility Code in the F/C field.
- 3. If needed, **add** an access level to the card.
- Right click in the record and select the Update option.
 Downloading will appear next to the Gateway.

			. 37 Bit-H10304 (
H	Update	Alt+S	
	Direct Control	۱.	
	Add New Court		🖶 📲 Engage Hardware
10	Add New Card		Site 1: Open Options Training
	Add Card Block		Training Gateway (Downloading)
¥.	Remove Card		a d Co D1 ND5 Classes Days 1
			3 I.GZ.DT: NDE Classroom Door T
	Journal		3 1.G2.D2: Training NDE Door 2

The Hardware Browser (IP Gateway)

The Hardware Browser in DNA Fusion is an explorer window that consists of a hierarchical layout of the field devices that make up the system. The tree also displays the status of objects by using status indicators to the left of the tree object.

To open the Hardware Browser:

1. **Select** the Hardware icon from the Standard Toolbar.

Or

Select View / Explorers / Hardware from the Main Menu.

The Hardware Browser will open.

2. **Expand** the ENGAGE Hardware header.

Driver Status Indicators:

- Green Diamond The ENGAGE driver is running and all systems are good.
- Black Diamond The ENGAGE driver is not running.
 - □ Verify the DNADrvr32 and Engage services are running under the correct identity.
- Yellow Diamond The ENGAGE driver is running but tunable to open the connection used to communicate status to the DNA Driver.

□ The oo.Engage.status queue cannot be opened by the DNA Driver. Verify that the Engage Driver is configured to run under a local administrators' group account.

• Red Diamond - The ENGAGE driver is running but unable to open the connection used to relay events to DNA.

D The oo.dnafusion.event queue cannot be opened by the DNA Driver.

• Purple Diamond - The driver is running but unable to open either the events or status connections to DNA.

Both the oo.Engage.staus or oo.dnafusion.event queues cannot be opened by the DNA Driver.

Door Indicators:

- Blue Door The door is currently in a normal state; i.e., closed.
- Red Door The door is currently in an alarm state; i.e., door held open or door forced open.
- Gray Door The door is in Lockdown mode.
- Green Door The door is currently in an unlocked state.
- Yellow Door The door is currently in the Momentarily Unlock status.

Door Control Options

The easiest way to control a door is to right-click on the door and select the option from the Door menu.

- 1. **Right-click** on the desired door in the Hardware Browser.
- 2. Select the Modes option and select the correct Mode.

Locked	Requires a card with the correct format be presented.
Unlocked	Unlocks the selected point and allows unlimited access. No card read required.
Lock Down	The door will ignore all badges except those flagged as VIP.
Remove Lock Down	Returns the doors to the normal state.

The Door Options menu also includes a Momentary Unlock option.

Door Control Dialog

DNA allows the operator to directly perform various tasks on a selected door using the Door Control dialog. The dialog offers the following options:

- Change the Door Mode
- Issue a Momentary Unlock
- Schedule One Time Scheduled Commands

To open the Door Control dialog:

1. **Right-click** the door you wish to control and **select** Control from the context menu.

The Direct Control dialog will open.

- Door Address and description of selected door. (Read Only)
- Name Description of lock. (Read Only)
- Status Displays the status of the door. (Read Only)
- 2. **Select** the appropriate option from the Set Door Mode to: dropdown and **click** the Execute Now button.

Allows the operator to set the reader mode. This setting determines the type of access the reader will allow. See the table above for more door mode information.

Engage L		
Door Mo	ode	
Door:	1.G2.D1	
Name:	NDE Classroom Door 1	
Status:	Locked (Card Only)	
SetDoo	r Mode to:	
Lock Do	wn Door Execute Now	
Moment	arv Unlock Door method:	
Default :	Strike Time	
Default	Strike Time	
Default	Strike Time	
Default :	Strike Time	
Default : Schedule	e Command to Execute At	
Default : Schedule	E Command to Execute At	
Schedule Descript	e Command to Execute At	
Schedule Descript	e Command to Execute At ion: 220 V 7:38:00 AM V Schedule	
Schedule Descript	e Command to Execute At	
Schedula Descript	e Command to Execute At ion: 120 7:38:00 AM Schedule View Scheduled Commands	
Schedule Descript	e Command to Execute At ion: 120 • 7:38:00 AM • Schedule View Scheduled Commands	

Momentary Unlock Door	Execute Now
Lock Down Door	
Remove Lock Down	
Unlock Door	
Lock Door	
Momentary Unlock Door	

If Momentary Unlock is selected, the Unlock Door Method drop-down becomes active. **Select** the desired method and **click** the Execute Now button.



- Default Strike Time Unlocks the door for the programmed strike time.
- Seconds Enter the time (in seconds) for the door to unlock.
- Time of Day Enter the time for the Momentary Unlock command to be executed.
- 3. **Click** the Close button or the X icon to close the dialog box.

Scheduling Commands

The Schedule Command to Execute At option allows the operator to schedule door control.

It is a single event with defined start and end times as well as door modes. This type of scheduled control is stored in the host and is initiated from the host at the time of the event. Consequentiality, the host computer must be on at the time of the event.

- 1. From the Door Control dialog, **select** the Door Mode.
- 2. In the Schedule Command to Execute At section, enter a Description for the event.

This is a user-defined description for the action that will appear when the event is viewed in the future.

- 3. Enter a Date and Time.
- 4. Click the Schedule button.

A confirmation dialog will appear. **Click** OK to close the dialog. Keep in mind you may need to schedule multiple door mode events to return the door to a secured state.

To view any Scheduled Events, **click** the View Scheduled Commands button.

Future events are displayed in green while events that have already

occurred appear red.

Data Time -	Cabaddad Da	- Fundamention	- 4-6
Date Time +	Scheduled by	Explanation	Action
02/14/20 17:3	Admin @ Station 1	PTA Meeting	Uniock Door
14			
ilters			
ilters		Explanation:	
ilters		Explanation:	

Click the Remove button to delete a selected command.

5. **Click** the Close button to exit the dialog.



If a door mode is changed, it may require scheduling two (2) events in order to return the door to a secured mode.

	Door Control
Door Me	ode
Door:	1.G2.D1
Name: Status:	NDE Classroom Door 1 Locked (Card Only)
Set Doo	r Mode to:
Lock Do	wn Door Execute Now
Moment	ary Unlock Door method:
Default	Strike Time
	- Command to Evenute At
Schedul	e command to execute At
Schedul Descrip	ion:
Schedul Descrip	tion:
Schedul Descrip 2/10/2	220 Tr:38:00 AM
Descrip 2/10/2	20
Descrip 2/10/2	220 Tr:38:00 AM Schedule View Scheduled Commands View Scheduled Commands
Schedul Descrip 2/10/2	220 View Scheduled Commands

Supported Features

The following features are currently supported in a limited capacity.

• Host Based Macros

Host Base	d Macro (Global I/O)					
Macro Descr	ription: 17			Schedule:	*NONE*	
Loca	l Object Type (Controlling Object)		Remo	ote Object (Contro	lled Object)	
Туре:	Engage	тур	e: HDW: Mor	nitor Point		-
Action 1						
Event ID:	000: "None"	Act	ion:			
	000: *None*					
	600: Alarm Cleared					
	601: Alarm Dismissed					1
Action 2	700: Alarm Acknowledged 7000: Input Voltage Source Not De	atected				
Event ID:	7002: Input Voltage Source is Line	Power				
	7004: Input Voltage Source is POE					
	7006: Input Voltage Source is POE	+				
	7008: Input Voltage Source is Batt	tery				
Action 3	7010: Connected to App 7012: Allocated for future use					
Event ID:	7014: Allocated for future use					
L'ICHAID.	7016: Allocated for future use					
	7018: Allocated for future use					
	7020: Allocated for future use					
Action 4	7022: Allocated for future use					
EventID	7024: Allocated for future use 7026: Invalid Reader Configuration					
Evenub.	7028: No Tour Not Supported By R	eader				
	7030: Reader Configured For No To	bur				
	7032: Unpaired or unsupported rea	der detected				
	7034: Configurations Updated					
	7036: Configuration Error Invalid R	elock Delay	at Dalay			
Site	7038: Configuration Error Invalid D	oor Prop Dete	ct Delay			
cano.	7042: Configuration Error Invalid A	ock Function	ay			
	7044: Configuration Error Invalid B	attery Failure	Mode			
	7046: Configuration Error Invalid C	omm. Loss Fa	il Mode			ancel
	7048: Configuration Error Invalid D	ays to Auto P	urge			
	7050: Configuration Error Invalid C	hange Bits to	Cache			*

• Direct Commands

					•		J		
Jser Commands	Buildings I D				Modify Eng	age Dire	ct Command Door Assignm	nents	
ame. All	Buildings LD			-	Name:	Lockdov	wn NDE Doors		
ommand ID: 7					Comment	Leek De	un Daar	1	
assword Mode: No	Password -				Command:	LOCK DO	wit boor	3	
					As	signed	▼ Address	▼ Door	
Viract Commande						+	1.G2.D1	NDE Classroom Door 1	
freet commands						. •	1.G2.D2	Training NDE Door 2	
Address	Command	Title	Operation	^					
1.1.D1	Set Temporary Override		Card Only (Indefinite)						
1.2.01	Set Temporary Override		Card Only (Indefinite)	_	0				
12.02	Set Temporary Override		Card Only (Indefinite)						
1.3.01	Set Temporary Override		Card Only (Indefinite)	_					
1.3.02	Centrel Time Schedule		Card Only (Indelinite)						
12 TS4	Control Time Schedule		Override Off						
11154	Control Time Schedule		Override Off						
1.2.TS7	Control Time Schedule		Override Off	~					
Add -	Edit Remove								
Add Mercupy Bas	ad Hardwara								
Add ASSA Based	Hardware								
Add ASSA based	Hardware		- ОК 🗶	Cancel					
Add AAIS based I	hardware				C t. D.				
Add Isonas Based	Hardware				Search Do	pors			
Add Engage Base	ed Hardware								
	durare N							OK	👗 Can

• Standard Crystal Reporting

Future Supported Features

The ENGAGE IP Gateway platform is a new and developing solution. There will be some limited functionality in the following areas:

- Conventional Triggers and Macros
- Tenants, SSP Lists and Event Filtering
- API Support for the Mobile application and Web capabilities
- ACM Status Report
- View ENGAGE locks on ACM tab
- ACM Sub Groups

This Page Intentionally Left Blank

NDE in DNA Fusion

In This Chapter

 $\sqrt{}$ Configuring Access Levels

 \checkmark Controlling the NDE Lock Hardware

 $\sqrt{}$ Generating Reports

Once the NDE locks are commissioned and programmed in DNA Fusion, the properties of the door may be configured. Access levels will need to be created to provide access to the door(s). DNA Fusion also offers a number of different hardware features as well as the ability to generate "Who Has Access" reports on the fly.

If the ENGAGE IP Gateway solution was utilized, cards will need to be properly configured for the encoded data to be downloaded to the lock.

Configuring Access Levels in DNA Fusion

An Access Level consists of an entry point (such as a NDE locks) and an associated time schedule. When the access level is added to a card record, it determines where and when the cardholder has access within the system. When using the Gateway locks, Global Access Level Groups must be utilized.

Access Levels can be added to individual cards or groups of cards in the system. Each card can be assigned 32 access levels per SSP controller in the system. For more information on access levels, see Chapter 6 in the DNA Fusion User Manual.

Creating a Global Access Level Group

A Global Access Level Group provides an easy way for doors and elevators from multiple controllers to be grouped together in a common access level. This will allow a cardholder to have access to doors on multiple controllers with a single global access level group. See page 6-7 in the User Manual for more information.

1. With the Access Levels Browser open, **right-click** on Access Level Groups and **select** Add Global Access Level Group from the resulting menu.

The Global Access Level dialog opens.

- 2. Enter a Name for the global access level group.
- 3. **Select** the Assigned column for the desired Doors and NDE Locks.

A 💠 will appear in the Assigned column once the door(s) have been selected.

If the group has doors already assigned, a \checkmark will appear in the Assigned column.

NDE locks appear with A in the address as well as an identifying icon \parallel

4. From the Default Time Schedule drop down, select a Time Schedule for the Access Level. Or

If Time Schedule Sets are utilized, the schedule will need to be selected from the drop down.

5. Click OK to close the Global Access Level dialog.

The Global Access Level Group will appear in the browser and is ready for distribution to cardholders. Global Access Level Groups can be identified by the folder with the red access level icon.

					Activation Date.		v
De	fault Time Schedule	TS 001: A	lways	-	Deactivation Date:		*
Aci	cess Level Categor	Access Leve	el		Credential Function:	None	
Es	cort Requirements:	Not an Esco	ort (default)		Note: Credential Functi	ons are limited to Engag	ne Doors
	Assig • Add	dress 🕌	Description	•	Time Schedule/Flo	or Group	•
₽	1.1.	D1	DController Door		*Default		
	1.2.	D1	📕 Main Entrance		*Default		
	1.2.	D2	Employee Entrance		*Default		
	1.2.	D3	PG Monitor		*Default		
	1.3.	D1	Office Door		*Default		
	1.3.	D2	Classroom Door		*Default		
	1.G	2.D1	Real NDE Classroom Door 1		*Default		
	1.G	2.D2	Training NDE Door 2		*Default		
	1.IS	D1	MAC0018C8405BDD		*Default		
	1.IS	D11	MAC0018C82E8BA4		*Default		
	1.IS	D12	MAC0018C840567E		*Default		
	1.IS	D2	RAC0018C840599A		*Default		
	1.IS	D3	MAC0018C84054AF		*Default		

1.3.D1	Office Door	"Default
1.3.D2	Classroom Door	*Default
1.G2.D1	NDE Classroom Door 1	*Default *
1.G2.D2	Training NDE Door 2	001: Always
1.IS.D1	MAC0018C8405BDD	002: Business Hours - Main Entrance Schedule (8:00a-5:00p M
1.IS.D11	MAC0018C82E8BA4	003: Rapid Response (24x7)
1.IS.D12	MAC0018C840567E	004: General Personnel (6:30a-8:30p M-F w/NH)
1.IS.D2	MAC0018C840599A	005: 3rd Shift Personnel (11:00p-7:00a M-Sun w/H)
1.IS.D3	MAC0018C84054AF	006: 1/2 Day Schedule (T8)
		007: Main Entrance Door Scheule (7a-6p M-F w/NH)
		008: 24 x 7 Personnel

ENGAGE Credential Functions (IP Configuration Only)

Credential functions in the ENGAGE IP NDE lock permits a card to perform specialized functions. In version 7.7.0.70 full support for additional ENGAGE credential modes when utilizing the Gateway IP installation method.

The additional credential options are available when configuring a Global Access Levels. If the site is licensed for Engage IP Gateway, a new option will be available on the Global Access Level header. Deploying the feature at the Access Level permits a credential to have different functionality on a door by door basis.

1. Create or edit a Global Access Level.

See page 4-1 for information on creating Global Access Levels.

- 2. Enter a Name for the global access level group.
- 3. Select the desired Doors and NDE Locks.

A + will appear in the Assigned column once the door(s) have been selected.

If the group has doors already assigned, a \checkmark will appear in the Assigned column.

NDE locks appear with A in the address as well as an identifying icon [].

4. From the Default Time Schedule drop down, select a Time Schedule for the Access Level. Or

If Time Schedule Sets are utilized, the schedule will need to be selected from the drop down.

5. **Select** the desired Credential Function from the list.

This setting will have no impact if no ENGAGE doors are selected.

- One Time This function opens the selected ENGAGE door(s) only once with the normal function. Once a one time use credential has been used on a door, it will no longer work on that ENGAGE door. It will still provide access on other selected doors in the Access Level.
- Supervised These credentials allow access only when a second supervised credential is presented.
- Toggle A toggle credential unlocks the ENGAGE door and leaves it unlocked until a toggle credential is presented to the door again. It toggles a door between unlocked and card only.
- Freeze A freeze credential disables the credential reader. After a freeze credential has been used on a door, only a pass through credential will operate the lock. To move the freeze, present a freeze credential to the lock a second time to return it back to the normal operational state.
- Lock Down A lock-down credential places the lock into the secured mode combined with freeze credential functionality.
- 6. Click OK to close the Global Access Level dialog.

The Global Access Level Group will appear in the browser and is ready for distribution to cardholders.

Global Access Level Groups can be identified by the folder with the red access level icon.

NOTE: If a credential is assigned multiple access levels with different Credential Functions enabled, only one will be applied. This is based on a function ranking priority. The credential function with the highest priority will be granted to the card.

The Credential Functions priority is as follows:

- 1. Pass Thru
- 2. Lock Down
- 3. Freeze
- 4. Toggle
- 5. Supervised
- 6. One Time

) (Global Access Le	vel					×
Van	ne:				Activation Date:		4. V
Defa	ault Time Schedul	TS 001: A	ways	-	Deactivation Date:		
Acc	ess Level Categor	Access Leve	el		Conduction Exection	[
Esc	ort Requirements:	Not an Esco	rt (default)	-	Credential Function.	None	-
					note: creaencer ranca	ons are initied to Engage Doors	
4	Assig 🔻 Ade	dress ₊†	Description		 Time Schedule/Flo 	or Group	•
۲	1.1.	D1	DController Door		*Default		
	1.2.	D1	Main Entrance		*Default		
	1.2.	D2	Employee Entrance		*Default		
	1.2.	D3	PG Monitor		*Default		
	1.3.	D1	Office Door		*Default		
	1.3.	D2	Classroom Door		*Default		
	1.G	2.D1	PNDE Classroom Door 1		*Default		
	1.G	2.D2	Training NDE Door 2		*Default		
	1.IS	.D1	MAC0018C8405BDD		*Default		
	1.IS	D11	MAC0018C82E8BA4		*Default		
	1.IS	D12	MAC0018C840567E		*Default		
	1.IS	D2	MAC0018C840599A		*Default		
	1.IS	D3	MAC0018C84054AF		*Default		

Credential Function:

	. One Time
	Dogged
	Supervised
	Toggle
	Freeze
	Lock Down
	Pass Thru
ised crea	dential is presented.
cked unt	til a toggle credential
card or	ily.

Normal Blocked

Assigning an Access Level to a Cardholder

An access level provides the when and where a cardholder can access doors in the system. An access level can be associated with a cardholder numerous ways. See Assigning Access Levels on page 7-13 in the DNA Fusion User Manual for detailed information.

For ENGAGE IP Gateway integrations, an extra step is required to properly encoded the card. Since the locks are storing the card data and they do not account for facility codes, the Card Format and Facility Code will need to be entered in the cardholders record. See page 4-4 for more information.

Assign From the Context Menu

- 1. Locate the desired card in the Personnel Browser.
- 2. **Right-click** on the Card and **select** Modify Access. The Assian Access Levels dialog opens.

		-						
	DNAFusi	ion - Assign Acce	ess Le	vels				×
N	lodify Card	Access Levels/G	roup	5				
		5500						
G	ard: :	0023						
	Ass 🔻	Access Level	-	Description -	Start Date	-	End Date	-
	-	💾 Group		Emergency Personnel				
		🔮 Group		General Personnel-All				
		💾 Group		RRT / SWAT				
		💾 Group		Temp Access-Front				
	 Image: A second s	💾 Group		VIP				
		🔮 Group		Weekends-Front				
	-	1.1.AL1		VIP Personnel (All Doors, Always)				
		1.1.AL2		RRT / SWAT (All Doors, Always)				
		1.1.AL4		Janitorial (Employee Entrance, Weekend Sched				



- A green check \checkmark indicates that the access level is already assigned to the card.
- A red minus sign indicates that the access level will be removed from the card.
- A blue plus sign 💠 indicates that the access level will be added to the card.
- Click the Assigned field next to the desired access level(s).
 A blue plus sign + will appear next to the access level(s).
- 4. **Click** the OK button.

The access level(s) are added to the card.

Assign From the Personnel Record

- 1. Select the Card tab from the Personnel Record.
- 2. **Right-click** inside the Access Levels section and **select** Add/Remove/Modify Access.

The Assign Access Levels dialog opens.

- Select the Assigned field next to the desired access level(s).
 A blue plus sign + will appear next to the access level(s).
- Click the OK button.
 The access level(s) are added to the card.

Drag & Drop to an Individual Card or Cardholder

- 1. **Open** the Personnel Browser and the Access Levels Browser.
- 2. **Expand** the browser tree.





4. **Click** OK.

If the access level is dragged and dropped to a cardholder, the access level will be assigned to all of the cardholder's cards.

Expand All Collapse All	
Add/Remove/Modify Access	
Edit Temporary Information	
Remove Access Level/Group	
Remove All Access	
Copy Access Levels From Card	•

Configuring ENGAGE IP Card Formats (IP Gateway Integrations Only)

The NDE locks does not store card formats. The integration requires DNA Fusion to send a fully encoded card number to the lock in order for the card to validate access. To format the cards the exact format of the card must be known. DNAFusion comes preconfigured with common card formats.

To configure additional card formats:

- 1. From the Hardware Browser, **right click** on the ENGAGE Hardware main node.
- 2. Select Card Formats from the menu.

The External Card Formats dialog opens.

External Card Formats			>
Card Format			
Card Format			•
Default Facility Code:	0		
Set as <u>d</u> efault		ОК	Cancel



🖃 📲 Site: 1: 00 Training

-+ Axis Controllers

• • 1.3: Desktop SSP-EP

- 3. Select the Card Format from the drop down list.
- 4. Enter the Default Facility Code for the card format(s).

Each card format can have a default Facility Code. The Facility Code will automatically be populated when a new card is issued for the selected Card Format.

5. If desired, check the Set as default option.

External Card Formats		×
Card Format		
Card Format	26 Bit-No Sentinel	
Default Facility Code:	55	
Set as <u>d</u> efault	ОК	Cancel

6. **Click** the Ok button to save the card format settings.

If additional card formats are required, contact Open Options Technical Support.

Configuring an ENGAGE IP Cardholder (IP Gateway Integrations Only)

IP Gateway integrations require the Card Format be identified at the card level.

1. From the cardholders record, **select** the Card Tab.



The Card Type will auto default to the selected format. If no format is set as default, **select** the card format from the drop down list.

- 2. If needed, enter the Facility Code in the F/C field.
- 3. If needed, **add** an access level to the card.
- 4. Right click in the record and select the Update option.

	Update	Alt+S
	Direct Control	×
6	Add New Card	
=	Add Card Block	
	Journal	•



NDE Door Features

There are a number of features available for NDE locks. For instance, you can see who has access to a specific door or trace the history for the selected lock.

To access these features, right-click on the lock.

Trace History

A trace history report can be run on a reader-controller to view the la transactions.

1. **Right-click** on the NDE Lock and **select** Trace History from the menu.

Or select the Info / Trace History option.

The Trace History Dialog will open.

Trace Histo	ory Dia	alog								>
Trace History Start Date: End Date:	for 1.	G2.D1: NDE Classro 7/2020 □▼ 12:0 0/2020 □▼	Access On	Export			Print	Trace		
Time & Date		Panel Time	Last Name	First Name	Employee #	Tenant ID	Card	F/C	Address	Descripti
02/07/20 11:3	7:11	02/07/20 11:37:11							1.G2.D1	NDE Clas
02/06/20 12:2	2:29	02/06/20 12:22:29							1.G2.D1	NDE Clas
02/06/20 12:2	2:28	02/06/20 12:22:28							1.G2.D1	NDE Clas
02/06/20 12:2	2:25	02/06/20 12:22:25	Barrow	Sherinda	987654	2	1205		1.G2.D1	NDE Clas
02/06/20 12:1	9:31	02/06/20 12:19:31							1.G2.D1	NDE Clas
02/06/20 12:1	9:21	02/06/20 12:19:21							1.G2.D1	NDE Clas
02/06/20 12:1	9:18	02/06/20 12:19:18	Barrow	Sherinda	987654	2	1205		1.G2.D1	NDE Clas
02/06/20 12:1	8:59	02/06/20 12:18:59							1.G2.D1	NDE Clas
02/06/20 12:1	8:37	02/06/20 12:18:37							1.G2.D1	NDE Clas
02/06/20 12:1	8:30	02/06/20 12:18:30							1.G2.D1	NDE Clas
02/06/20 12:1	8:04	02/06/20 12:18:04							1.G2.D1	NDE Clas

	Ė	Engage Hardware						
		😑 🍖 Site 1: Open Options	Train	ning				
		🖮 📲 1.G2: Training Ga	ntewa	iy —				
		2 1.G2.D1: NDE		Properties				
		Stentofon		Momentary Unlock				
	Ē	Bosch Panels		Modes •				
		🖶 📲 1.P1: OO Bosch	ès.	Control				
w the last		🖶 📲 1.P2: OO Training						
v the last		🗄 🦑 Levels		Refresh Status				
		🗄 - 👗 Users		Download 🕨				
			2	Trace History				
nenu.		ALL Objects Input Points	0	Who Has Access				
			Who does not have access					
Doors								
	e Doo	or						
Elevators	8-	Properties	וו					
MPGs		Control	11					
Ime Schedules		Add Door						
Avis Controllers		Auto Unlock						
Isonas Doors	0	Delete						
Character Hardware	♣	Download	11					
Stentofon		Reports	11					
Bosch Panels		Info		Status				
🗈 📲 1.P1: OO Bosch		Journal	2	Trace History				
1.P2: OO Training		Watch Item	0	Who has access				
E- Cevels		Add to Marro		Who does not have access				
		Configure Door Alerts	Β	Access Level Usage				
				-				
	4	Defaults						
		Templates						
		Homepage						
		Refresh Status		-				
	Q	Where Used	11	-				
			-	-				
ALL Objects 🛑 Input Points	•	Output Poi 📋 ACMs 💠 AS	SA	-				

- 2. If a wider time or date range is needed, enter the Start and End Date/Time and click the Trace button.
- 3. To view access events, check the Access Only option and click the Trace button.

The results will be limited to access granted and denied events.

The results can be printed or exported by selecting the appropriate button. **Select** the Print to Size checkbox to size the report so that all columns appear on the same page without forcing them to a new page.

Who Has Access

This feature allows you to generate an immediate report that details who has access to the selected ACM.

1. Right-click on the Door and select Who Has Access from the menu.

The Who Has Access dialog appears.

/10/2020 -	Filter on Activat	1 tion Da	.G2.	D1: NDE Classr Filter	oom Door ring on date	1 s before tod	ay will includ	de cards	*	Export	🚍 Print	×	Cancel
11012020				mark	ked inactive	if start/stop	dates are va	alid.					
Last Name	First Name	AL		AL Descripti	TS	TenantID	Card Nu	Active	Department	Location	Title	Start Da	Stop Da
Abrahamson	Mitch	4	1	RRT - All Do	8	1	5496	Yes	Information T	Seattle, WA		10/24/20	3/20/20
Barrow	Sherinda	-	1	RRT - All Do	8	2	1205	Yes	Police Depa	Dallas, TX	Director, Edu	3/13/2019	3/13/20
Barrow	Sherinda	4	1	RRT - All Do	8	2	1205	Yes	Police Depa	Dallas, TX	Director, Edu	6/27/2019	6/27/20
Barrow	Sherinda	4	1	RRT - All Do	8	2	66741	Yes	Police Depa	Dallas, TX	Director, Edu	8/29/2019	8/29/20
Buehler	Bernie	4	1	RRT - All Do	8	1	3027	Yes	Information T			10/24/20	3/20/20
Hindmarch	Stevan	4	1	RRT - All Do	8	1	3074	Yes	Information T			10/24/20	3/20/20
Kristen	Boun	4	1	RRT - All Do	8	1	3020	Yes	Information T	Denver, CO		10/24/20	3/20/20
Lundquist	Ernest	4	1	RRT - All Do	8	1	3089	Yes	Information T			10/24/20	3/20/20
Tata	Brittany	-8	1	RRT - All Do	8	1	9995	Yes				5/15/2019	5/15/20
				RRT-AIDO	0		3332	res				5/15/2019	5/13
i alt	Shidiny												
1 alt	Unitary												
1 018	Childry												
i ait	Unitariy												
i alt	Unitariy												
1 alt	Unitariy												

The results can be exported, printed or e-mailed by selecting the appropriate button.

Who Does Not Have Access

This feature allows you to generate an immediate report that details who does not have access to the selected ACM.

1. **Right-click** on the ACM and **select** Who Does Not Have Access.

The Who Does Not Have Access dialog appears.

1.G2.D1: NDE Classroom Do	por 1					×
Who Does Not Have Access To	o This Door: 1.G2.D1: NDE Classroon	n Door 1	Export	📄 Print	X Canc	el
Card Number	LastName	First Name	Start Date	E	mployee ID	^
3034	Hinojosa	Jayne	10/24/2018		0	_
3035	Shammass	GREGG	10/24/2018		0	
3036	Maple	Francis	10/24/2018		0	
3037	Vajda	Rejan	10/24/2018		0	
3038	Kenney	Barry	10/24/2018		0	
3039	Holdren	Damell	10/24/2018		0	
3040	Logan	Phillina	10/24/2018		0	
3041	Cubillas	sena	10/24/2018		0	
3042	Gilpin	Brody	10/24/2018		0	
3043	Bridget	Chamai	10/24/2018		0	
3044	Hamrick	Roseanne	10/24/2018		0	
3045	Doss	Maynard	10/24/2018		0	
3046	Debell	Marleen	10/24/2018		0	
3047	Degennaro	James	10/24/2018		0	
3048	Seaboldt	HEDWIG	10/24/2018		0	
3049	Knapper	Kirsten	10/24/2018		0	
3050	Pouquette	Mary Ann	10/24/2018		0	
3051	Haini	Deneace	10/24/2018		0	
3052	Killen	Elba	10/24/2018		0	
3053	Fratkin	Teco	10/24/2018		0	
3054	Ramasamy	Summer	10/24/2018		0	~
					Record Count	830

The results can exported, printed or e-mailed by selecting the appropriate button.

Where Used

The Where Used feature provides a grid displaying the door's associated relationships (i.e. Triggers, Macros, Access Levels, etc.).

1. **Right-click** on the ACM object and **select** Where Used.

The Where Used Report dialog opens.



The results can be exported to a CSV file or to the Clipboard.