## fresco

#### We are making changes to the Fresco Touchscreen and components to focus on network security.

These changes are a result of recent legislation aimed at improving security for connected devices but are also part of our ongoing commitment to maintaining and improving our systems to meet or exceed industry best practices.

While most of these enhancements are under the hood, some changes to setup workflow and user interaction will be necessary.

Briefly, the changes are as follows:

- 1. Each Fresco Touchscreen will require an Admin Account
- 2. Ethernet traffic is now encrypted by default, requiring a passphrase. There is an opt-out option available as well where no Ethernet encryption will be used.
- 3. Bluetooth is also encrypted, requiring a 6-digit PIN.
- 4. Fresco Touchscreens, Fresco Studio, and Fresco Mobile on the same network **must all use the same passphrase** (if Ethernet is being encryption)
- 5. The Ethernet passphrase and Bluetooth Pin can be managed from the Touchscreen's controller tab when logged in as an admin user.
- 6. There is no back-door password to recover lost user/admin passwords.

Because the Ethernet traffic is now encrypted and authenticated, only Fresco Touchscreens with the same passphrase can transmit or react to commands on the network. Third parties cannot decipher lighting control or inject unwanted commands. Additionally, this encryption/authentication assures that any firmware or programming updates sent across the network are not able to be eavesdropped or altered. We are using well-proven encryption technology and best practices and will update as the field progresses.

#### General

- What revision of Fresco Touchscreen firmware adds these new features?
  202.01.1
- 2. What revision of Fresco Studio software adds these new features? **2.4.0**
- 3. Are there any changes to the FCN network on 485? No.
- 4. Are there any changes to the AVI box? No.
- Updates
  - 9. What are the proper steps to update a single Touchscreen system?

Update as normal. After it starts up, it'll ask you for an Ethernet passphrase. Since its only one single touchscreen, the encryption will only apply when communicating with Fresco Studio. If you choose to use encryption, make sure to also enter the passphrase on Studio.

- 5. Are there any changes to LMP panels? No.
- 6. Are there any changes to RB wall stations? No.
- Do I need to update nLight components connected to a Fresco network?
   No.
- 8. Will BACnet still work the same? Yes.
- 10. What are the proper steps to update a multiple Touchscreen system?

Update all controllers as usual. Each Ethernet capable connected controller will ask for a passphrase. If you choose to use encryption, make sure to enter the same passphrase on each Fresco and on Studio. Ethernet comms will not work until all Frescos share the same passphrase.

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#### Encryption

- 11. How can I tell if a Touchscreen uses encryption? Log in as an admin. Go to the controller setup page and verify if encryption is enabled or not.
- 12. Can Fresco Studio setup the Ethernet Encryption on Frescos? No, it must be setup on each Fresco Touchscreen.
- 13. Can I opt out of Ethernet encryption or disable the feature? **Yes.**
- 14. Can I opt out of Bluetooth encryption or disable the feature? No.

#### Passphrases & PINs

17. Do I use the same passphrase for my project file and my Fresco encryption?

It is recommended but not required that users use the same passphrase for both their Fresco encryption and to encrypt their project file, as Studio will automatically attempt to use the project passphrase when establishing communication with an encrypted Fresco (this saves users from having to reenter passphrases for each Fresco when working with a large network). Both Fresco and project passphrases are cached between Studio sessions per user per computer to save users from having to reenter passphrases.

- What are the minimum requirements for the Ethernet passphrase?
   The Ethernet passphrase must be at least 6 characters.
- 19. What do I do if I forget my Ethernet passphrase or Bluetooth PIN? You can log in as an Admin user and see the Ethernet passphrase and Bluetooth Pin in the Menu->Controller screen.

- 15. Fresco Studio has a button "Encrypt Project File", what is this? The encrypted project file option allows users to set an encryption passphrase for the project file itself.
- 16. Does a project file have to be encrypted?

It is not required that a project file be encrypted in order to interface with a Fresco that is; however, users will not be able to manage Fresco user accounts through Studio without also encrypting their project files.

- If I need to reset the Bluetooth PIN, Ethernet Passphrase, or admin username/password, how do I do that?
   To reset the Bluetooth Pin or ethernet passphrase, log in as an admin and modify it from the Controller tab.
- 21. What do I do if I forget my Admin password? Contact Fresco Technical Support.
- 22. How many times do I need to enter a controller's Bluetooth PIN with Fresco Mobile? Just initially. If the PIN is changed on the touchscreen, you must erase the pairing information on the iPad Settings and then the app will ask for the pin again. (DELETE THE DEVICE)
- 23. How many times do I need to enter a controller's passphrase with Fresco Mobile or Fresco Studio? Just initially. If the passphrase is changed on the Touchscreen, Fresco Mobile and Fresco Studio will prompt you for the new passphrase.
- 24. I am setting multiple Fresco Touchscreens on the same network, can I avoid typing the passphrase in multiple times?
  Yes, by encrypting the project file in Fresco Studio, using the same passphrase that you will use for the Touchscreens.

### **Working with Existing Sites & Devices**

25. If a Fresco at an existing jobsite is replaced with a new Fresco that has the security features, will it be able to communicate with the other Frescos at the jobsite?

If encryption is enabled for that controller, then that controller will not be able to communicate with other controllers. You can opt out of encryption and it will be able to communicate with the other controllers. The other option is to update all Frescos and setup the same passphrase on all. 26. Will I have to create a new admin username/password if I update an already deployed Fresco to the new secured firmware? Previous versions of Fresco Firmware generated a default admin username/password of acuity/1234. This default username will be kept when updating from previous Fresco firmware to the new version. If need be, it can be modified by logging in and changing the user accounts.

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#### **Ethernet Encryption Setup Process**

1. Check the **Encrypt Ethernet** option to enable the Passphrase field. You can not see or edit the pin without logging in as an admin.

2. If you do not choose to use the Encrypt Ethernet option, no Passphrase field will appear.

3. Create a passphrase of at least 6 characters length, as per the previous FAQ.

Controller Name Liabting Controller About Ethernet Encryption Setup This passphrase must match on every Ethernet connected Fresco Touchscreen and on Fresco Studio. If disabled, it must be disabled on every Ethernet connected Fresco and on Studio.

Controller Name Liahting Controller		About
Ethernet Encryptior	n Setup	
This passphrase must match on every E Touchscreen and on Fresco Studio If dis on every Ethernet connected Fresco and	thernet conne abled, it must t I on Studio.	r cted Fresco be disabled
Encrypt Ethernet		
	CANCEL	OKAY
	CLOS	



Controller Name	Lighting Controller	About
Network ID	1 Controller ID 1	Screen
Room	A	Controller
Bluetooth	Enabled Pin 010399	Location
Network	ODISABLED ODHCP OStatic	Chappole
Ethernet Encryption	testPassphrase	Circineis
IP Address	192.168.000.010	nLight
Subnet Mask	255.255.255.000	DMX
Default Gateway	192.168.000.001	RDM
FCN Port	61680 (0xF0F0) DEFAULTS	FCN
	CLOSE	-

4. The newly created passphrase will display in the **Ethernet Encryption** field.

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#### **Ethernet Encryption Setup Process - cont'd**

- 5. The passphrase can be viewed and modified when logged in as an admin user.
- Controller Name FCS #54 IvI.6 About Controller ID Network ID 6 Room Controller Bluetooth Enabled Pin Location Network O DISABLED O DHCP O Static Channels Ethernet Encryption nLight 010.035.065.081 IP Address DMX Subnet Mask Default Gateway RDM DEFAULTS FCN Port 61680 (0xF0F0) FCN CLOSE



,	Serial Number	Room	Controller Name	IP	Application Version	Uptime	Encryption	
	01061A89		Unknown Encrypted Device	192 168 0.10	0.0	N/A	Enter Passnbrase	_

	k Adapter: 📕	I Networ	ks				lers	
		Real Providence		This controller is encrypted	1. Please provide a pa	ssphrase		
i	Number	Room	Controller Name					
00	01061AB9		Unknown Encrypted		cancel	ok	THEP.	_
					2.9	1000	200	

6. You must restart the device to apply the change.

7.

In Fresco Studio, the device will display Enter Passphrase

under the Encryption field.

8. Enter the passphrase to access the device through Fresco Studio.

### **Bluetooth Pin Process**

1. The Bluetooth pin is randomly generated at startup, but can be edited by logging in to the device as an admin.

2. You can not see or edit the pin without logging in as an admin.

3. The pin must be 6 digits in length.

4. The pin can be viewed and modified when logged in as an admin user.

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	Room	F	Control
	Bluetooth	Enabled Pin	Locati
	Network		Chane
Ethernet	Encryption		pLiab
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Ethernet S Defau	IP Address ubnet Mask ult Gateway FCN Port	010.035.065.081 255.255.255.000 61680 (0xF0F0) CLOSE	DMX RDM FCN
Ethernet S Defa	IP Address ubnet Mask ult Gateway FCN Port	010.035.065.081 255.255.255.000 61680.(0xF0F0) CLOSE	DMX RDM FCN
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