

# 2N IP Verso Configuration Guide for Brivo Onair

This manual provides instructions to integrate 2N IP Verso intercoms with Brivo Onair to enable automatic intercom directory updates from Brivo Onair and to unlock Onair controlled doors from Verso intercom DTMF codes.

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# Introduction

## Prerequisites

The following items are the minimum requirements for proper operation with Brivo Onair.

**A thorough understanding of all system components is essential for proper setup and configuration of the 2N IP Verso.** It is highly recommended that you review the listed documents below before any programming of the connected systems is performed.

1. 2N IP Verso Base Station ( Part Number US 01273-001 or 01274-001 , world 9155101CB or 9155101C)
2. 2N IP Verso Touch Display (Part Number US 01275-001 , world 915503691590)
3. 2N IP Verso enhanced integration license (US 01378-001 or 01380-00, world 9137907 or 9137909)
4. Brivo control panel(s) with valid reader subscription
5. Brivo Onair intercom subscription (B-OA-IC1)
6. SIP telephone subscription
7. Brivo Onair Administrator’s Manual
8. **Axis 2N IP Verso Modular IP Intercom Installation Manual (Specifically, the intercom configuration section of the 2N Verso configuration manual found at [www.2nusa.com](http://www.2nusa.com).)**
9. Brivo Control Panel Installation Guide
10. Optional 2N Security Relay (Part Number US 01386-001 or world 9159010)

## Glossary

The following is a list of terms used within this document.

<b>ACT</b>	<b>Audio Configuration Tool</b>
<b>DTMF</b>	Dual Tone Multiple Frequency - transmits telephone keypad numbers during a phone call
<b>Guest</b>	A person who selects a user from the intercom touch display to initiate a call to the user
<b>IP</b>	Internet Protocol
<b>MAC Address</b>	<b>Media Access Control - a unique hardware identifier</b>
<b>SIP</b>	Session Initiation Protocol - enables the intercom to initiate telephone calls over an IP network
<b>Switch Code</b>	A 4 digit numeric code entered by the user during an intercom call to trigger a door unlock
<b>User</b>	A person who is displayed on the intercom touch display and receives phone calls from the intercom
<b>User Directory</b>	Users displayed on the 2N IP Verso touch display

## Operational Overview

Brivo Onair enables automatic intercom directory updates to 2N IP Verso intercoms to reliably update users **displayed on the intercom touch display. Onair administrators can configure which Onair users are displayed, their display names, the phone number(s) the intercom calls to contact the selected user, and the switch code entered by the user to unlock the door.**

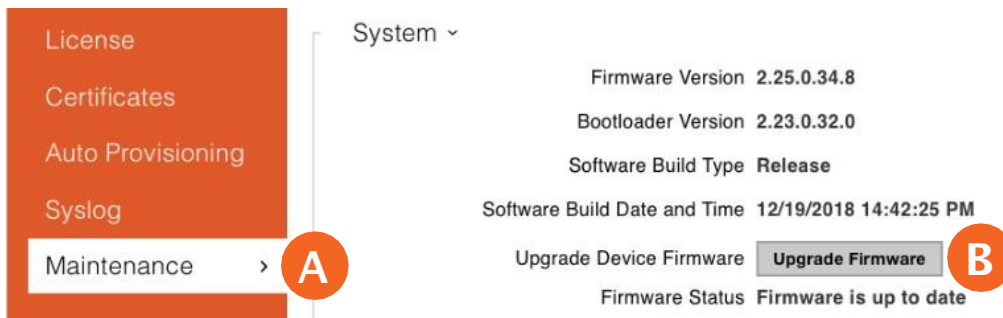
- **Onair administrators configure one or more phone numbers for users displayed on the Verso touch display.**
- Onair administrators add users to an Onair user group that will be displayed on the Verso directory.
- **Onair administrators configure the display name with a flexible combination of first and last name, and custom fields like department name.**
- **Onair creates a user directory file for each intercom.**
- **The 2N IP Verso downloads this configuration file on an hourly, daily, weekly or monthly basis.**
- A guest selects a user from the touch display.
- **The 2N IP Verso places a SIP telephone call to the first number provided by Onair.**
- The user answers the phone.
- The user may enter a 4 digit code on their telephone to unlock the door.
- The 2N IP Verso relay output signals to the Onair panel to unlock the door.

# Installation

## Mandatory Intercom Preparation

To prepare a 2N IP Verso for integration with Brivo Onair, follow these steps:

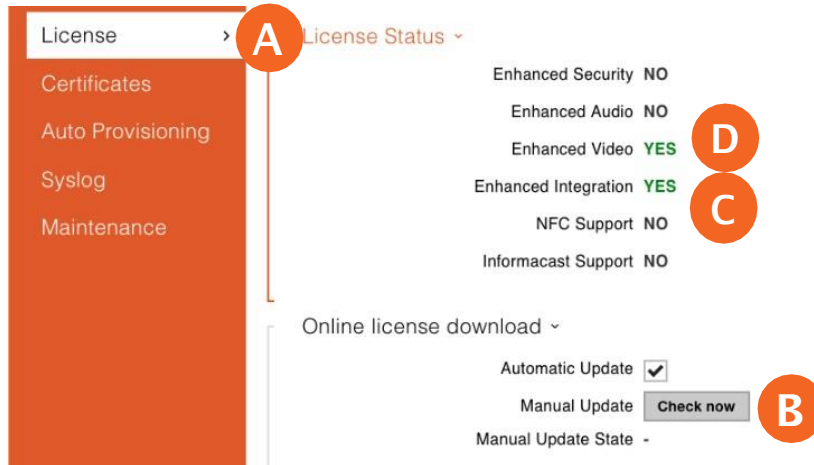
- A. **Install a 2N IP Verso base station with optional touch display part number 01275-001. Optionally, a 2N Security Relay module (part number 01386-001) can be included between the 2N IP Verso and the Brivo control panel.**
- B. **Upgrade the 2N IP Verso Intercom Unit to the latest firmware version. A minimum of version 2.24 is required. From the Dashboard, click on the System tile and then the Maintenance tab (A) to access the Upgrade Firmware button (B) to begin the firmware upgrade process.**



- C. **Configure the intercom for an SIP service and confirm operation by verifying two-way audio with a phone per the 2N IP Verso manual. From the Dashboard, click on the Services tile and then the Phone tab (A) to access the Test Call button (B).**



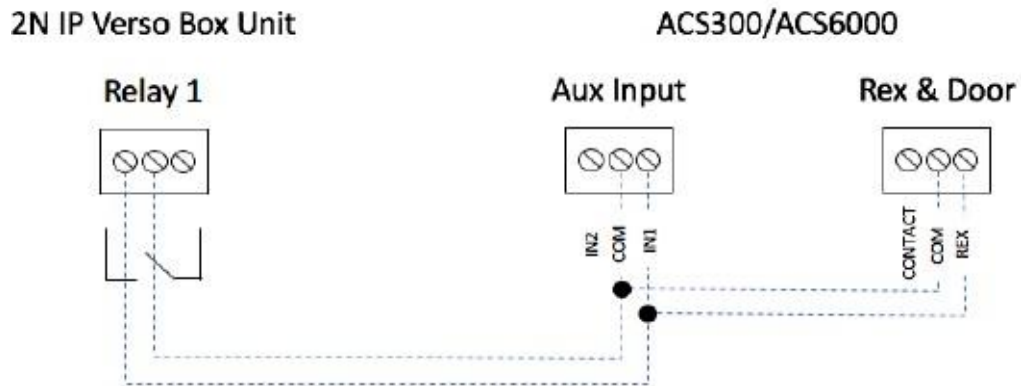
- D. **Purchase and install one 01378 or 01380 enhanced integration license. From the Dashboard, click on the Services tile and then the License tab (A).**
  - a. Press the Check Now button (B) to download and install the most recent license.
  - b. Enhanced integration (C) must be enabled to automatically download intercom directory lists from Brivo Onair.
  - c. Enhanced video (D) integration is required for camera integration with Eagle Eye Networks.



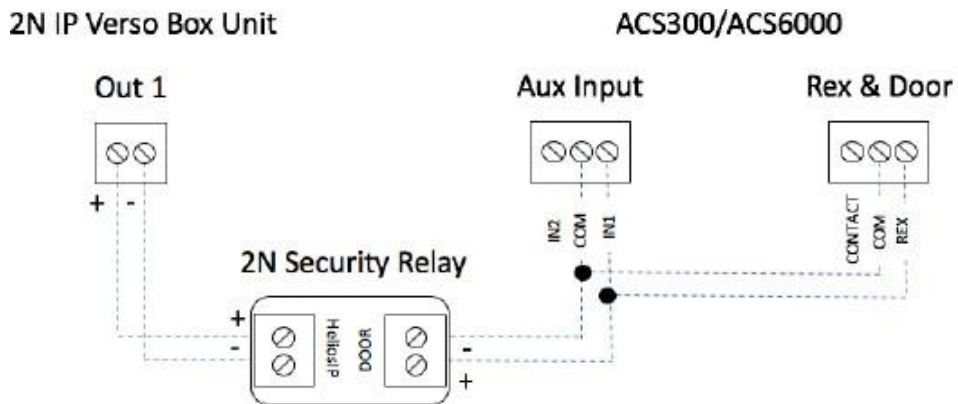
E. Write down the MAC address of each intercom for use in the Brivo Onair integration. The MAC address can usually be found on the back of the 2N IP Verso unit.

### Wiring for Door Release

Standard Door Unlock Interface for the 2N IP Verso unit.



High Security Door Unlock Interface for the 2N IP Verso unit.



## Brivo Onair Lock Configuration

Three door modifications are needed to properly unlock the door. Set the Use Request-to-Exit to Yes (A), set Rex Unlock to Yes (B) and set Use Alarm Shunt to No (C). After making the necessary adjustments, click Save Door (D) to save the changes made.

**EDIT DOOR**

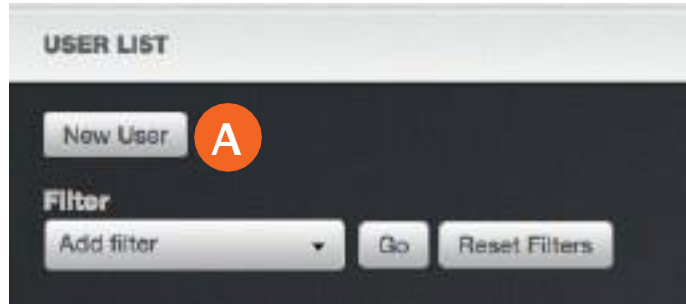
Door Name	Front Lobby	
Reader Interface	Wiegand	
Bluetooth Reader ID		
Door Ajar Enabled	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Door Ajar Threshold	120	seconds (30-600)
Invalid PINs Threshold	3	attempts (1-10)
Invalid PINs Shutdown	120	seconds (10-600)
Pass-through Period	5	seconds (1-600)
Debounce Period	0	seconds (0-255)
Use Lock-on-open	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Lock-on-open Delay	0	milliseconds (0-500)
Use Request-to-Exit	<input checked="" type="radio"/> Yes <input type="radio"/> No <b>A</b>	
Rex Unlock	<input checked="" type="radio"/> Yes <input type="radio"/> No <b>B</b>	
Maximum REX Extension	0	milliseconds (0-60000)
In/Out	<input type="radio"/> In <input type="radio"/> Out <input checked="" type="radio"/> Neither	
Door Unlock Schedule	None	
Two Factor Schedule	None	
Two Factor Interval	3	seconds (3-60)
Card Required Schedule	None	
Use Alarm Shunt	<input type="radio"/> Yes <input checked="" type="radio"/> No <b>C</b>	
Alarm Shunt Duration	1	seconds (1-240)
Control from Browser	<input checked="" type="radio"/> Yes <input type="radio"/> No	
<input type="button" value="Cancel"/> <input type="button" value="Save Door"/> <b>D</b>		

**Note:** It is recommended to rename this input to a name like “Intercom Unlock” which provides a meaningful description in the Brivo Onair event logs.

## User Configuration

**Note:** Before creating users in Brivo Onair to add to the 2N IP Verso Intercom directory, you MUST already have (or need to create) a single group in Brivo Onair that all of these users will belong to (like Front Lobby Intercom Group).

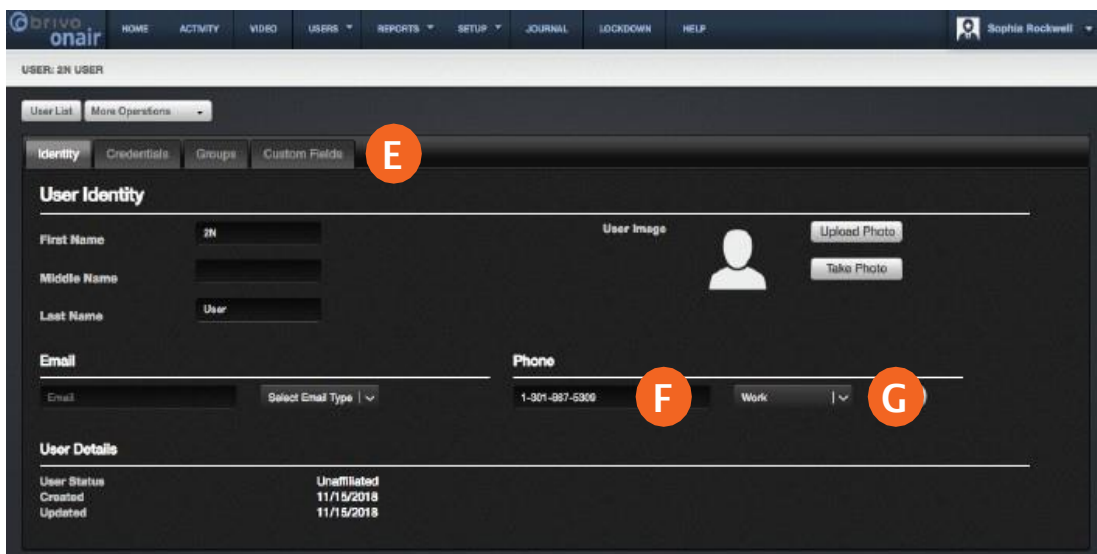
From the Users tab, click on Users and User List page will display. Click the New User button (A). The Identity tab of the New User page displays.



Enter the First Name (B), Middle Name (optional), and Last Name (C) of the New User and then click on the Save Identity button (D).



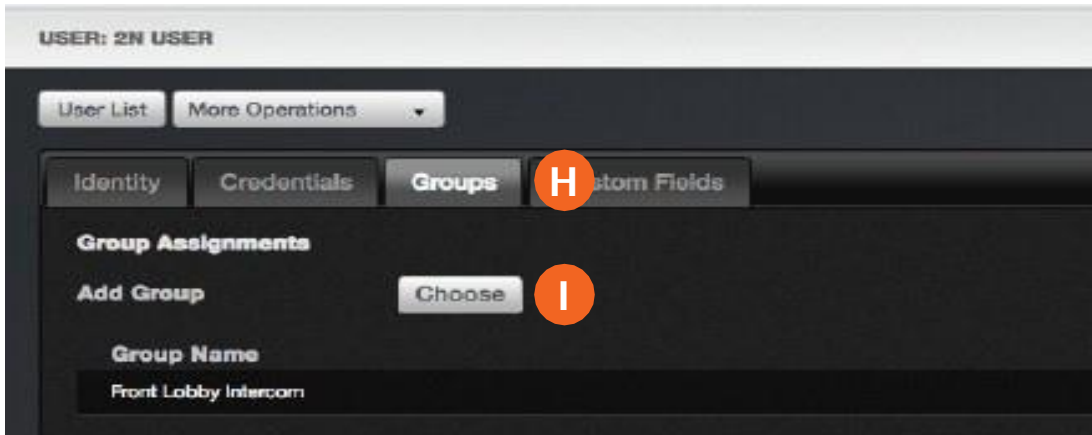
On the User Identity tab, optionally enter one custom field (E) (such as department name) that should appear on the directory user list, enter the phone number in the Phone field (F) and select the phone type (G) from the dropdown menu.



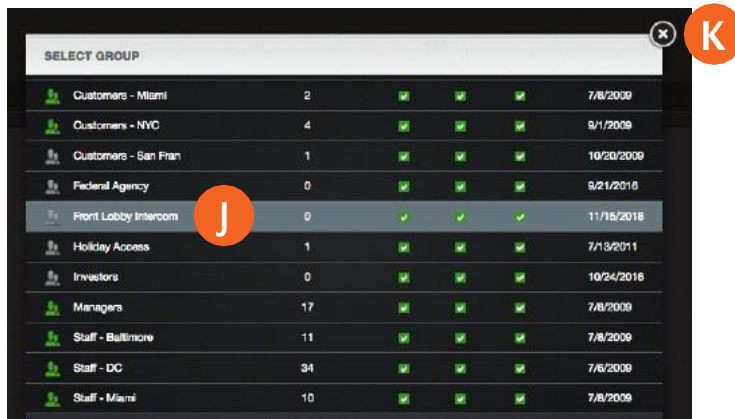
**Note: In order for the 2N IP Verso unit to be able to ingest phone numbers from Brivo Onair, the phone number MUST include a country code. For phone numbers in the United States and Canada, this means including a 1 before the ten digit phone number. DO NOT use dashes when entering phone numbers.**

**Note: If a phone number is not present, the name of the phone directory recipient will not be displayed in the Audio Configuration Tool, and will not appear in the 2N IP Verso Directory.**

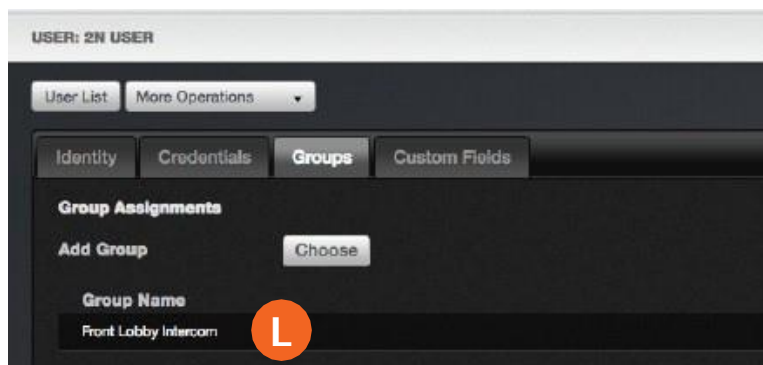
**Once you have complete the steps above, move to the Groups tab (H) of the User page and click the Choose button (I).**



**A pop-up window will appear and you should select the Group (J) you configured at the beginning of this process. Click on the large X in the upper right-hand corner of the pop-up window (K) to dismiss the pop-up window.**



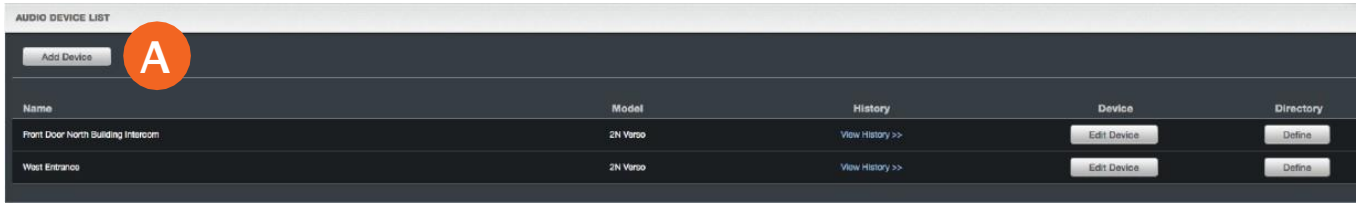
The User page will reappear and the selected group will be displayed in the Group List (L).





## Brivo Onair Audio Configuration

From the Setup tab, click the Sites/Doors tab, and then select Audio Devices and the Audio Device List page displays. You then click on the Add Device (A) button.



1. Enter the Device Name (B).
2. Enter the MAC Address you recorded at the beginning of the installation process (C).
3. Write down the Password (D).

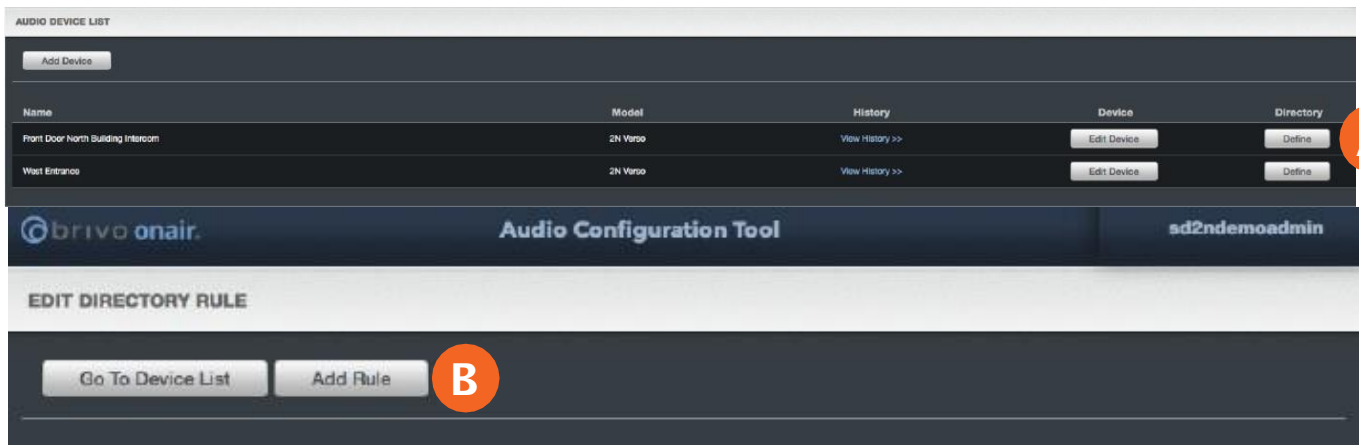
**Note: This password will only be displayed one time until saved on this page. If you do not record this password, you may press the Regenerate (E) button.**

4. Enter a four digit door release code for switch 0 (F) (or switch 1) if the intercom call recipient should enter a four digit code to trigger a relay output.
5. Click Save Device (G).



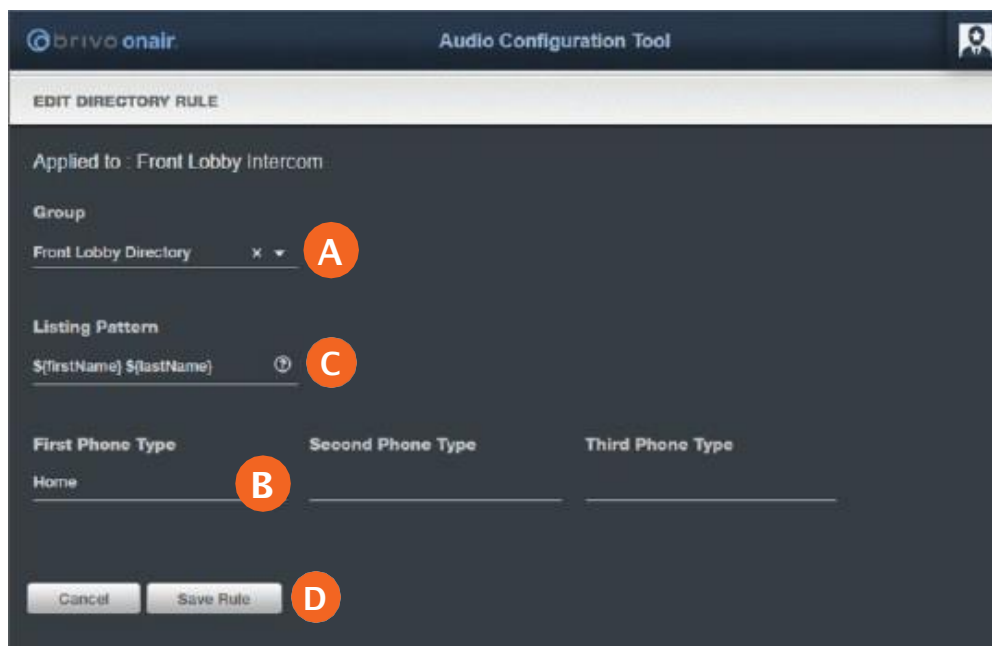
## 2N IP Verso User List Display Configuration

From the Setup tab, click the Sites/Doors tab, and then select Audio Devices and the Audio Device List page displays. You then click on the Define (A) button. The Edit Directory Rule page appears. Click on the Add Rule (B) button.



The Edit Directory Rule page displays.

1. **Select the Group you configured for this process from the dropdown list (A).**
2. **In each phone type pulldown (B), select which Onair phone type should be used. The first phone type is the first one the intercom will dial. Phone numbers 2 and 3 will only be dialed if the previous phone does not answer before the timeout configured in the intercom.**
3. **Configure a listing pattern (C) to specify how the names will be displayed on the list. See below for additional information on Listing Patterns.**
4. Click Save (D).



## Listing Patterns

Standard listing patterns can be used to map Brivo User account fields to the directory rule. These listing patterns must follow a specific format for proper use. Formatting starts with a dollar sign “\$” followed by an opening curly bracket “{”, the field name, and a closing curly bracket “}” as indicated in this example:

**`#{lastName}`**

The following are standard Onair User field names and the equivalent listing pattern for use with phone directory listing rules:

<b>First Name</b>	<b><code>#{firstName}</code></b>
<b>Middle Name</b>	<b><code>#{middleName}</code></b>
<b>Last Name</b>	<b><code>#{lastName}</code></b>

Onair custom fields can also be used by using a “c\_” in front of the custom field name. For example; to use a custom field called “Company Name”, the listing pattern would look like:

**`#{c_CompanyName}`**

### Examples:

To list directory contents by last name, e.g. **Jones, Bob**

The listing pattern rule will appear as: **`#{lastName}, #{firstName}`**

- 1. All characters outside of curly brackets except the dollar sign (\$) are interpreted in the literal sense.**
- 2. All custom field names must be begin with the characters “c\_”, e.g. `#{c_CompanyName}` to represent “Company Name”.**

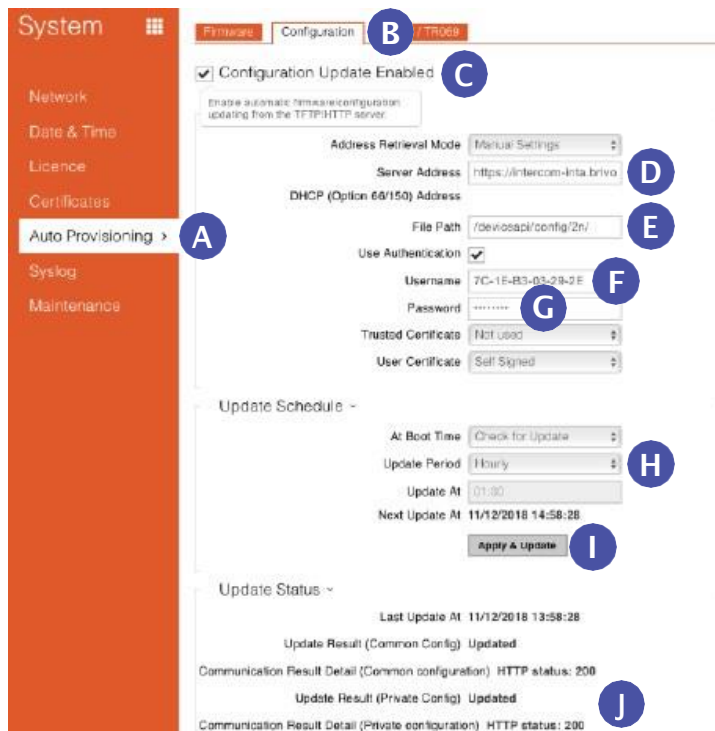
## 2N IP Verso Unit Configuration/Auto Provisioning

From the Dashboard, click on the System tile to access the Auto Provisioning sub-page (A). From there, click on the Configuration tab (B) to access the settings used to connect and authenticate with Brivo Onair.

1. Check the Configuration Update Enabled checkbox (C).
2. Set the Server Address (D) to “https://audio.brivo.com”.
3. Set File Path (E) to “/deviceapi/config/2n”
4. Set the Username (F) to the MAC Address that you wrote down off the back of the 2N IP Verso unit. The MAC address MUST be entered using only capital letters.
5. Enter the password (G) you wrote down when you configured the Audio Device in Brivo Onair.

Note: If you did not write down the password from earlier, you will need to log into Brivo Onair, go back to the Edit Audio Device page and click the Regenerate button. This will generate a new password, which you should then write down to enter on the Configuration page in the 2N IP Verso interface.

6. On the Update Period dropdown menu, select Hourly (H). This is recommended because this parameter will determine the frequency at which the intercom connects to Onair to check for user directory updates.
7. Click Apply & Update (I) to test the intercom’s ability to download an configuration file from Brivo Onair.
8. Update Result (J) (private configuration) will change status to “Updated” and Communications Results Detail (J) (private configuration) will change status to “HTTP 200” after a successful intercom directory download from Brivo Onair. The intercom will reboot 10-15 seconds later and display the new users in the Intercom Directory.



## Configuring Ring Time Limit

**When using multiple phone numbers per user (call rollover), set the ring timeout to avoid voicemail before rolling over to the next call.** Fifteen (15) seconds allows for four rings (four seconds each) less one second to rollover to the next phone number before voicemail answers.

The screenshot shows the Brivo configuration interface. On the left is a purple sidebar with the 'Services' header and a wrench icon. Below it are menu items: 'Phone' (highlighted with a white bar and a right-pointing arrow), 'Streaming', 'Onvif', 'E-mail', and 'Automation'. The main content area has a top navigation bar with tabs: 'SIP 1', 'SIP 2', 'Calls' (selected), 'Audio', 'Video', and '2N Indoor Units'. Below the tabs, there are two sections: 'Incoming Calls' and 'Outgoing Calls'. Under 'Incoming Calls', there are two 'Call Answering Mode' dropdown menus, both set to 'Always Busy', and a 'Pick up in' input field with the value '0' and a '[s]' unit indicator. Under 'Outgoing Calls', there is a 'Ring Time Limit' input field with the value '15' and a '[s]' unit indicator, and a 'Dial Cycles Limit' input field with the value '3'.