

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.

I Introduction

Prerequisites	2
Glossary	2
Operational Overview	3

II Installation

Mandatory Intercom Preparation.....	4
Wiring for Door Release	5

III Onair Configuration

Brivo Onair Lock Configuration.....	6
User Configuration	7
Brivo Onair Audio Configuration.....	9
2N IP Verso User List Display Configuration.....	10
Listing Patterns	11

IV 2N Configuration

2N IP Verso Unit Configuration/Auto Provisioning.....	12
Configuring Ring Time Limit	13

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
2. 2N IP Verso Touch Display (Part Number 9155101)
3. 2N IP Verso enhanced integration license (Part Number 01378-001 or 01380-001)
4. Brivo control panel(s) with valid reader subscription
5. Brivo Onair intercom subscription (B-OA-2N-0)
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.)
9. Brivo Control Panel Installation Guide
10. Optional 2N Security Relay Part Number 01379-001

Glossary

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

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

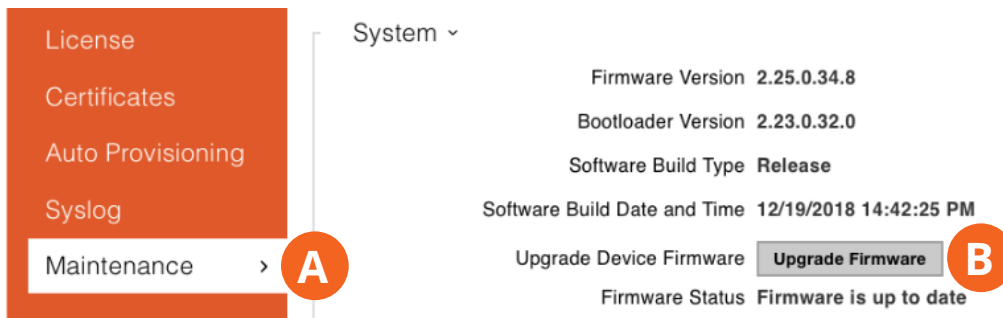
- Onair administrators configure one or more phone numbers for users displayed on the Verso touch display.
- Onair administrators add users to an Onair user group that will be displayed on the Verso directory.
- Onair administrators configure the display name with a flexible combination of first and 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

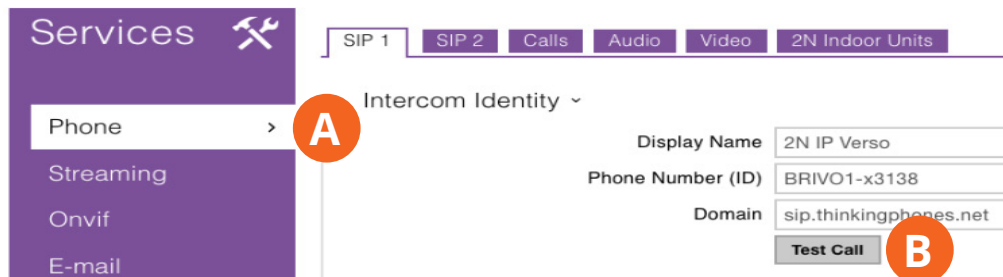
Mandatory Intercom Preparation

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

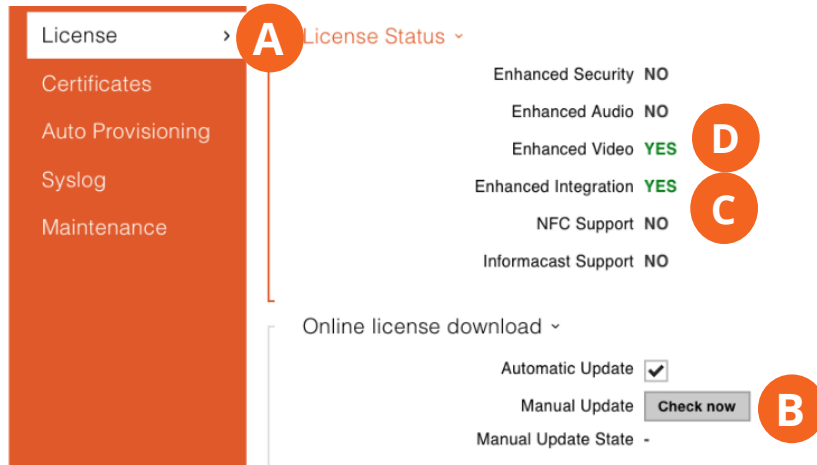
- A. Install a 2N IP Verso base station with optional touch display part number 01275-001. Optionally, a 2N Security Relay module (part number 01386-001) can be included between the 2N IP Verso and the Brivo control panel.
- B. Upgrade the 2N IP Verso Intercom Unit to the latest firmware version. A minimum 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).



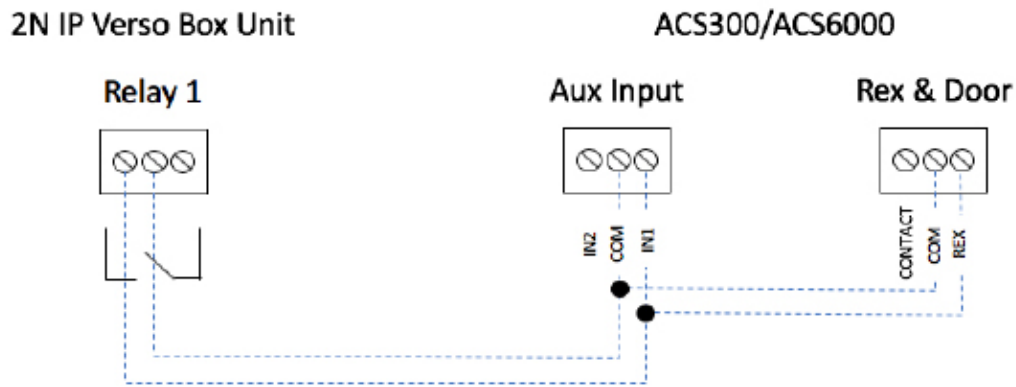
- D. Purchase and install one 01378 or 01380 enhanced integration license. From the Dashboard, click on the Services tile and then the License tab (A).
 - a. Press the Check Now button (B) to download and install the most recent license.
 - b. Enhanced integration (C) must be enabled to automatically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



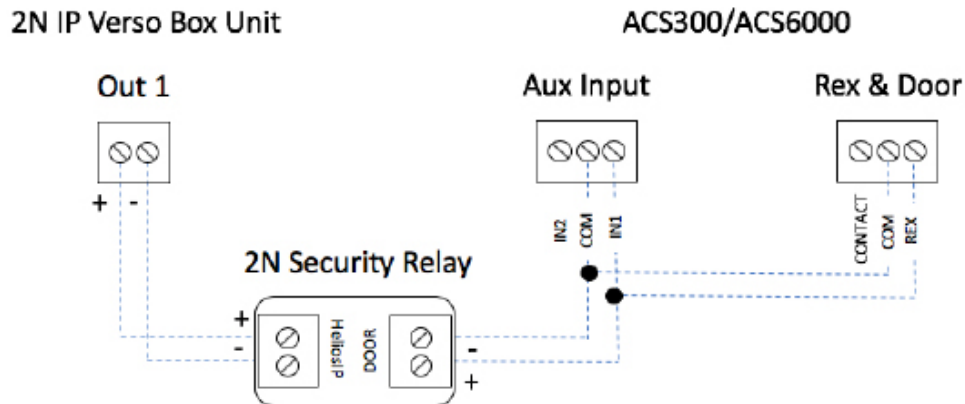
E. Write down the MAC address of each intercom for use in the Brivo Onair integration. The MAC address can usually be found on the back of the 2N IP Verso unit.

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

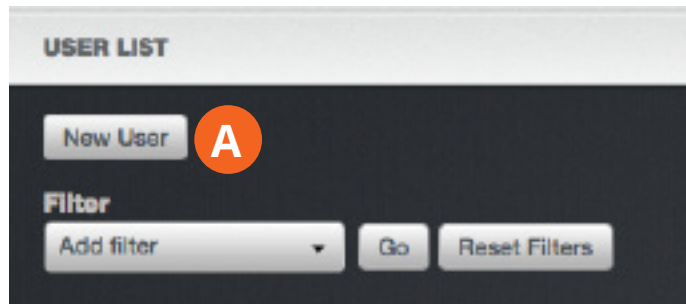
Door Name	<input type="text" value="Front Lobby"/>	
Reader Interface	<input type="text" value="Wiegand"/>	
Bluetooth Reader ID	<input type="text"/>	
Door Ajar Enabled	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Door Ajar Threshold	<input type="text" value="120"/>	seconds (30-600)
Invalid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

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.

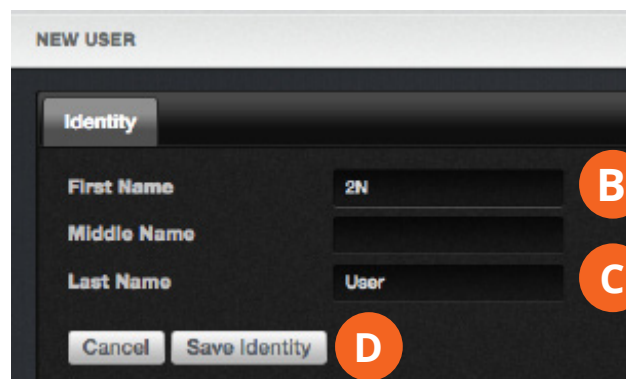
User Configuration

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).

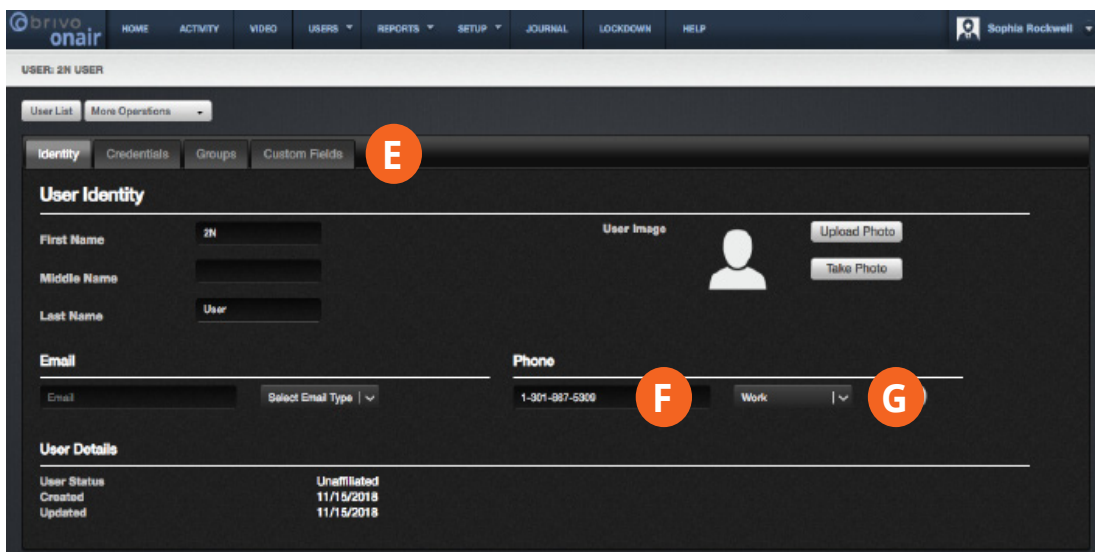
From the Users tab, click on Users and User List page will display. Click the New User button (A). The Identity tab of the New User page displays.



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).



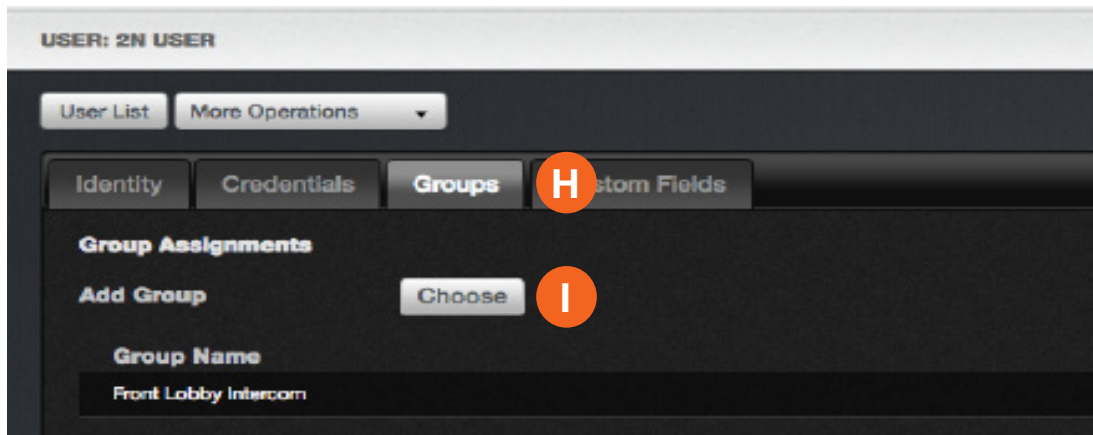
On the User Identity tab, optionally enter one custom field (E) (such as department name) that should appear on the directory user list, enter the phone number in the Phone field (F) and select the phone type (G) from the dropdown menu.



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.

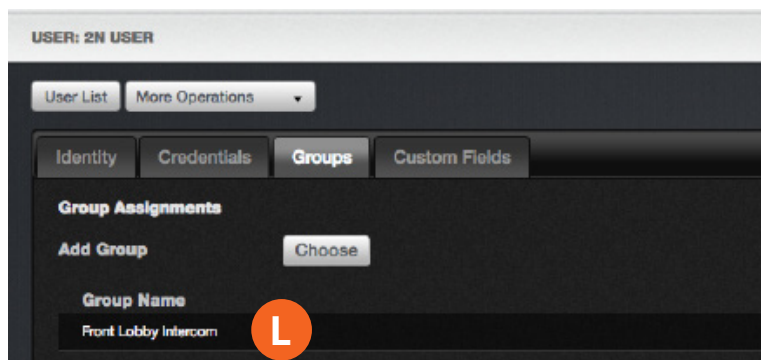
Once you have complete the steps above, move to the Groups tab (H) of the User page and click the Choose button (I).



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.

Name	Model	History	Device	Directory
Front Door North Building Intercom	2N Verso	View History >>	Edit Device	Define
West Entrance	2N Verso	View History >>	Edit Device	Define

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).

ADD AUDIO DEVICE

Device Name
Front Lobby Intercom **B**

Model
2N Verso

Password
lku894aw **D** [Regenerate](#) **E**

MAC Address
7C-1E-03-03-14-00 **C**

Code for Switch 0 **F** Description
1234

Code for Switch 1 Description

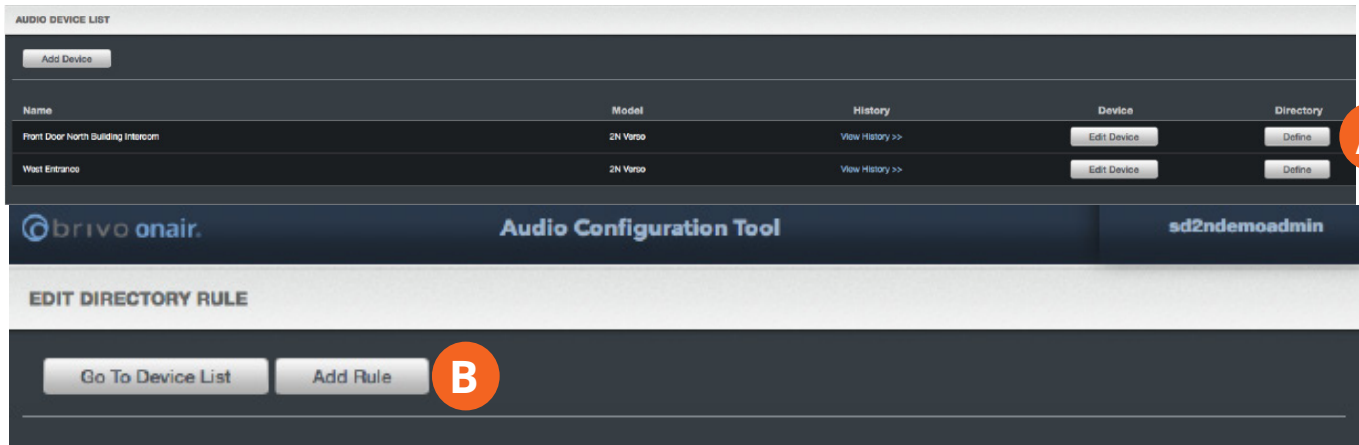
Code for Switch 2 Description

Code for Switch 3 Description

[Cancel](#) [Generate Config File](#) [View History](#) [Save Device](#) **G**

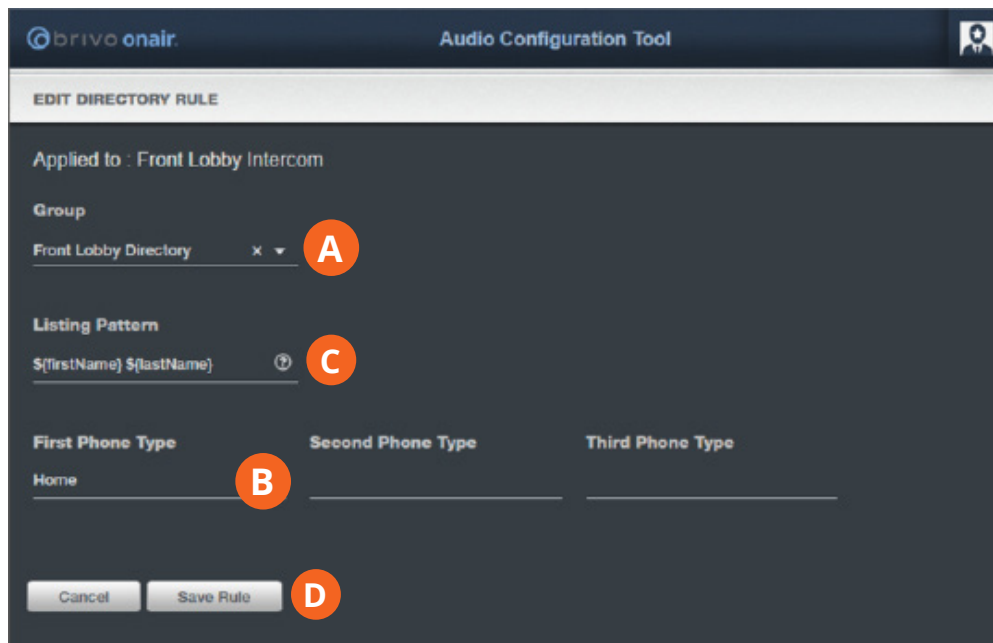
2N IP Verso User List Display Configuration

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:

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

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 configuration page for 'Calls' under the 'Services' menu. The 'Calls' tab is selected, and the configuration is for SIP 1 and SIP 2. The 'Incoming Calls' section includes:

- Call Answering Mode (SIP1): Always Busy
- Call Answering Mode (SIP2): Always Busy
- Pick up in: 0 [s]

The 'Outgoing Calls' section includes:

- Ring Time Limit: 15 [s]
- Dial Cycles Limit: 3

Revision List

Date	Description	Version
1/17/19	Initial Draft	1.0
1/31/19	Updated 2N part numbers	1.1