

# Lumen® Hosted VoIP & SIP Trunking Emergency Notification Management Guide

September 6, 2022

## Table of contents

Advisory Regarding Access to Emergency Response Services.....	3
Administrator portal login .....	3
Emergency Call Notifications (E911) feature eligibility .....	3
Lumen® Hosted VoIP .....	3
Lumen® SIP Trunking.....	3
Notification types and limitations.....	3
Managing global notifications.....	4
Planning ahead .....	4
Entering global notification data .....	5
Editing your global notification data .....	7
Applying notifications .....	8
Apply default notifications at the tenant level.....	8
Apply default notifications at the group level.....	10
Apply unique notifications to a telephone number .....	12
Verify your notifications .....	14
Content of 911 notifications.....	15
Email notification .....	15
SMS text notification .....	15
Testing to confirm notifications are accurate .....	16
Start with 933 .....	16
What to expect .....	16
Documenting 933 call results .....	17
Tips for testing calls to 911 .....	17
Additional 911 products and 911 limitations .....	17

## Advisory Regarding Access to Emergency Response Services

Prior to making any changes to 911 addresses, please read the [Advisory Regarding Access to Emergency Response Services](#).

### Administrator portal login

Your administrator login details should have been emailed to you on your initial order with Lumen. The portal URL is [voip.lumen.com/oneflex/portal/bvoip](http://voip.lumen.com/oneflex/portal/bvoip). Click the log in button. Enter your administrator username and password to sign in and access functionality within the portal.

### Emergency Call Notifications (E911) feature eligibility

For a telephone number (TN) to be eligible for notifications, it must be registered with emergency services. This will occur when the below criteria are met for each product.

#### Lumen® Hosted VoIP

- All orders associated to the TN are closed.
- The TN is the Group TN. All Group TNs are eligible regardless of seat type.
- TN is built to a seat that is eligible to dial 911. The following capabilities are not eligible for 911:

Auto attendant	Instant call group
Contact center	Voice mail only
Group paging	Anywhere
Hunt group	

#### Lumen® SIP Trunking

- All orders associated to the TN are closed.
- The TN is the Group TN. All Group TNs are eligible regardless of seat type.
- The TN has a subscription to the SIP E911 add-on feature.

**Note:** The SIP E911 add-on feature is required for all SIP Trunking TNs using a Business Communicator client or Webex for BroadWorks client.

### Notification types and limitations

Notifications can be sent in the form of an email or a text message (SMS). A maximum of 10 emails and 10 SMS numbers can be applied to any given TN.

The text messaging feature as part of this application only supports texting to 10-digit phone numbers in the US 50 States.

You may also use the email address option where your mobile carrier permits “text to email.”

## Managing global notifications

Before you begin your updates in the portal, you will want to formulate a 911 notification plan for your organization. Having this plan developed and referenceable will help the overall process to go as smoothly as possible.

### Planning ahead

Document who within your organization should receive a notification when 911 is called and the type of notification (email, SMS, both) they should receive.



#### Create email distribution lists for your notifications.

Roles within companies naturally change over time. Updating a distribution list will be easier, more efficient and eliminate the need to update notification information in the portal.

- Create distribution lists for groups, such as all safety and security personnel at a specific location.
- Create distribution lists based on titles or positions instead of entering an individual's email. While a distribution list with one recipient may seem unusual, you will have more flexibility in the long run.
- This is an effective way to apply more than the maximum of 10 emails to any given TN if needed.

As you compile your list, identify if the notification should be a default for the tenant, a default for a specific group, or be applied to specific TNs.

**Tenant level defaults:** These notifications will be applied to every 911 eligible TN in your tenant. For example, the chief safety and security director for your entire company.

**Group level defaults:** These notifications will be applied to every 911 eligible TN in a specific group. They are mutually exclusive from the tenant default notifications. For example, the head of safety and security at a specific location.

**TN level settings:** You can further customize notifications sent to specific 911 eligible TNs. These will be mutually exclusive from the tenant and group defaults. For example, alerting your hazmat team when a 911 call is made from a room that requires a biohazard suit before entering.

Lastly, create a concise description for each entry. This description will be helpful when entered in the portal along with each notification.

For group level notifications, best practice is to start the description with the group name. For TN level notifications, best practice is to start the description with the group name followed by the TN(s) to which the notification will be applied. For tenant level notifications, it is recommended to start the description with the word tenant.

Once completed, your list may look something like this:

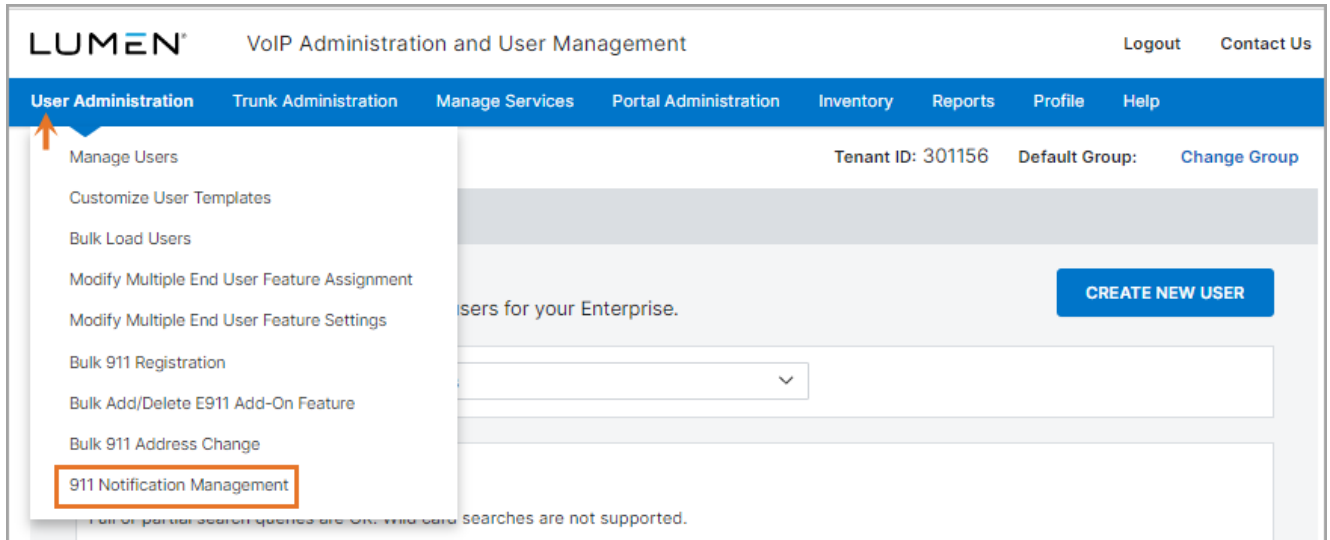
Notification level	Notification Type	Email or SMS#	Description
Tenant default	Email	SecurityHQ@company.com	Tenant   Distro: All security personnel at HQ
Tenant default	SMS	5554371718	Tenant   Chief Safety Officer at HQ - company cell
Group default	Email	DirectorSecurityDenver@company.com	Denver   Director of security
Group default	SMS	5554378200	Denver   Director of security - company cell
TN	SMS	HVACDenver@company.com	Denver 555-437-7040   Distro: All HVAC personnel

## Entering global notification data

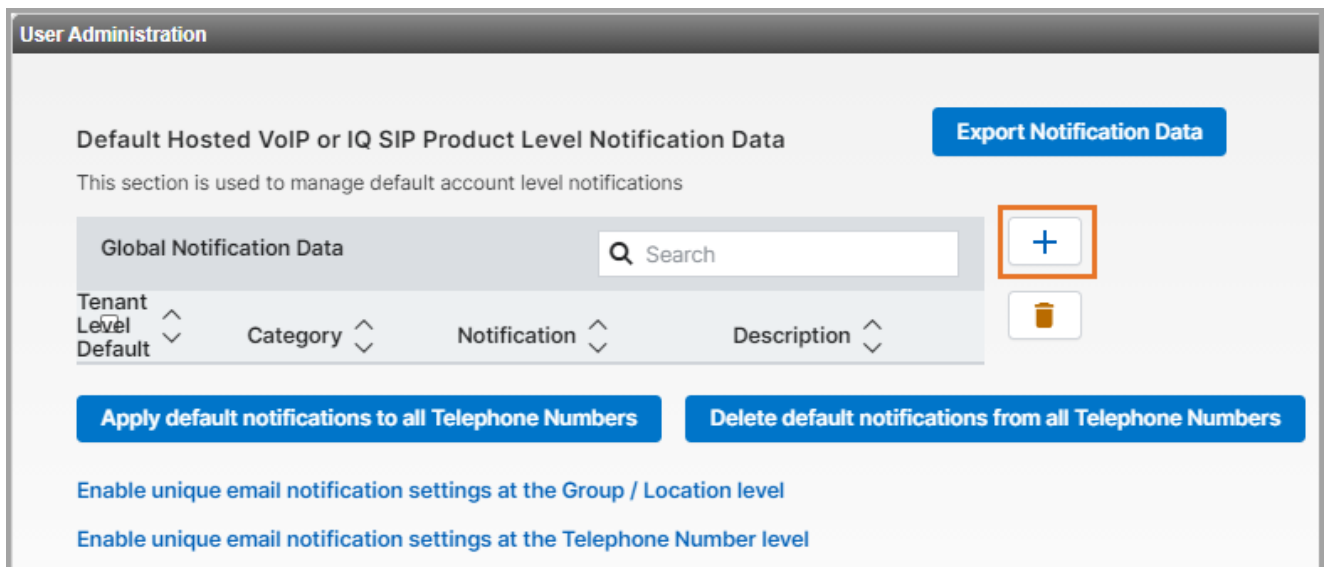
Once you have your notification list prepared, enter all notifications in the **global notification data** list. After they have been entered, you will select notifications from this list to apply at the tenant, group or TN level. It is the step of applying the notifications that will associate them to specific 911 eligible TNS.

To enter global notifications:

1. Hover your mouse over **user administration**.
2. Click **911 notification management**.



3. Click the plus sign icon to add a notification.



## 4. Enter the notification information.

- **Notification type:** Click email or SMS
- **Value:** Enter the email or SMS number
- **Description:** Enter an appropriate description
- **Set as tenant level default:** Click this box if you want to apply this notification to all TNs in the portal.
- Click **save** to save your entry and add another notification. The dialogue box will remain open.
- Click **save and close** to save the entry and close the dialogue box.
- Click **cancel** to close the dialogue box without saving your entry.

**Add Email/SMS** [X]

Notification Type: \*  Email  SMS

Value: \*

(Use semicolon to separate multiple entries.)

SecurityHQ@company.com

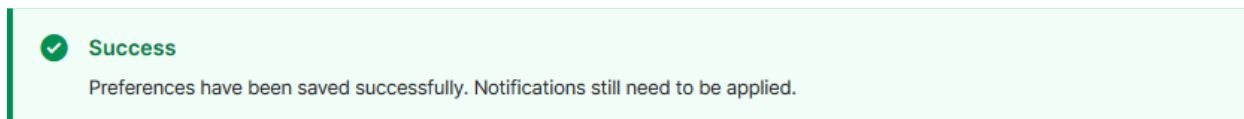
Description:

Tenant | Distro: All security personnel at HQ

Set as Tenant Level Default

Save Save and Close Cancel

When you select **save and close**, you will see a message confirming your notifications were saved but still need to be applied. You will also see the notifications in the global notification data list.




Global Notification Data				Search
Tenant Level Default	Category	Notification	Description	
<input type="checkbox"/> <input checked="" type="checkbox"/>	EMAIL	SecurityHQ@company.com	Tenant   Distro: All security personnel at HQ	


## Editing your global notification data

Once a notification has been saved, the only content that can be edited is the tenant level default setting. To change whether it is a tenant level default, toggle on or off the switch in the **tenant level default** column.

The tenant level default is on when the switch is blue. Toggle it to off by clicking on the blue portion.

Global Notification Data				
<input type="text" value="Search"/>				
<input type="checkbox"/> Tenant Level Default	Category	Notification	Description	
<input type="checkbox"/> 	EMAIL	SecurityHQ@company.com	Tenant   Distro: All security personnel at HQ	

Then tenant level default is off when the switch is gray. Toggle it to on by clicking the gray portion.

Global Notification Data				
<input type="text" value="Search"/>				
<input type="checkbox"/> Tenant Level Default	Category	Notification	Description	
<input type="checkbox"/> 	EMAIL	SecurityHQ@company.com	Tenant   Distro: All security personnel at HQ	

If you notice a typo in the email address, SMS number, or description after you have saved the notification, you will need to delete and re-create the notification. It is important to confirm notifications appear as you like **before** applying them.

To delete a notification:

1. Click the box to the left of the entry you want to delete.
2. Click the trash can icon to delete the entry.

Global Notification Data				
<input type="text" value="Search"/>				
<input type="checkbox"/> Tenant Level Default	Category	Notification	Description	
<input checked="" type="checkbox"/>	EMAIL	SfaetyandSecurityHQ@YourCompany.com	SMS TN for Devon	

3. A dialogue box will pop up asking you to confirm you want to delete this selection. Click on delete to continue.

**Confirm to delete** ✕

Are you sure want to delete the selected notifications?

**Info**

There will be no changes to the applied notifications and the notifications will be removed from the Global Notification Data table only!

Refer to the **entering global notification data** section (above) to re-add an entry without typos.

## Applying notifications

Once your global notification data has been entered, you will need to apply the notifications for them to take effect. You will have the option to apply notifications at the tenant, group and TN levels.

When notifications are applied, it will nullify and replace any existing notifications for the TN(s). As such, start by applying default notifications at the tenant level. Next, apply any group default notifications. During this step, you will apply notifications to both the group and tenant defaults. Lastly, apply unique notifications at the TN level. You will apply notifications to the TN, and both tenant and group level defaults during this step.



It is imperative that you apply notifications starting at the tenant level, followed by the group level, and lastly the TN level. If you do not follow this order, you jeopardize deleting notifications applied at the group and TN levels.

Once you have applied default notifications for the tenant and group, those defaults will automatically be applied to 911 eligible TNs added to your account in the future.

## Apply default notifications at the tenant level

When you entered your global notifications, you identified which will be tenant level defaults. For notifications to take effect, you now need to apply them.

1. Scroll to the bottom and click **apply default notifications to all telephone numbers**.
  - Only notifications with the tenant level default turned on (blue) will be applied to all TNs.

**User Administration**

**911 Notification Management**

**Default Hosted VoIP or IQ SIP Product Level Notification Data** Export Notification Data

This section is used to manage default account level notifications

**Enable Tenant Defaults only.** Functionality will be disabled at the Group and Telephone Number levels. This setting is managed exclusively by the portal Administrator.

**Global Notification Data** Q Search +

<input type="checkbox"/>	Tenant Level Default	Category	Notification	Description
<input type="checkbox"/>	<input checked="" type="checkbox"/>	EMAIL	SecurityHQ@company.com	Tenant   Distro: All security personnel at HQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SMS	5554371718	Tenant   Chief Security Officer at HQ - company cell
<input type="checkbox"/>	<input type="checkbox"/>	SMS	5554378200	Denver   Director of Security - company cell
<input type="checkbox"/>	<input type="checkbox"/>	EMAIL	DirectorSecurityDenver@company.com	Denver   Director of Security
<input type="checkbox"/>	<input type="checkbox"/>	EMAIL	HVAC@company.com	Denver 555-437-7040   Distro: All HVAC personnel

5 results 1 of 1

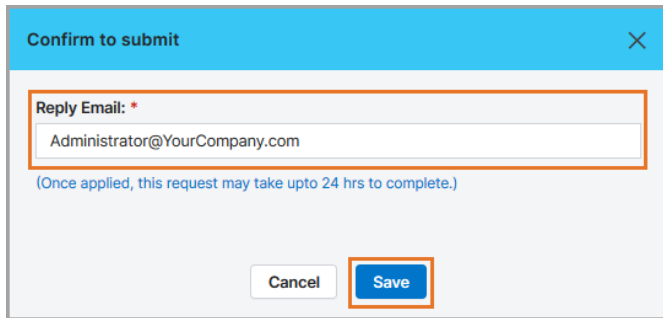
Apply default notifications to all Telephone Numbers
Delete default notifications from all Telephone Numbers

Enable unique email notification settings at the Group / Location level

Enable unique email notification settings at the Telephone Number level




2. Enter your email address in the pop-up box. Results may take up to 24 hours.

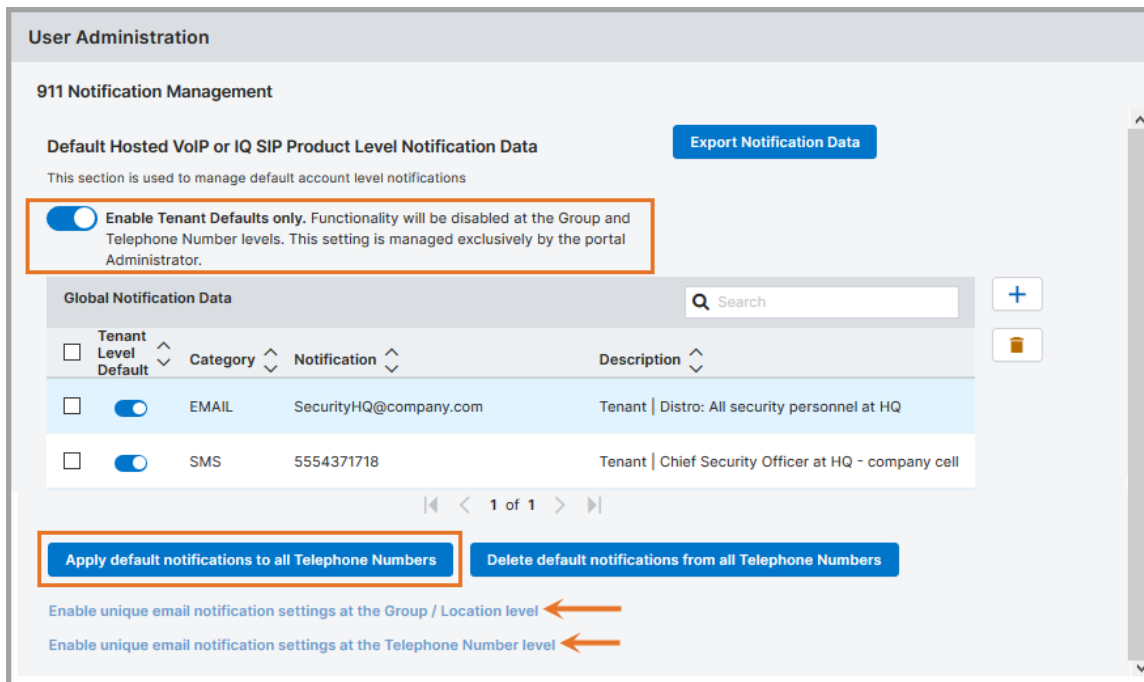


A dialog box titled "Confirm to submit" with a close button (X) in the top right corner. It contains a text input field labeled "Reply Email: \*" with the value "Administrator@YourCompany.com". Below the input field is a note: "(Once applied, this request may take upto 24 hrs to complete.)". At the bottom are two buttons: "Cancel" and "Save".

3. When you receive the automated email, open the attached results to confirm all updates have been successful. You can then proceed to apply additional notifications.

 Notifications cannot be applied to a TN while there are pending requests for that TN. If you try to apply notifications before receipt of this email, you will receive an error message.

**Note:** You can **enable tenant defaults only** by toggling the switch to on (blue). This will allow you to apply default notifications at the tenant level only. When enabled, the option to enable unique notifications at the group and telephone levels will become inactive.



The screenshot shows the "User Administration" interface for "911 Notification Management". It features a section for "Default Hosted VoIP or IQ SIP Product Level Notification Data" with an "Export Notification Data" button. A toggle switch for "Enable Tenant Defaults only" is turned on. Below this is a table of "Global Notification Data" with columns for "Tenant Level Default", "Category", "Notification", and "Description". Two rows are visible: one for EMAIL (SecurityHQ@company.com) and one for SMS (5554371718). At the bottom, there are two buttons: "Apply default notifications to all Telephone Numbers" and "Delete default notifications from all Telephone Numbers". Two red arrows point to the text "Enable unique email notification settings at the Group / Location level" and "Enable unique email notification settings at the Telephone Number level", which are shown as inactive.

## Apply default notifications at the group level

Notifications that are unique to a specific group can be set as the default notifications for that group. Group default notifications are applied to all 911 eligible TNs in that group.

1. Scroll to the bottom and click **enable unique email notification settings at the group/location level**.

**User Administration**

**911 Notification Management**

**Default Hosted VoIP or IQ SIP Product Level Notification Data** [Export Notification Data](#)

This section is used to manage default account level notifications

**Enable Tenant Defaults only.** Functionality will be disabled at the Group and Telephone Number levels. This setting is managed exclusively by the portal Administrator.

**Global Notification Data**  [+](#) [-](#)

<input type="checkbox"/> Tenant Level Default	Category	Notification	Description
<input type="checkbox"/> <input checked="" type="checkbox"/>	EMAIL	SecurityHQ@company.com	Tenant   Distro: All security personnel at HQ
<input type="checkbox"/> <input checked="" type="checkbox"/>	SMS	5554371718	Tenant   Chief Security Officer at HQ - company cell
<input type="checkbox"/> <input type="checkbox"/>	SMS	5554378200	Denver   Director of Security - company cell
<input type="checkbox"/> <input type="checkbox"/>	EMAIL	DirectorSecurityDenver@company.com	Denver   Director of Security
<input type="checkbox"/> <input type="checkbox"/>	EMAIL	HVAC@company.com	Denver 555-437-7040   Distro: All HVAC personnel

5 results << < 1 of 1 > >>

[Apply default notifications to all Telephone Numbers](#) [Delete default notifications from all Telephone Numbers](#)

[Enable unique email notification settings at the Group / Location level](#)

[Enable unique email notification settings at the Telephone Number level](#)

2. Select the appropriate group from the **select group** drop-down menu and click **get**.


**User Administration**

**Group / Location Level Notification Data**

This section is used to manage group / location level notifications

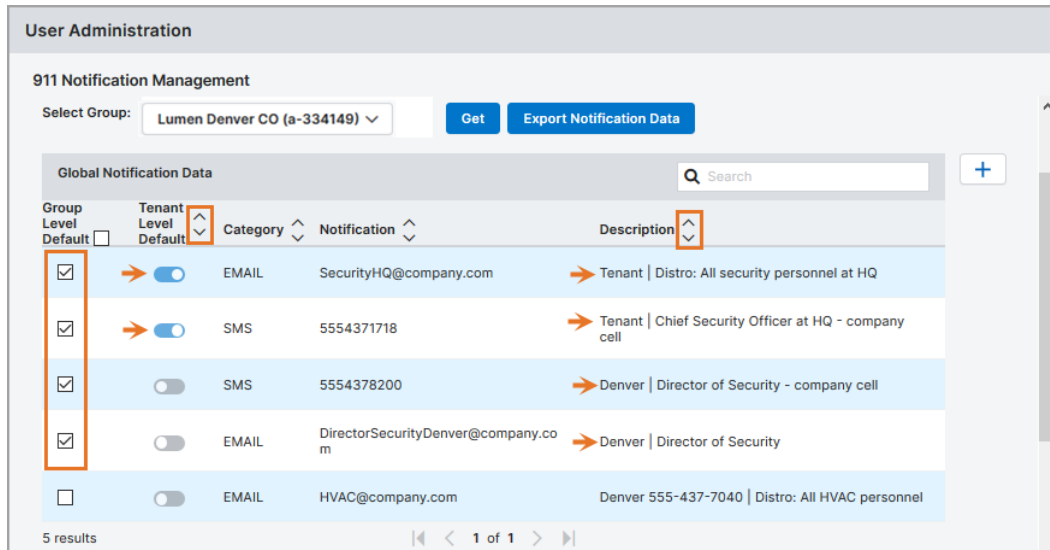
Select Group:  [Get](#) [Export Notification Data](#)

- In the group default column, click the box next to all the **tenant default** notifications.



When notifications are applied, it will nullify and replace any existing notifications. To retain the tenant level defaults you applied in the previous step, you must re-select them during this step.

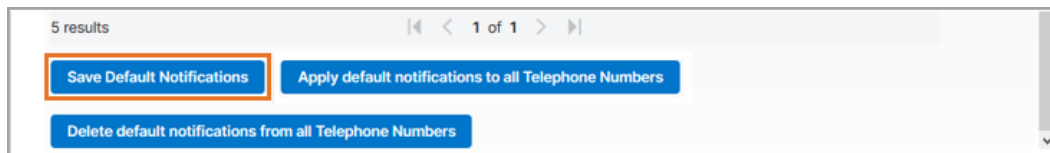
- In the group default column, click the box next to those you would like to assign as a **group default** for this group
  - If your descriptions include the group name or identifies which are tenant defaults, sorting by description will help you quickly locate the notifications you wish to apply.
  - You can also sort the tenant level default column to easily identify those.



The screenshot shows the '911 Notification Management' interface for the 'Lumen Denver CO (a-334149)' group. It features a table with columns for 'Group Level Default', 'Tenant Level Default', 'Category', 'Notification', and 'Description'. The first four rows have their 'Group Level Default' checkboxes checked, and their 'Tenant Level Default' toggle switches are turned on. The fifth row has its 'Group Level Default' checkbox unchecked and its 'Tenant Level Default' toggle switch turned off.

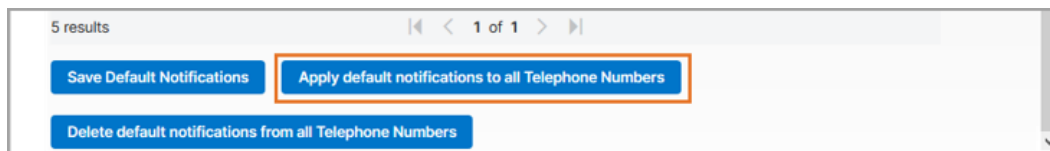
Group Level Default	Tenant Level Default	Category	Notification	Description
<input checked="" type="checkbox"/>	ON	EMAIL	SecurityHQ@company.com	Tenant   Distro: All security personnel at HQ
<input checked="" type="checkbox"/>	ON	SMS	5554371718	Tenant   Chief Security Officer at HQ - company cell
<input checked="" type="checkbox"/>	OFF	SMS	5554378200	Denver   Director of Security - company cell
<input checked="" type="checkbox"/>	OFF	EMAIL	DirectorSecurityDenver@company.com	Denver   Director of Security
<input type="checkbox"/>	OFF	EMAIL	HVAC@company.com	Denver 555-437-7040   Distro: All HVAC personnel

- Click **save default notifications**.




The screenshot shows the bottom of the notification management interface with three buttons: 'Save Default Notifications', 'Apply default notifications to all Telephone Numbers', and 'Delete default notifications from all Telephone Numbers'. The 'Save Default Notifications' button is highlighted with an orange box.

- Click **apply default notifications to all telephone numbers**.



The screenshot shows the same interface as the previous step, but now the 'Apply default notifications to all Telephone Numbers' button is highlighted with an orange box.

- Enter your email address in the pop-up box. Results may take up to 24 hours.
- When you receive the automated email, open the attached results to confirm all updates have been successful. You can then proceed to apply additional notifications to these TNs at the telephone number level.



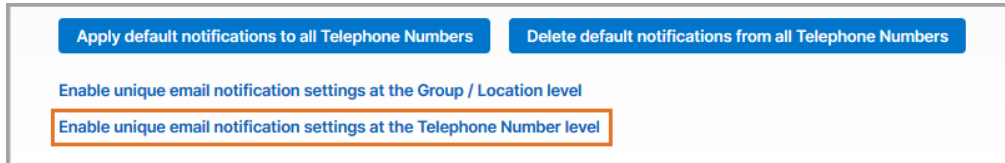
Notifications cannot be applied to a TN while there are pending requests for that TN. If you try to apply notifications to a TN in this group before receipt of this email, you will receive an error message.

## Apply unique notifications to a telephone number

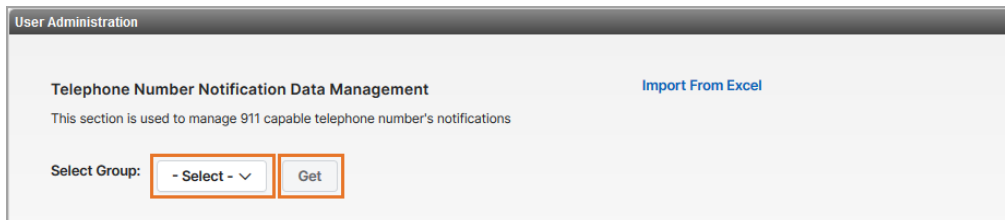
Step 6 in this section requires you know which notifications are group defaults. While tenant defaults are easy to identify (**tenant level default** column), group defaults are not similarly identified.

If your descriptions make it clear which notifications are group defaults and to which TN(s) notifications should be applied, you can sort by description when you get to step 6. Otherwise, be sure you have a list of group default notifications that you can reference before beginning this section.

1. Scroll to the bottom and click **enable unique email notification settings at the group/location level**.



2. Select the appropriate group from the **select group** drop-down menu and click **get**.



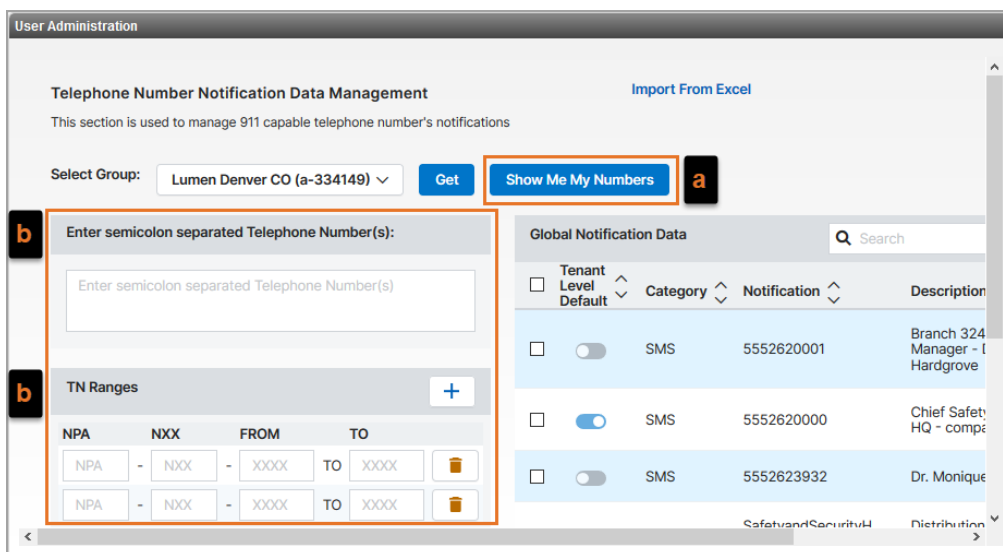
3. Select the TN(s) to which you would like to apply unique notifications. There are three ways to select TNs.

a) Select from a list of TNs.


Click **show me my numbers** to see all 911 eligible TNs in this group. Select from that list.

b) Manually enter TNs.

Enter non-consecutive telephone numbers, separated by semicolons, in the top box. Enter consecutive ranges in the TN Ranges section. Non-consecutive and consecutive can be populated simultaneously.



- Use the horizontal and vertical scroll bars to center the global notification data.
- In the first column, click the box next to all the tenant default notifications.
- In the first column, click the box next to all the **group default**. (If necessary, reference list for group defaults recommended at the beginning of this section.)

 When notifications are applied, it will nullify and replace any existing notifications. To retain the tenant *and* group level defaults you applied in the previous steps, you must re-select those during this step.

- In the first column, click the box next to all the unique notifications you would like to assign to the TN(s).

**User Administration**

**911 Notification Management**

ated Telephone Number(s):

Global Notification Data

Tenant Level Default	Category	Notification	Description
<input checked="" type="checkbox"/>	EMAIL	SecurityHQ@company.com	Tenant   Distro: All security personnel at HQ
<input checked="" type="checkbox"/>	SMS	5554371718	Tenant   Chief Security Officer at HQ - company cell
<input checked="" type="checkbox"/>	SMS	5554378200	Denver   Director of Security - company cell
<input checked="" type="checkbox"/>	EMAIL	DirectorSecurityDenver@company.com	Denver   Director of Security
<input checked="" type="checkbox"/>	EMAIL	HVAC@company.com	Denver 555-437-7040   Distro: All HVAC personnel

5 results

Apply notifications to the Selected Telephone Numbers

Delete default notifications from Selected Telephone Numbers

- Use the horizontal and vertical scroll bars to locate and click **apply default notifications to all telephone numbers**.

**User Administration**

**911 Notification Management**

TN Ranges

NPA - NXX - FROM TO

Apply notifications to the Selected Telephone Numbers

Delete default notifications from Selected Telephone Numbers

- Enter your email address in the pop-up box. Results may take up to 24 hours.

- When you receive the automated email, open the attached results to confirm all updates have been successful.

## Verify your notifications

Once you have completed applying all notifications, export your notifications and verify your entries. You will need to return to the tenant level to locate the export option.

- Click **enable unique email notification settings at the tenant**.

- Click the **export notification data** button.

- Review export for accuracy.

## Content of 911 notifications

### Email notification

Email notifications will come from [support@emergencycallnotification@lumen.com](mailto:support@emergencycallnotification@lumen.com) and include the following information:

- Company name
- TN that called 911
- Address
- Time of call
- A hotlink to view this location in a map



To prevent 911 email notifications from being delivered to a spam or junk folder, add [support@emergencycallnotification@lumen.com](mailto:support@emergencycallnotification@lumen.com) to your email address book.

### SMS text notification

SMS texts will come from 1.833.864.0718 or 1.833.864.0719 and include the following information:

- Company name
- TN that called 911
- Address



To quickly recognize emergency notification texts, add these TNs to the contact list in your mobile phone:

1.833.864.0718

1.833.864.0719

**Note:** These are not dialable numbers.

## Testing to confirm notifications are accurate

As part of your Lumen Hosted VoIP service, you have access to the 933 service. This is a non-mandated service that allows you to dial 933 to confirm the telephone number and address show accurately with emergency services without dialing 911. The 933 service will not send notifications, though, and 911 will need to be called for that purpose.

### Start with 933

If you plan to test your notifications, start by calling 933 to confirm the accuracy of your telephone number and address. The benefits of starting with the 933 service are:

- You will be keeping 911 lines available for emergencies.
- You can proactively confirm the correct telephone number and address will display on future 911 calls.
- You can avoid potential charges for misrouted 911 calls.
  - If your phone number/address are not properly registered with emergency service, a 911 call may be misrouted to the ECRC (Emergency Call Relay Center). For each 911 call sent to the ECRC, you will incur a \$75 charge.
  - You can avoid these potential charges by using the 933 service to confirm your information.
- There is no concern that emergency services will be dispatched to your location when calling 933.
- The 933 service is offered at no additional cost.

**Note:** The 933 service is included with your service as a courtesy of Lumen. There may be programming considerations for it to work properly.



**Important:** There are a limited quantity of lines available for the 933 service. It is possible for you to receive a **busy signal**, especially if you are testing during peak hours (Mon–Fri, 8 a.m. to 5 p.m. Eastern Time).

If you receive a busy signal, please hang up and try again. Consider testing outside of the peak hours listed above.

### What to expect

When you call 933, an IVR (interactive voice recording) will playback an automated message. For example:

“911 test system.

Your telephone number is **555 555 1234**.

Your address is **1 Quincy Lane, Suite 200, Crystal Lake, Utah, 60014**.”

The call will automatically disconnect at this point.

You will want to confirm the telephone number and address provided are correct and match what is in the portal.

Contact repair if:

- The IVR says “subscriber not found.”
- The phone number and/or address do not match what is in the portal, and therefore are not correct.



## Documenting 933 call results

When making calls to 933, there are specific details you should document. In the event a 933 call results in inaccuracies, this is the information the Lumen repair team will need to troubleshoot. Repair can be reached at 877.453.8353, option 1, option 2, option 2, option 1.

### Template to document 933 test call results

- Calling date
- Calling time
- Time zone
- Number that called 933
- Number that should display to 933
- Address
- The number provided by the IVR
- Is this the correct number (yes/no)
- The address provided by the IVR
- Is this the correct address (yes/no)

## Tips for testing calls to 911

Once you have confirmed your telephone number and address are correct using the 933 service, you can proceed to making a test call to 911 to confirm the accuracy of your notifications. Test calls do not need to be scheduled. The best time for test calls for any PSAP (public-safety answering point) are between 9 a.m. and 3 p.m. local time. Protocol for these types of calls is relatively simple:

1. Immediately identify that this is not an emergency and provide your name and company.
2. Ask if they have a few seconds to verify what call information they are seeing at the PSAP. If it is not a good time, they will let you know.

Since you confirmed your information already using 933, there should not be a discrepancy. Proceed confirming notifications were delivered as you have programmed them.

## Additional 911 products and 911 limitations

This guide provides information on specific aspects of how E911 works on the product to which you've subscribed. For customers using products such as CER (Cisco emergency responder) to manage calls to emergency services, additional considerations need to be made to successfully integrate the two systems. Limitations to 911 are included in your contract with Lumen. Access the [911 Emergency Service Advisory for Lumen, LLC](#) guide for limitation specific information.