This project is supported by: The NATO Science for Peace and Security Programme

Homeland Security
Science and Technology

NEXT GENERATION INCIDENT COMMAND SYSTEM
NICS
USER GUIDE
ND-T002

NICS
NATO·SPS

ND-T002 05-2020

Contents

Introduction to NICS 5
System Access 6
User Interface 7
Navigating the Map 8
Adding Markers or Symbols 11
Marker Details 11
Adding Label 12
Drawing Shapes 12
Freehand & Update 13
Draw Line 15
Measure 16
Application Folder 16
Census 17
Weather 17
Share Workspace 17
Map Sync 18
Drawing a Search Cone 18
Deleting Objects 19
Creating an Incident 21
Creating a Room 22
Securing a Room 22
Managing Rooms 23
User/Organization Info 23
Organizations/System Users 25
Maps 27
Data Layers 27
Import Data Layers 28
Upload Other Data Layers 29
Upload Shape Files 29
Upload Images as Data Layers 30
Upload Mobile Tracking Info 30
Tracking Teams 31
Upload GeoTIFF 31
Upload GeoRSS Feeds 31
Tracking Dropdown Menu 32
Right Click Options on Data Tree 32

Tools Dropdown Menu 35
Print the Map 35
Incident Rooms 35
Room Management 35
Search Incidents 35
Email Feedback Report 36
Administration 36
Enable / Disable Users 37
Archiving an Incident 38
Incident Type 39
Organization Capabilities 39
Reports 41
EOD Report 42
Room Layers 43
Legend 43
Documents 43
Active Users 44
Multi Incident View 45
Streams 45
Alerts 46
Whiteboard Chat 48
Timeline 48
Introduction 50
System requirements 50
Getting Started 51
Overview Page, User Interface 52
Map View 52
Map Type 52
Tracking Layers 52
Room Layers 53
Incident Rooms 53
Additional Dropdown Options 53
Drawing on the Map 56
Placing Symbols on the map 56
Drawing a Line on the Map 57
Draw a Square on the Map 57
Draw a Polygon on the Map 58

Draw a Circle on the Map 59
Free Drawing on the Map 59
Drawing Fire lines on the Map 60
Adding Labels to the Map 61
Chat Messaging 61
Explosive Ordinance Disposal Report (EOD) 61
General Messages 63
AOI/ Hazard Detection Service 64
Settings/Logout/NICS Help 64
Organization Selector 64
Broadcast Alerts 64
Assigning Organizations to Incident Types: 66
Incident Escalation: 67
AOI/Hazard: 67
Custom Reports with Incident Type Association: 69
Export KMZ: 69
NICS 7.0.7 70
Updated Administration Panel 70
NICS Updated User Interface for Administrational Users 71
Organizations 0
Users 1
Symbology 2
Incident Type 3
Regions 4
Translation 5

This material is based upon work supported by the Department of Homeland Security under Air Force Contract No. FA8702-15-D-0001. Any opinions, findings, conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Department of Homeland Security.

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Introduction to NICS

Next Generation Incident Command System (NICS) is a web-based command and control environment for small to large to extreme scale incidents that facilitates collaboration across federal, tribal, military, state, county, and local/municipal levels of preparedness, planning, response, and recovery for all-risk/all-hazard events. NICS facilitates situational awareness for widely dispersed responders.

NICS provides collaboration and communication capabilities across all echelons of responders; it enhances the quality and accessibility of sensor data; and it integrates location data for resources, vehicles, and personnel. During an incident, NICS provides an information backbone that manages and distributes data, including real-time vehicle location feeds, weather, critical infrastructure, and terrain information.

Incident data is displayed by using a web-based, open standards platform that allows users with the proper permissions to log into a map-based environment accessible via an ordinary web browser and Internet connection. NICS offers graphical tools, including geo-referenced virtual whiteboards, for dynamic interagency collaboration that facilitates a coordinated response.

Using these tools, responders are able to quickly form teams, send messages to one another, and remotely share maps and drawings that enhance the management of the incident.

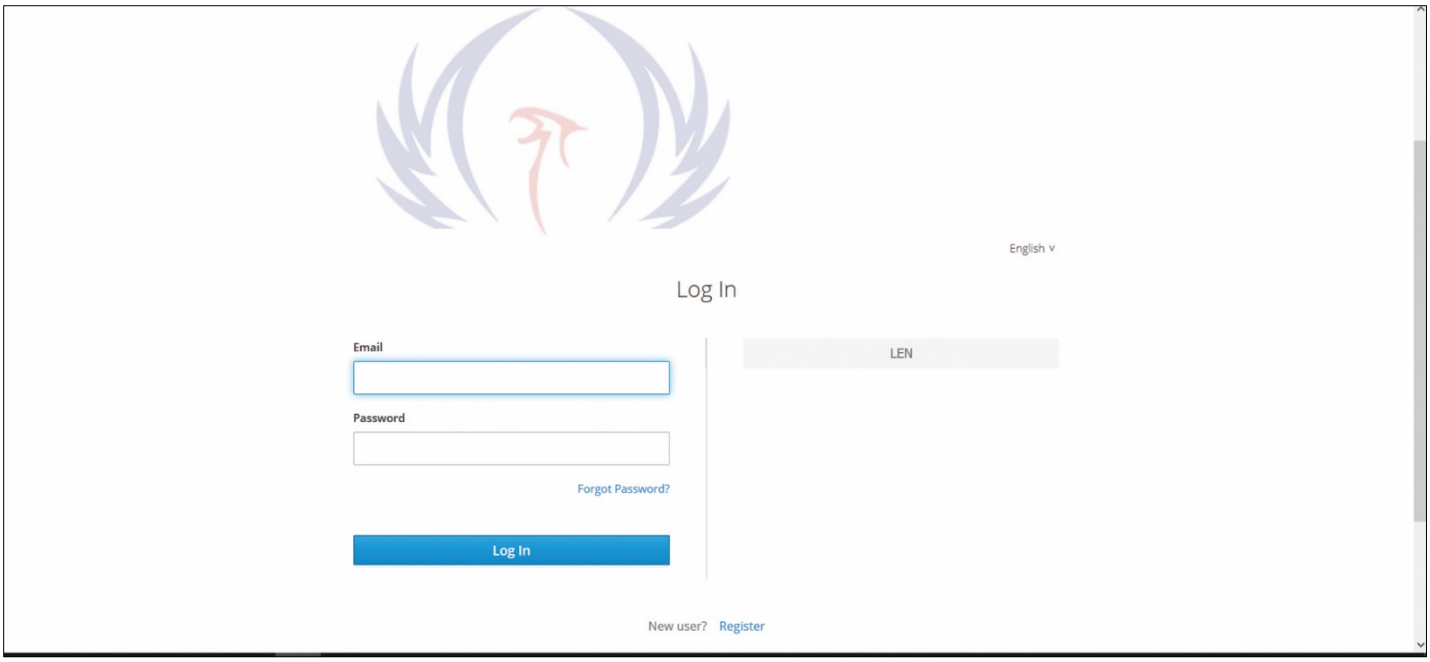
NICS supports the following features:

- The ability to organize and share whiteboard rooms
- The ability to communicate and document information using text-based chatting (public and private)
- Multiple base map layers including streets, topographical, satellite, and aeronautical
- A well-organized data warehouse
- Automatic Vehicle Location (AVL)
- Position Location Information (PLI) GPS-based personnel tracking
- Automated Aircraft Flight Following (AFF)
- Robust real-time weather feeds
- Form and reports

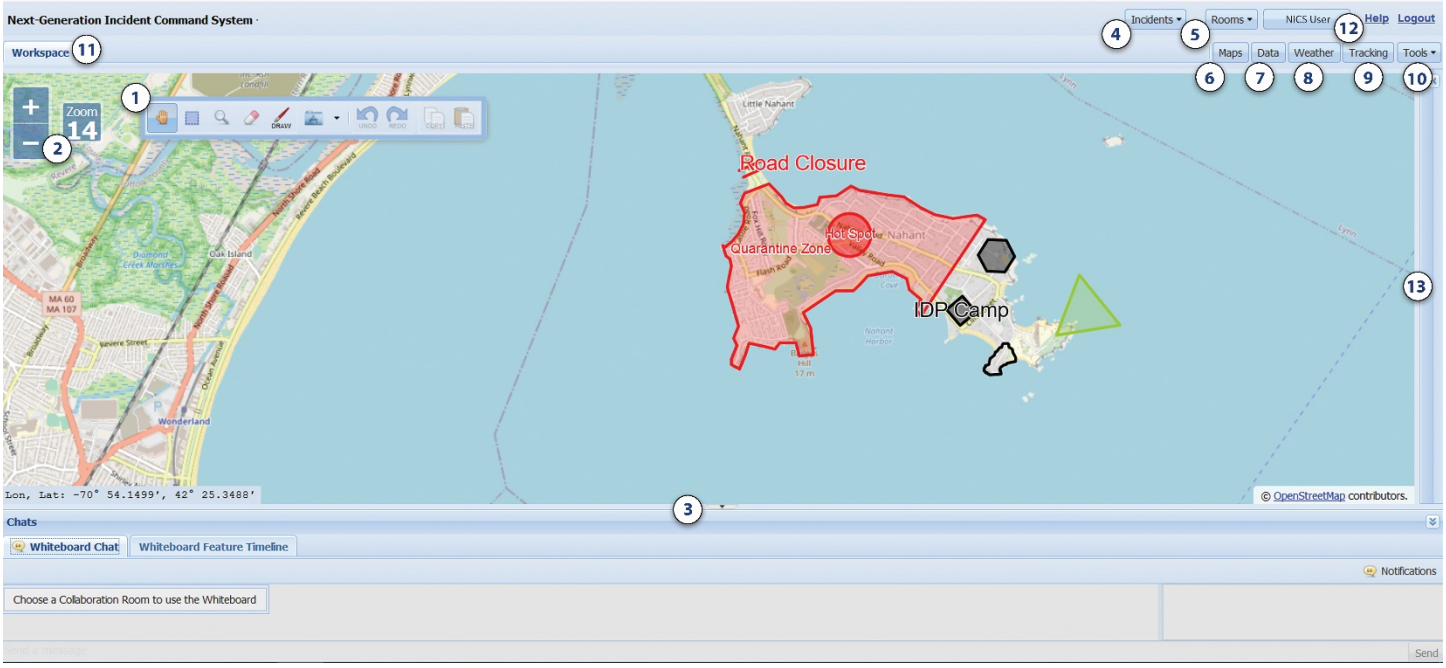
System Access

To access the NICS application, you must have a NICS account with a username and a password, which is obtained when you register and after the NICS administrator for your organization has approved your application online.

Once authorized, you can log in by providing your username and password in the appropriate areas. You can also request that your NICS password be sent to the email address you provided during registration by clicking on the Forgot Password link.



User Interface



1. Main toolbar: Drawing and map marking tools. (See drawing in the map section)
2. Map zoom level and zoom in and out buttons: You can use the plus or minus buttons to zoom in or out of the map. You can also use the scroll wheel on the mouse to achieve the same result.
3. Clicking here opens the bottom panel where the chat, timeline, and notification features can be found.
4. Incidents button: This button is where you can create an incident or select an incident that has already been created.
5. The Rooms button: Where you can create working rooms or join a room.
6. Maps button: This button gives the user multiple map option. Open Street, Bing Maps, US Topo Maps, and FAA Aeronautical Maps.
7. The Data button: Store and manage data layers uploaded by GIS users.
8. Weather button: This in an organizational tool used to organize weather data layers.
9. Tracking button: Allows you to track individuals, data points, and equipment and plot them to a map layer.
10. The Tools button: Allows you to print the map, export a room, view multiple incidents, modify room permissions, and access administration info.
11. Work Space: Represents private user room where work is persisted across sessions and not visible to other users.
12. User Information: Contact info is located here. You can also update your account information.
13. Clicking here opens the side panel.

Navigating the Map

NICS provides a variety of map tools for use in annotating your maps for your situational awareness. Primary map navigation is controlled using the zoom controls on the left side of the map region. Alternatively, the map tool bar contains zoom options as well as additional map navigation and annotation features. The various options are summarized in the following table.

Function	Tool	Description
Zoom		Click + to zoom in Click – to zoom out Zoom number indicates the current zoom level The higher the number, the more you are zoomed in
		Click and then draw a rectangular area on the map to zoom into that selected area
	Mouse Wheel	Scroll up to zoom in on your mouse location Scroll down to zoom out on your mouse location
Pan (Navigation)		Also known as the Hand tool Click the pan icon, then click and drag the map to the desired area
Select Box		Click and then draw a box around a set of features you want to move or copy
Eraser		Click and then select one or more features to remove the selected features
Draw		Click to display drawing tools
Apps		Click to access the Census, Weather, Geocode Location, and Share Workspace applications
Undo		Click to undo the last action you performed on the map
Redo		Click to redo the last action you performed on the map
Copy		Select a feature or set of features, then click to make a copy on the clipboard
Paste		Click to insert map items you copied to the clipboard

Section 2
Drawing on the Map

Drawing is one of the primary methods of communication in NICS. When information needs to be transmitted quickly and efficiently, a sketch on the map is often the most effective.

To begin drawing, select the draw icon

from the main toolbar to access the draw panel.

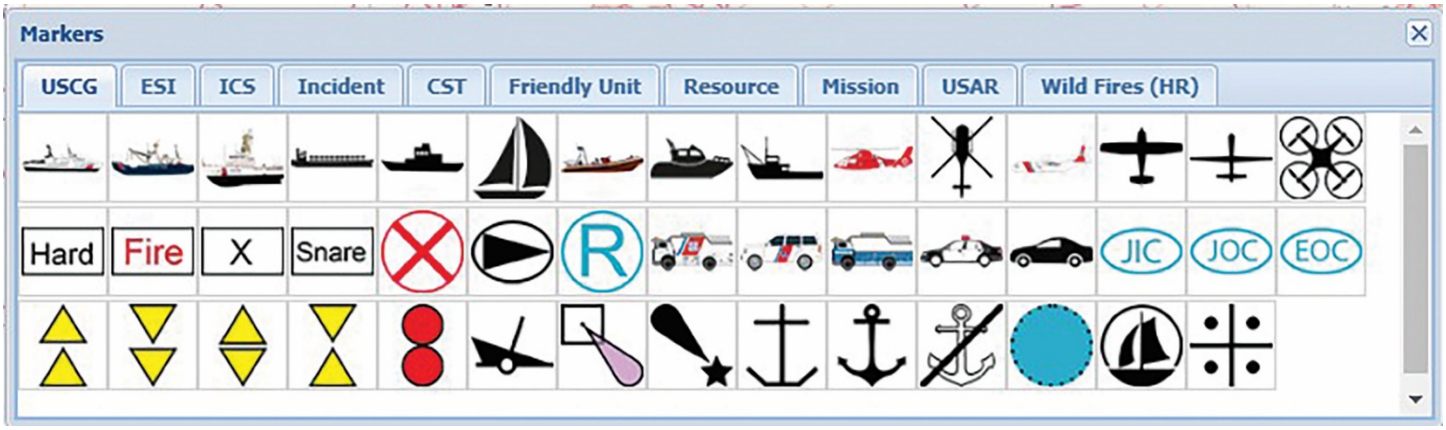
Tool		Function	Tips
		Draw Markers	
		Draw Label	Select color prior to selecting this tool
		Rotate	
		Draw Vector Polygon	Use the down arrow to select an alternate shape
		Draw Circle	
		Draw Triangle	
		Draw Square	
		Draw Hexagon	
		Draw Line	Use the down arrow to select line properties
		Measure Distance	Use the down arrow to select measuring options
		Measure Area	

Adding Markers or Symbols

Different Agencies and Organizations use symbology and map markers to indicate different things. The draw marker feature allows you to quickly add your organization's symbology to a map layer. In order to add markers or symbols to a
map layer:

1. Select the Draw Marker icon from the Draw panel.

This will display all the available markers that are currently loaded in to NICS.



2. Click on a marker to select it and then click anywhere on the map to place it.

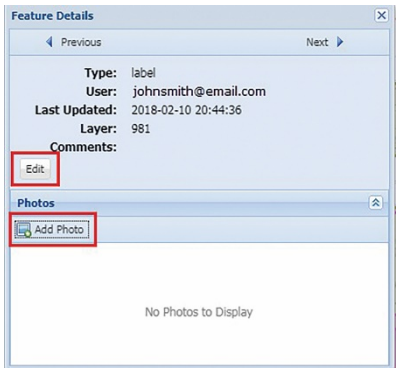
You can place an additional Marker on the map by clicking multiple times.

To reset the pointer, click on the HAND tool.

Note: All markers can be rotated on the map layer by using the rotate icon in the Draw Panel. (See Rotate section)

Marker Details

Information about the marker you have placed can be viewed by simply selecting the marker. Once selected, a Feature Detail window will open. You can also select lines, shapes, or labels. These details include: object type, user, last updated, layer number, and comments. Comments may be added using the Edit button.
Photos may also be added using the Add Photo option.

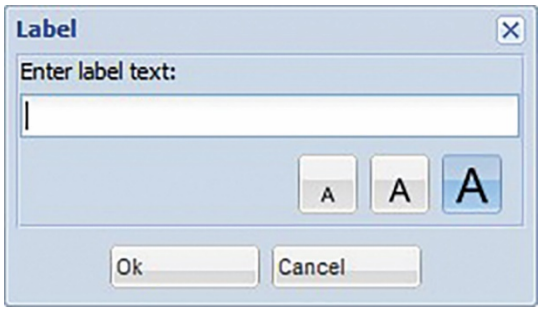


Adding Label

The Label tool enables you to put a text label anywhere on the map.

2. Type your label text and choose the font size.
3. Click OK.
4. Click the map where you want your text displayed.

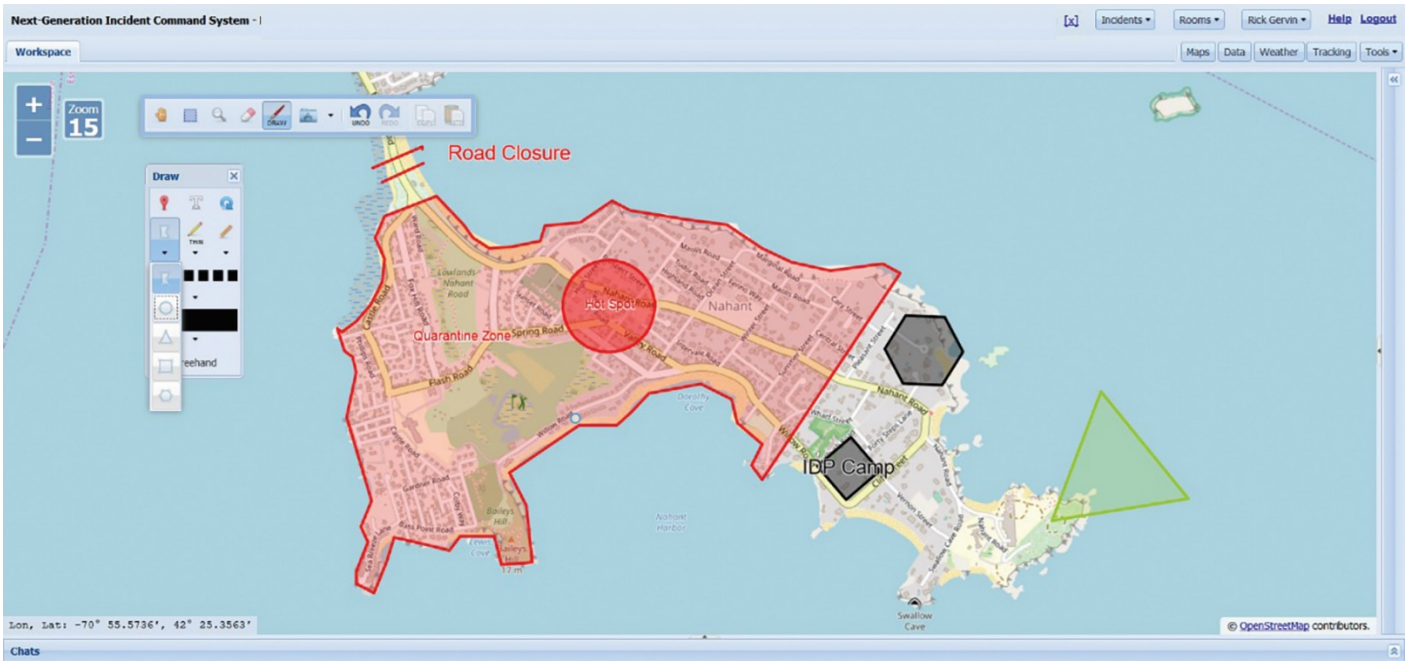
Like a marker, you can place the text anywhere on the map. You may also place additional copies of the text on the map by clicking multiple times.



Rotate

Drawing Shapes

The shapes tool enables you to create a shape with a solid border and translucent center. Use the down arrow below the shapes tool to select the shape you wish to draw: polygon, circle, triangle, square, or hexagon.



Draw a polygon:

(Alternatively, holding down the mouse button and dragging across the map causes the shape to automatically adjust to the mouse position.)

2. Release the mouse button to end a line segment.
3. Double-click to end the polygon.

To reset the pointer, click on the hand tool.

Draw a circle:

2. Drag the mouse until the circle is the size you need.
3. Click to end the circle creation.

To reset the pointer, click on the hand tool.

Draw a triangle:

2. Drag the mouse until the triangle is the size you need.
3. Click to end the triangle creation.

To reset the pointer, click on the hand tool.

Draw a square:

2. Drag the mouse until the square is the size you need.
3. Click to end the square creation.

To reset the pointer, click on the hand tool.

Draw a hexagon:

2. Drag the mouse until the hexagon is the size you need.
3. Click to end the hexagon creation.

To reset the pointer, click on the hand tool.

Freehand & Update

While drawing, it is possible to free draw by holding down the shift key. You can also select the Freehand icon that opens once you click either the Line tool or the Polygon tool. This feature also works while drawing with the Vector Polygon tool.

Updating Polygon Shapes:

If you need to update an existing polygon shape, select the icon for the side panel.

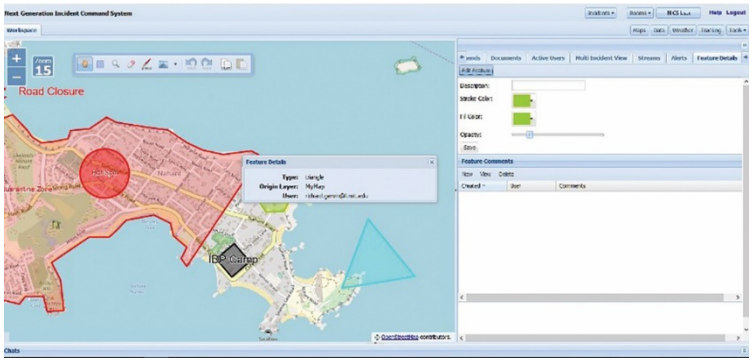
1. Scroll the button nav at the top of the side panel by clicking the right arrow button until you see the feature details button.
2. Select the Feature Details button.
3. Select the Polygon feature you want to update.
4. Select the Edit Feature button at the top of the Feature Details panel.

You can now edit the polygon drawing.

The following edits can be made in the Feature Details panel.

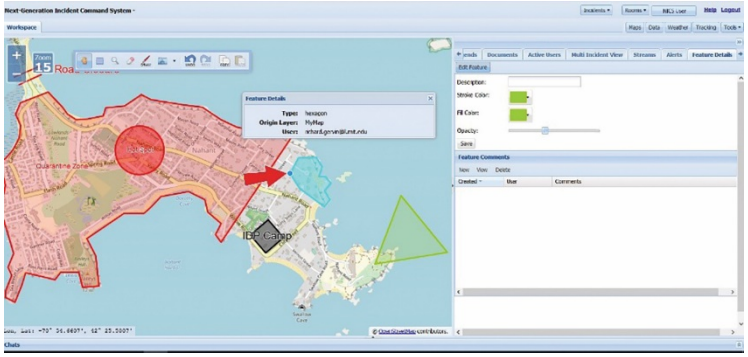
- Change or add a description
- Change the stroke color (Outline color)
- Change the fill color
- Change the opacity

Once the polygon has been selected, a popup window with the current details about that feature will open. In this window, you can edit comments and add photos. If you need to add multiple comments to the selected feature, select the **New** button on the side panel under feature comments. This will allow you to add, view, and edit multiple comments.



While in the edit features window, you can also edit the shape of a drawn polygon by placing the mouse cursor over the polygon edge. You will see a blue circle appear on the edge of the polygon. You can move the edge to

the desired location by clicking the mouse and dragging the cursor to the location you want, then releasing the mouse.



Note: Edit feature works best for editing polygon shapes and drawn polygons. Editing line drawings can be problematic.

Draw Line

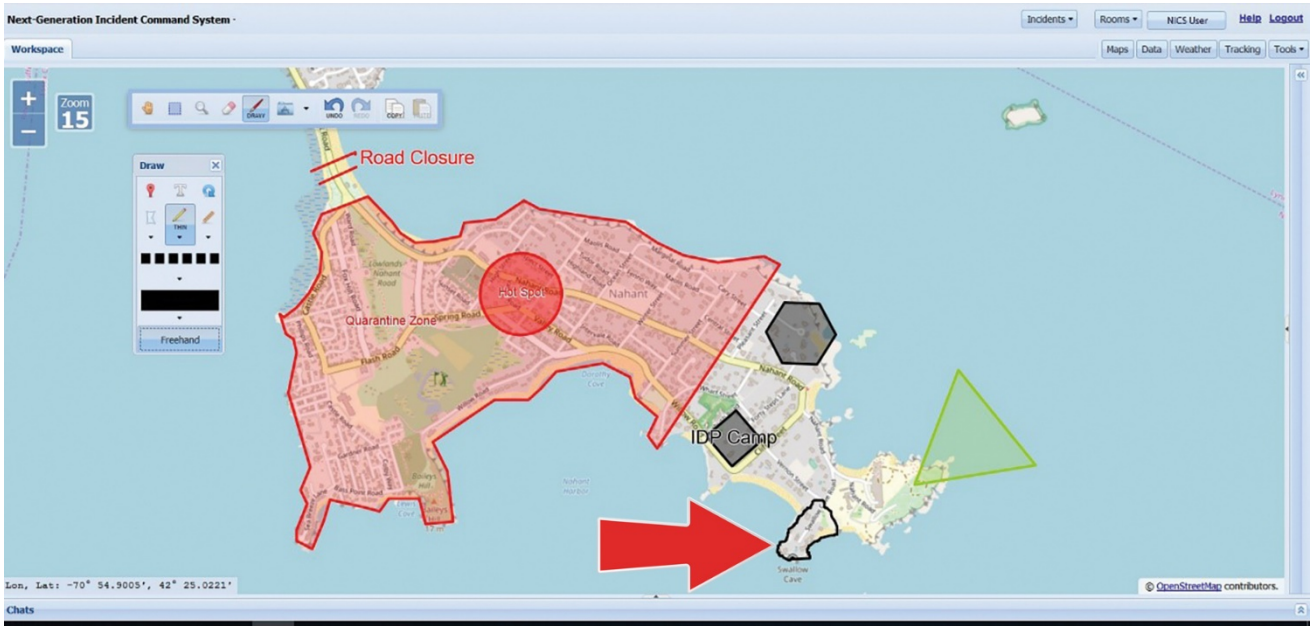
The Line tool creates a new line wherever you draw on the map.

Use the down arrow under the Line tool to select line options (i.e., thin, medium, thick, or dashed).

Click the map where you want the first line segment to begin. Drag the cursor until the line is the desired length. Release the mouse button to end a line segment, then double-click to end the line creation. To reset the pointer, click on the Hand tool.

Drawing Freehand:

Once you have selected the line option (thin, medium, thick, or dashed) select the freehand button on the Draw panel, this will allow you to freehand draw lines and polygons.



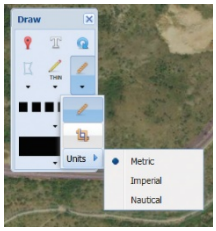
Click and hold down the mouse and draw. Once you're finished drawing, release the mouse to end the line segment or polygon.

To reset the pointer, click on the Hand tool.

Measure

The measurement tool can be used to measure distance or area. In addition, the unit of measure (i.e., Imperial, Metric, or Nautical) can be selected.

Measure Distance:



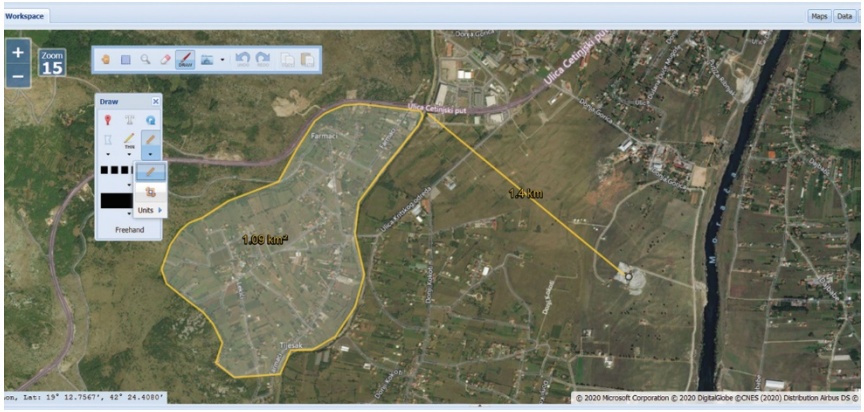
1. Click , then click the map where you want the first line segment to begin.
2. Drag the cursor until the desired length.

The distance will appear as the line segment is drawn.

If you need to find the distance of a winding road or border, you can use the **Freehand** button at the bottom of the Draw panel. This works in the same way as the Freehand Drawing tool.

Measure Area:

1. Click , then click the map where you want the first line segment to begin. (Alternatively, holding down the mouse button and dragging across the map causes the shape to automatically adjust to the mouse position.)
2. Area is shown as cursor is dragged across the map.
3. Release the mouse button to end a line segment, then double-click to end the area.



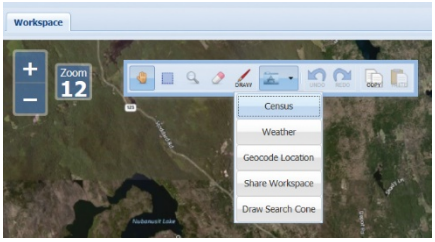
To reset the pointer and the area, click on the Hand tool.

Application Folder

More information about a location on the map such as local weather, census data, or map grid coordinates can be obtained by opening the Application folder found on the main toolbar.

Click to open the dropdown menu containing the four applications currently available.

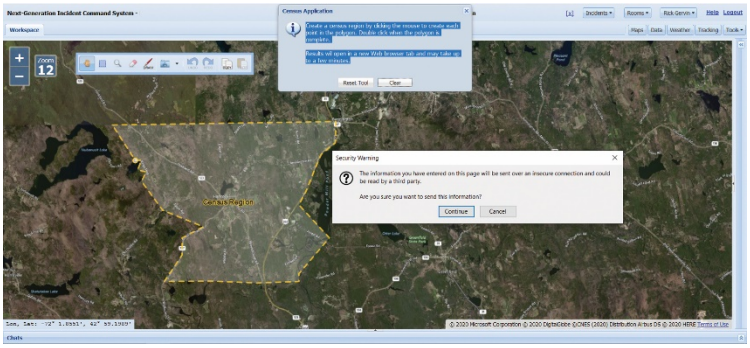
1. Weather
2. Census
3. Geolocation
4. Share Workspace
5. Draw Search Cone



Census

To obtain census data about a specific area, select the Census option in the application dropdown menu. Once in the Census app, you will need to create a census region.

1. Create a polygon by clicking the mouse at each point in the polygon.
2. Double click when the polygon is complete.

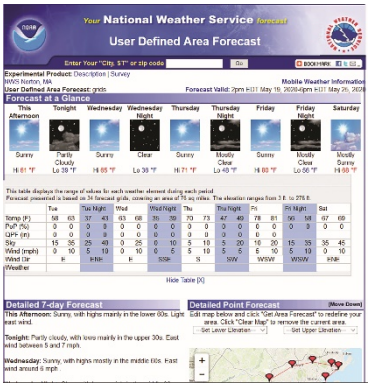


Results will open in a new Web browser tab and may take a few minutes to open.

Weather

To obtain weather data about a specific area, select the weather option from the application dropdown menu. Once in the weather app you will need to create a weather region.

1. Create a polygon over the area of interest by clicking the mouse to create each point in the polygon.
2. Double click when the polygon is complete.



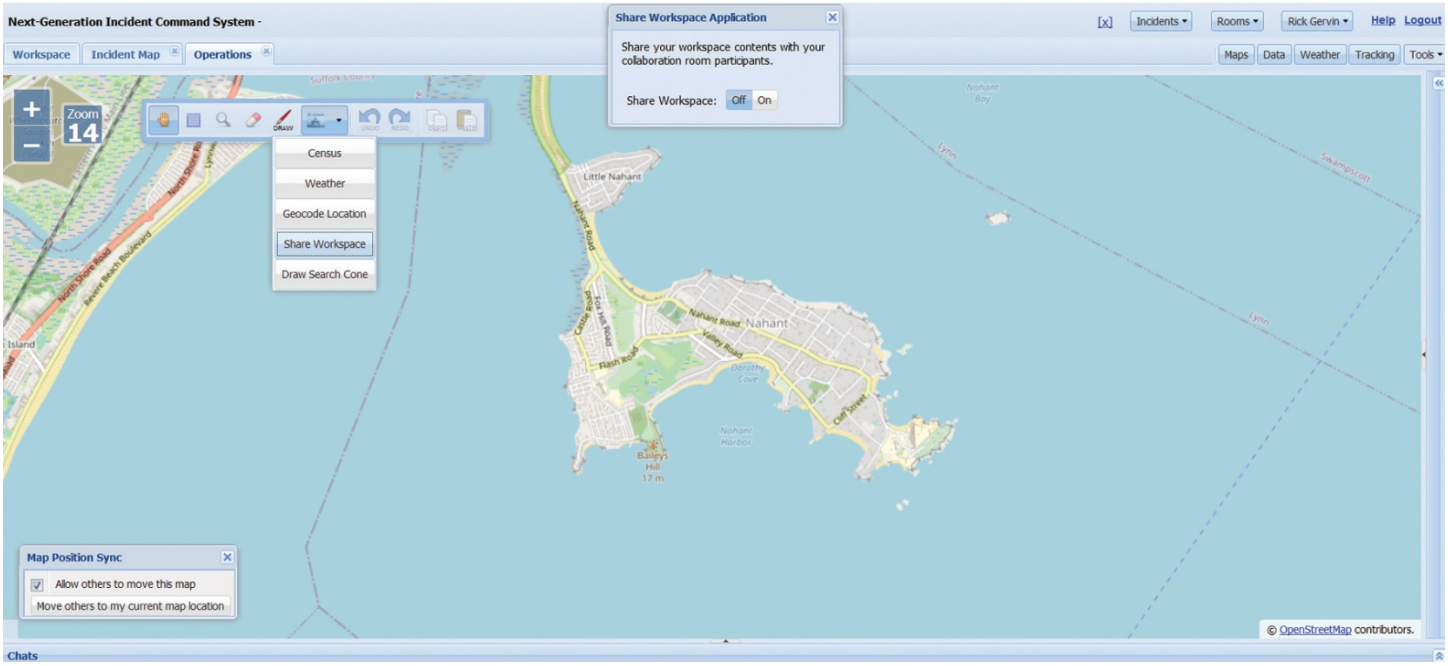
The total area must be less than 1000 square miles. Results will open in a new Web browser tab.

Share Workspace

To share your workspace with others, click Share Workspace from the application dropdown menu.

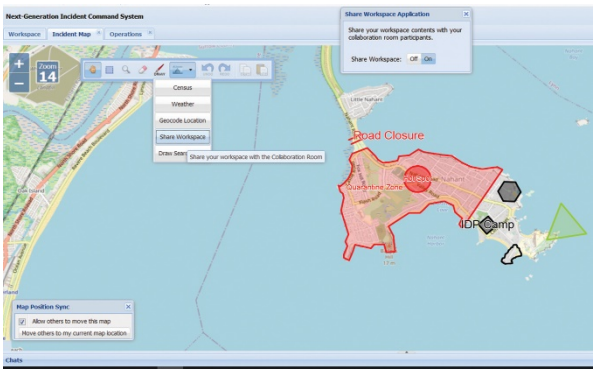
1. The Share Workspace Application message will appear in the center of the screen.
2. Click ON to share your workspace with your current room.
3. Alternatively, click OFF to stop sharing.

Note: Additionally, when leaving the room, either by changing rooms, or closing the room, your workspace will no longer be shared.



Map Sync

When users in the same room wish to collaborate, it is very useful to make sure everyone is looking at the same place and with the same zoom. This can be accomplished through the Map Position Sync window which usually appears in the bottom left of your display.



Note: If it has been minimized and is not visible (i.e., the "X" in the upper right corner had been clicked), it can be reopened by clicking Show Map Sync Options from the Tools menu.

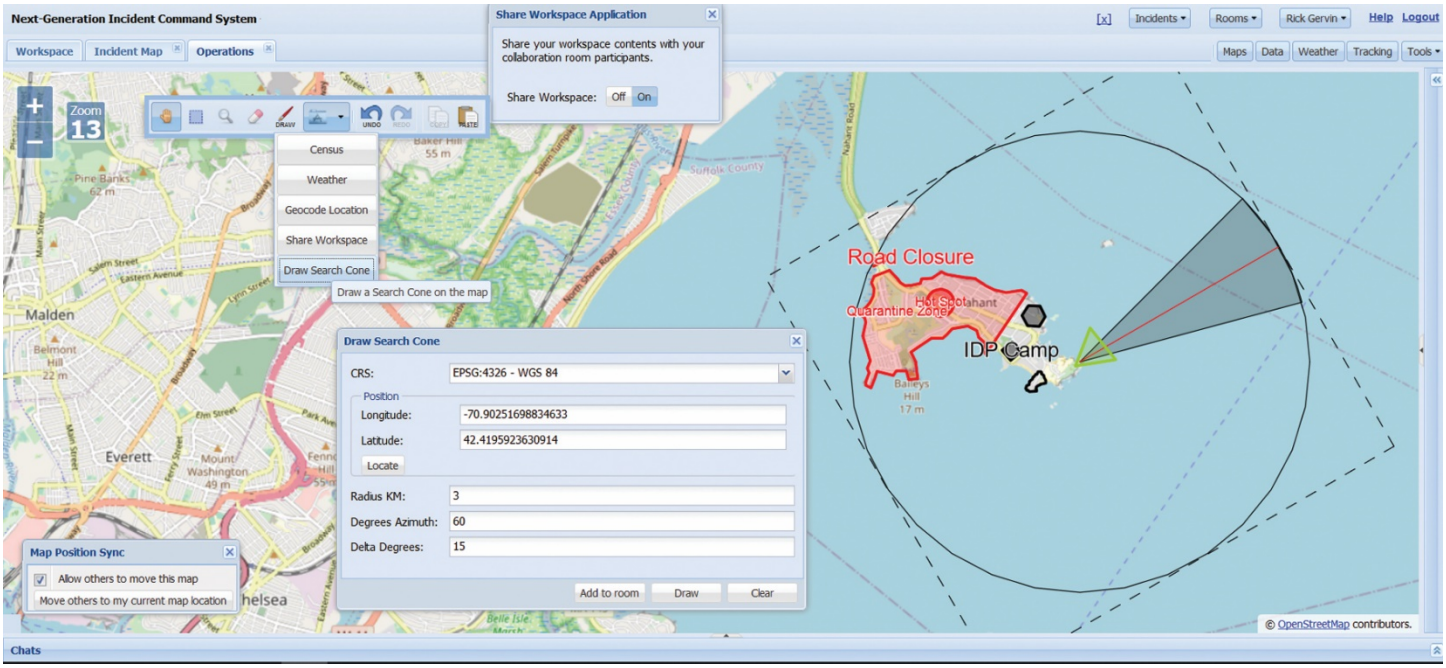
If you wish to let other people move your map to their location and view, click Allow others to move this map checkbox. If you don't want others to move your map without your permission, uncheck the box.

If you wish to take command of everyone's map orientation and view, click Move others to my current map location.

Drawing a Search Cone

The Search Cone is a search area based on the probability of position based on a last known coordinates and bearing to better send searchers to the right areas.

In order to draw a Search Cone, first select the application folder from the main tool bar and click on the Draw Search Cone.



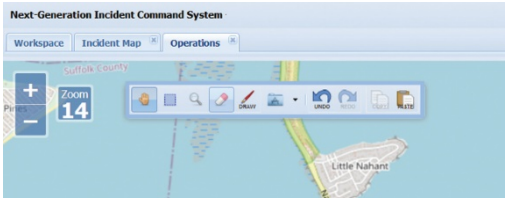
1. When the popup window opens first select a proper CRS. This will allow you to select the center position of the search area by clicking on the locate button, then selecting the location on the map.

Note: The search cone radius Azimuth and delta will need to be entered before you click on the draw button.

2. Once you are satisfied with the Search Cone, click Add to Room.

Deleting Objects

All drawn polygons, lines, markers, labels, and shapes can be removed from a room as easily as they were added. Simply select the eraser tool from the main tool bar and then click on the object you wish to remove from the map or draw a bounding box around all of the features to be deleted.



A dialog box will open asking you to confirm that you wish to delete the select object from the room.

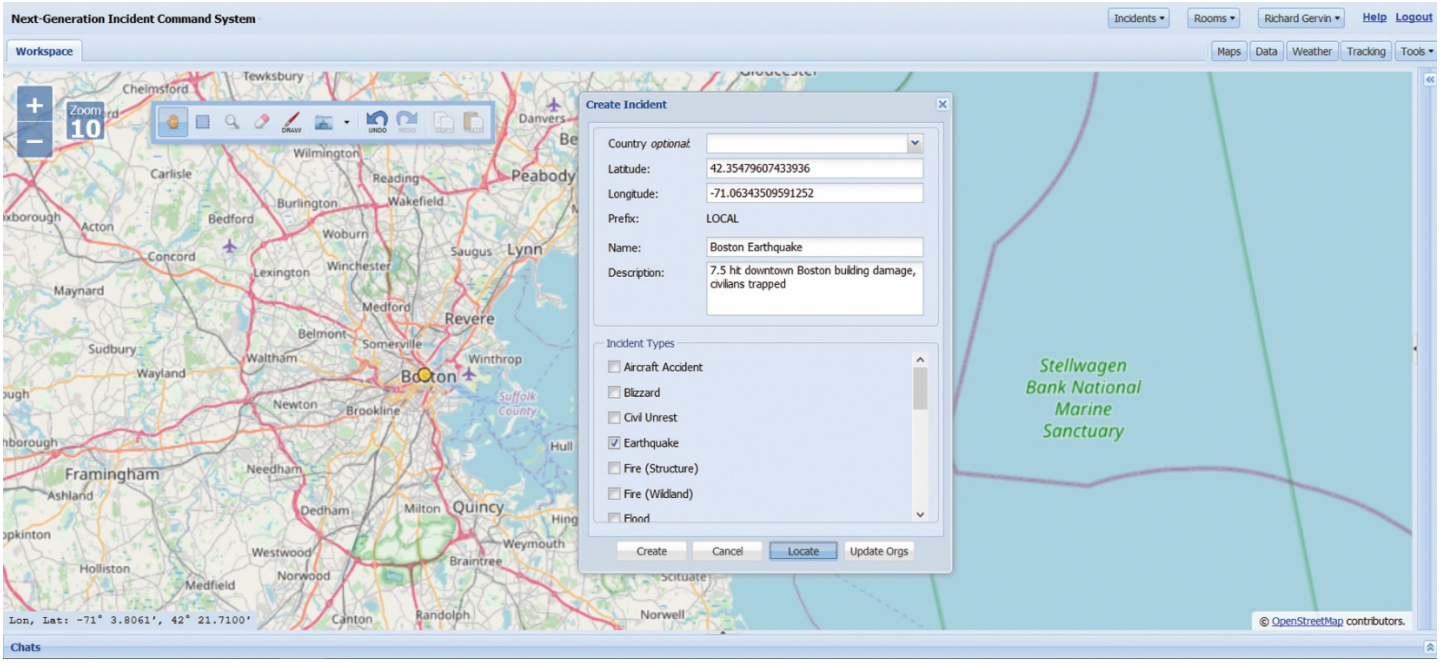
Click **Yes** to delete or Cancel to return to the map without deleting the selected object.

Section 3
Incidents & Rooms

Creating an Incident

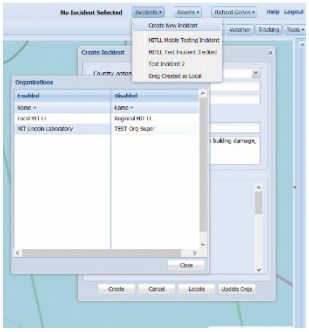
NICS is organized by named incidents. Within each incident, there are separate collaboration areas called Rooms. These rooms are meant to separate functionality to allow individual teams to collaborate on their part of a larger incident. Rooms can be open to anyone or restricted to certain users.

Once you have logged into NICS, you will either need to join an incident that is already in progress per your organization's standard operating procedures, or you will need to create a new incident.



1. Select the Incident button on the upper right hand corner of your screen.
2. A dropdown menu will open with the list of all available incidents to join or you can create a new incident.

Right now we will focus on creating a new incident.



3. Once you click on Create New Incident a popup window will appear.
4. Find the center point of the incident on the map and select the Locate button at the bottom of the popup window. Then mouse over the center point of the incident and click.

This will fill in the lat/long coordinates for you.

5. Name the incident and provide a detailed description of what's happening at the incident site.
6. Select one or multiple incident type(s) from the scrollable list.

If you would like to restrict access to an incident, click on the Update Orgs button at the bottom of the popup window.

(A) A second popup will open where you can drag and drop the organizations you want into the enabled box.

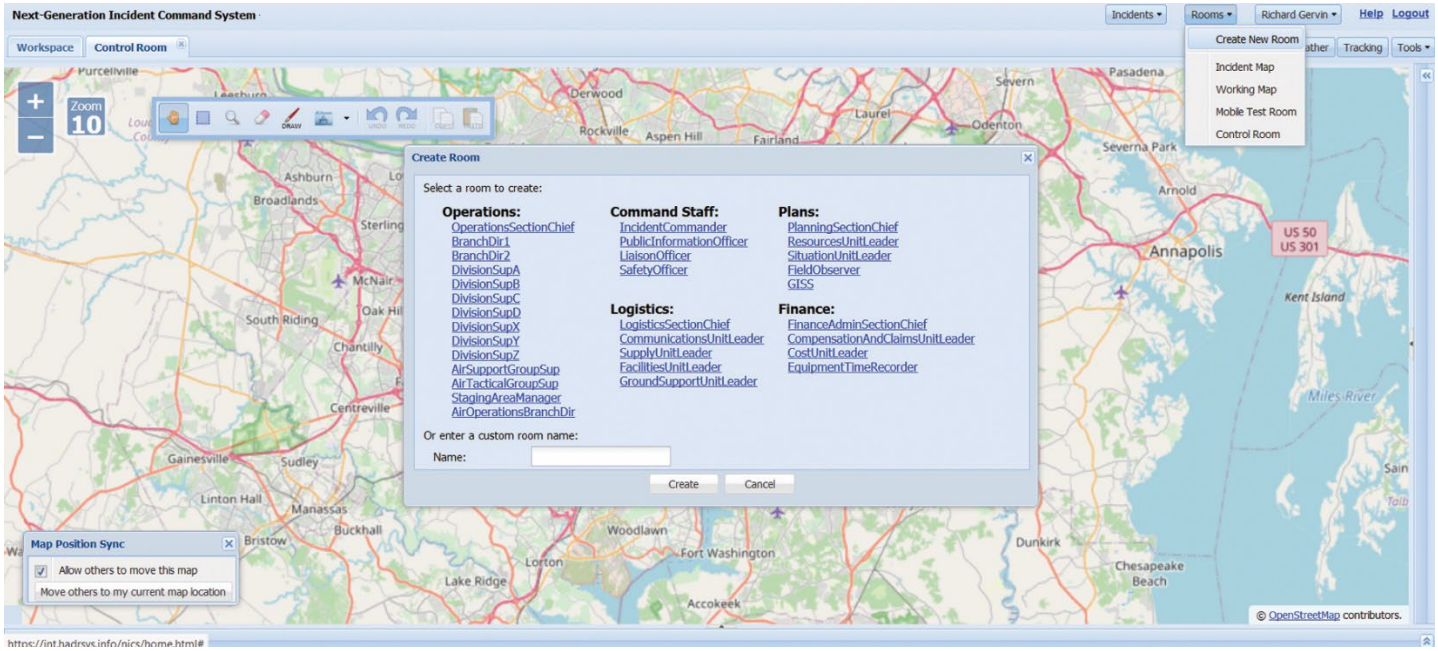
(B) Select Close when finished.

Otherwise, if you do not use the “Update Orgs” functionality, the incident will be visible to all NICS users. All new incidents are automatically restricted to the owning organization if the “Restrict Incident” checkbox is chosen in the Administration panel for the organization. (See the section about editing an incident)

1. Click the Create button at the bottom of the popup window to create the incident

Creating a Room

Once an incident has been created, persons with the proper permissions can create a room for their team or organization. This room will allow your organization/team to communicate with your own map and chat capabilities. Using the NICS mobile application, you can track your team in the field.



To create a room:

1. Select the Rooms button.
2. A drop down menu will open with a list of all available rooms.
3. At the top of the list, select the Create New Room button.
4. A popup window will open in the center of the screen with a list of room options to choose from, or you can name your room whatever you want by using the text box.
5. Once your room is named, click the **Create** button.

Your room is now created and open for all users to join.

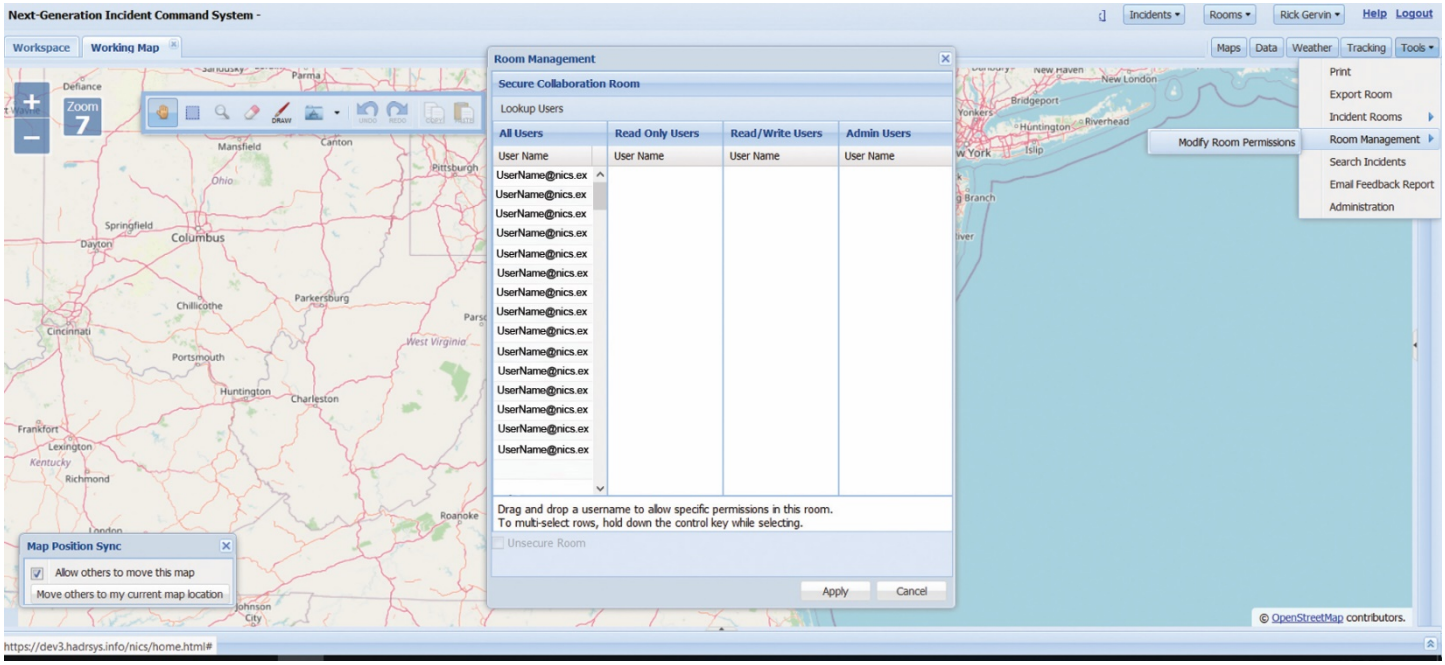
Securing a Room

If you only want to have your organization or team have visibility into your room, you can secure it by selecting the Secure Room checkbox at the bottom of the Create New Room popup window before you create the room. A second popup window will open, allowing you to drag and drop usernames to allow specific permissions in this room. To multi-select rows, hold down the control key while selecting.

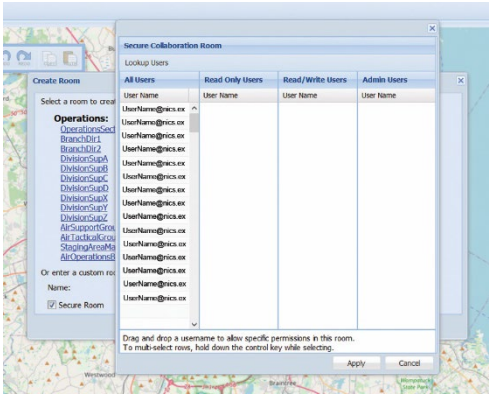
Select Apply to apply permissions. When modifying a room, the organization's administrator and system super users cannot be removed.

Managing Rooms

If you need to manage a user's permissions any time during an incident, you can select the Tools button to open the dropdown menu and select the Room Management button and Modify Room Permissions. This will open



the Room Management window, allowing you to add a user to the room, change a user's permissions, look up a user, and secure or unsecure a room.

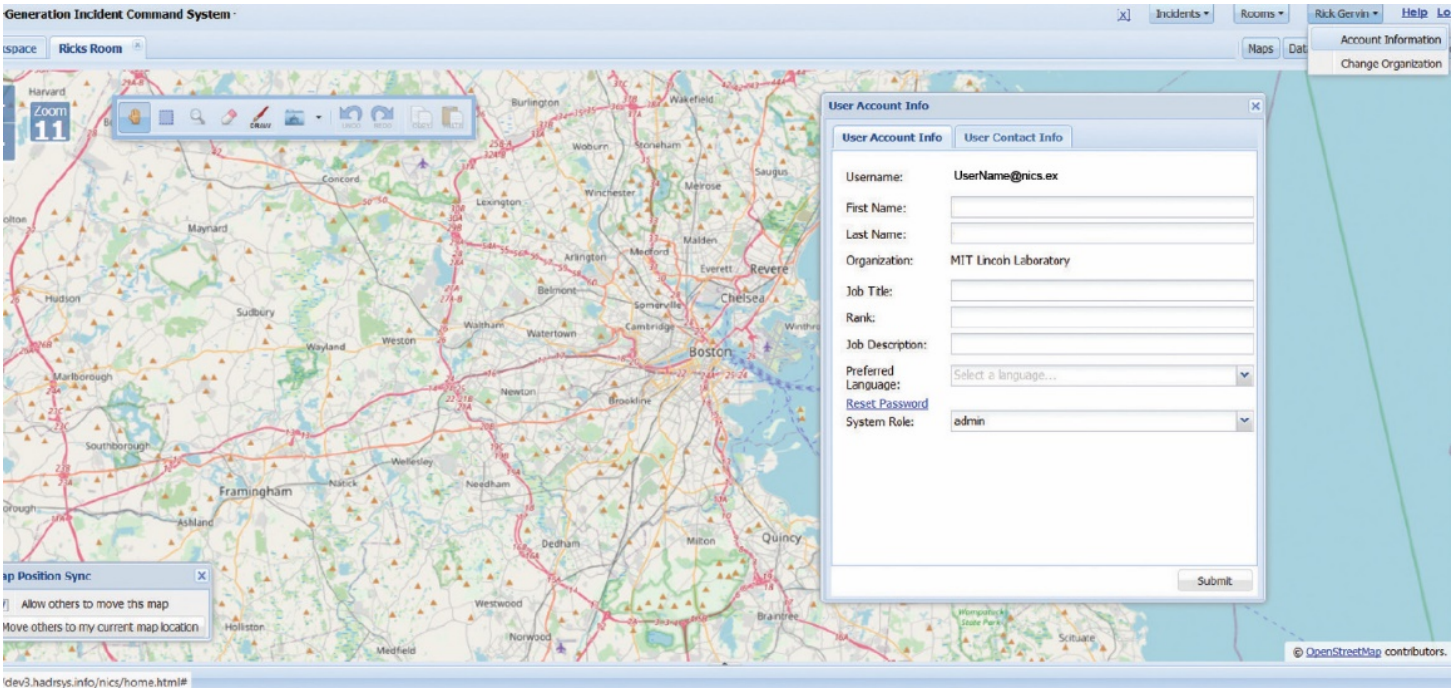


User/Organization Info

Once logged into NICS, you can review or change your user account information by selecting the button at the top right hand side of the screen with your name on it.

Once selected, a dropdown menu with the options Account Information and Change Organization will appear.

1. Select the Account Information.
2. A popup window will open providing the user with all their account information and contact information.
3. You can update this information as needed. If you can't update this information, contact your organization's administrator.
4. Once all your info is updated, click Submit at the bottom of the popup window.



Organizations/System Users

You can have one or more organizations within NICS. An organization is a grouping of system users by function, location, etc. There are five official system user types:

User Type	Description
NICS User	- Default user type – access is read/write - Can create incidents, draw on maps, chat, report, and upload data layers
GIS User	- NICS User plus rights to upload and manage data layers - Manages permissions and usage of maps, layers, geospatial data
Admin User	- Manages users, incidents, specific capabilities for an organization - Can be an admin in more than one organization - Can restrict permissions to rooms
Super User	- Organization administrator for every organization - Has full access to all organizations and users
Read-Only User	- View-only rights - Can only view rooms and chat - No edits

To access the NICS application, you must have a NICS account with a username and a password, which is obtained when you register and after the NICS administrator for your organization has approved your application online.

A user can belong to any organization and have a specific role in that organization, but it is important to note that user organizations and system roles do not extend across workspaces. In the case of workspaces, the user needs to be added and enabled in the organization in each workspace.

Section 4

Data Layers

Many different types of data can be integrated into NICS and represented as a map layer. Some examples include: streets, parcels, zoning, flood zones, shopping centers, office buildings, demographics, etc. When these layers are placed on top of one another, trends and relationships often emerge enabling us to gain insight about relevant characteristics of a location.

With NICS, you can customize your view by overlaying different data layers in order to provide the combination of information required to allow users to make informed decisions.

Maps

Maps represent the base layers, while Data, Weather, and Tracking provide additional overlays to be added to the map.

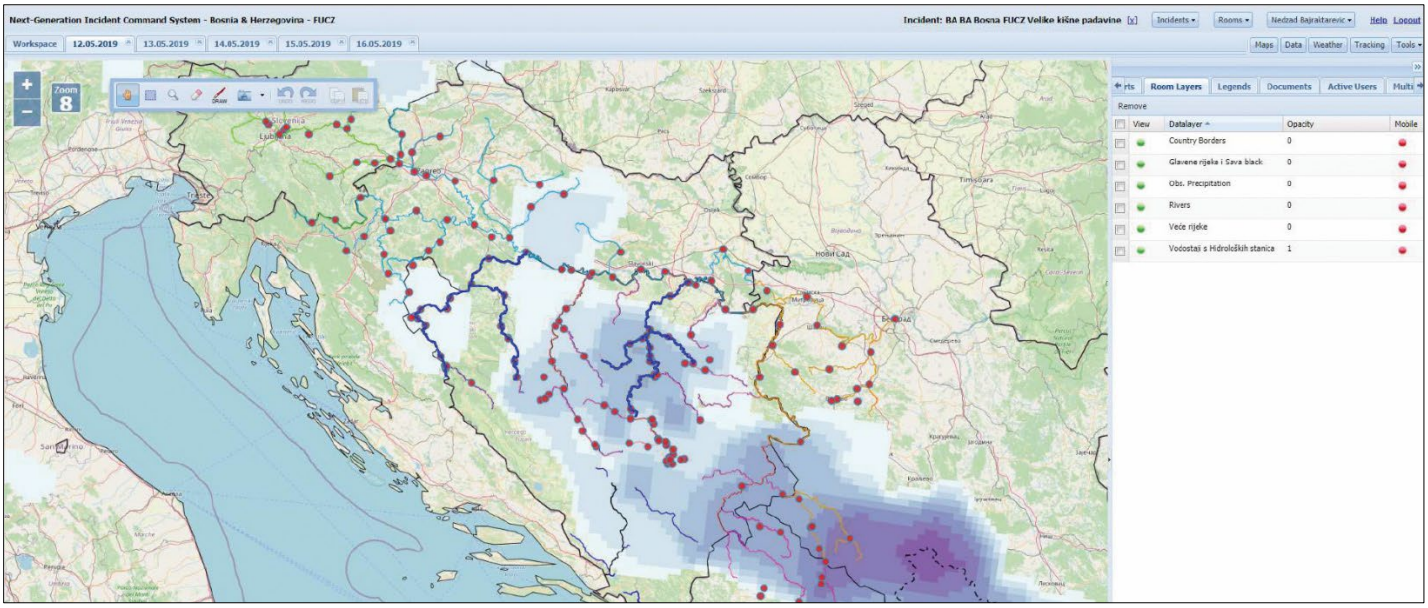
There are several types of maps, and new map types are added regularly.

- Open Street Map
- Bing Aerial with Labels
- Bing Roads
- Bing Aerial
- US Topo – 7.5 min. Quadrangle Maps: USGS 7.5/15 mins. Seamless topographical maps
- FAA – Sectional Aeronautical Charts

Organizations can also add their own maps by adding them to data layers.

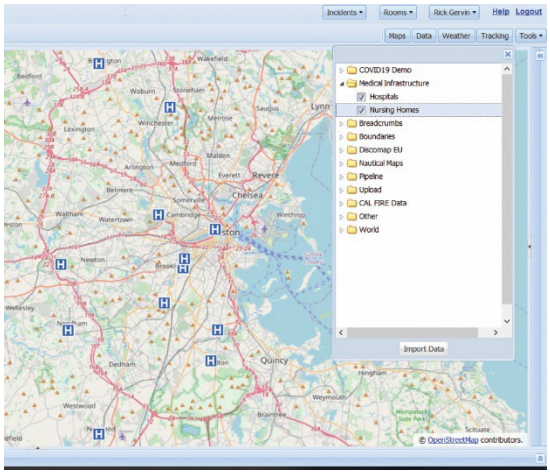
Data Layers

Data layers are the geo-information that can be placed on top of the base map layer. Layers are turned on and off by checking and unchecking boxes next to their names.



Data layers are organized in a tree file structure. NICS provides some general layers to every incident, and it is possible for authorized users to upload data from other sources, which will be located in the Upload Folder.

In order to access existing data layers in NICS, click on the Data button located on the right side of the application window. This will open a drop-down window with multiple folders to choose from. Open the folder to see the available layers included within the folder. To turn on a layer, simply select the check box next to the layer you want displayed.



In the image to the right, you can see local hospitals have been displayed on the map by turning on the data layer in the dropdown menu.

Import Data Layers

NICS also has the ability to upload dynamic data layers, such as WFS/WMS/ArcGIS, just to name a few. There are a few different steps required to upload different data layers; we will first look at WFS/WMS/ArcGIS.

1. First, select the Data button from the right side of the application window.
2. When the data layer folder window opens, select the Import Data button at the bottom of the window.
3. A window with all the import options will open. Select one of the first three options (WFS/WMS/ArcGIS) and click Add Data.
4. Enter a title and URL for the WFS/WMS/ArcGIS service in the blank entry fields that pop up. If the service is valid it will be added to the grid service list and ask if you would like the data source secured. If you select **Yes**, you can add a user name and password.

If the service is invalid, the editable fields are still displayed along with an error message.

Once you've selected the data service you want to use, the Layer to import drop-down dynamically populates once the service you selected has been registered. Clicking on another service in the table populates the drop-down with layers from that service.

5. Use the Layer to import drop-down to select the desired Layer.
6. Use the existing or enter a name in Display Name. This data layer name is ultimately shown in the Data tree.
7. (If desired) Enter a URL address to be used as a Legend for this data layer.
8. Set the Refresh Rate for the layer enabling all updates to automatically pull and display at the given interval.
9. (If desired) Select an organization to access this data layer. If you use the default (None), there are no restrictions on using this data layer, and it will be added to the Upload folder.

Note: Only the organization chosen in the drop-down box will be able to access the data layer from the Data tree.

10. (If desired) Select a room to access this data layer. If you use the default (None), there are no Room restrictions on using this data layer.

Note: If a room is selected, the data layer will only turn on when a user is in the specified room. To pick a room, the user must be in an incident when uploading a data layer.

11. Click Import Data Layer.

All imported layers are automatically placed in the Upload folder of the Data tree unless they were explicitly added to a room.

Upload Other Data Layers

To add (KMZ, KML, GPX, GeoJSON) data layer click Data from the buttons on the right side of the NICS screen. A list of data folders appears.

1. Click Import Data.
2. Click the desired static file type (KMZ, KML, GPX, GeoJSON) from the button list.
3. Use Browse to select the file to be imported.

Note: The file must have the proper file extension associated with the data layer type.

4. Enter a name in Create Display Name in NICS. This data layer name is ultimately shown in the Data tree.
5. The Refresh Rate only applies to any file that may contain a dynamic link (e.g., KML).
6. (If desired) Select an organization to access this data layer. If you use the default (None), there are no restrictions on using this data layer, and it will be added to the Upload folder.

Note: Only the organization chosen in the drop-down box will be able to access the data layer from the Data tree.

7. (If desired) Select a room to access this data layer. If you use the default (None), there are no Room restrictions on using this data layer.

Note: If a room is selected, the data layer will only turn on when a user is in the specified room. To pick a room, the user must be in an incident when uploading a data layer.

8. Click Upload.

Upload Shape Files

To add a shape file as a data layer, click Data from the buttons on the right side of the NICS screen. A list of data folders appears.

1. Click Import Data.
2. Click Shape File from the button list.
3. Browse and select a file for each file type associated with the shape file.

Note: The SLD file is optional.

4. Enter a name in Display Name. This data layer name is ultimately shown in the Data tree.
5. Click Upload.

The Shape files are uploaded and displayed as a WMS layer.

Upload Images as Data Layers

To add images as a data layer click Data from the buttons on the right side of the NICS screen. A list of data folders appears.

1. Click Import Data.
2. Click Image from the button list.
3. Enter a name in Create Display Name in NICS. This data layer name is ultimately shown in the Data tree.
4. Browse and select geotagged images that will be aggregated into one data layer and displayed on the map as points.

Note: When a user clicks on the points, the image displays in a popup window.

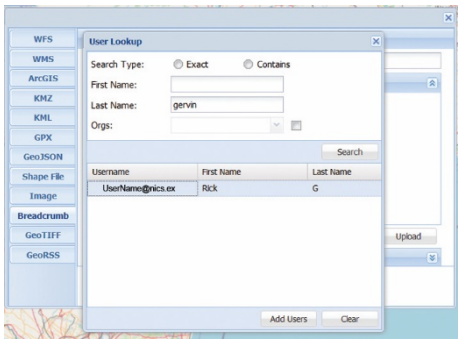
5. Click Upload.

Upload Mobile Tracking Info

To add mobile tracking information as a data layer, click Data from the buttons on the right side of the NICS screen. A list of data folders appears.

1. Click Import Data.
2. Click Breadcrumb from the button list.
3. Enter a name in Create Display Name in NICS. This data layer name is ultimately shown in the Data tree.
4. Click Lookup to search for a mobile user by name.
5. Enter a number into Hours Past to create a track for the desired number of past hours, or choose a time frame by clicking on the Date button which will open a Date/Time picker. Choose a Time from the dropdown at the top.

6. Checking the Segment checkbox connects the points for the breadcrumb
7. Checking the Style checkbox allows you to style each location as directional arrow or a point.
8. Click Upload.

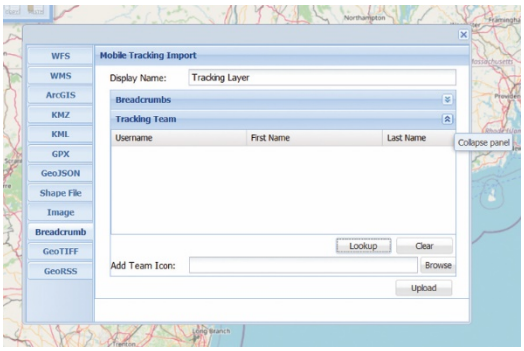


The layer is added to the Upload folder as a WFS layer. You can click each location point and display the time of that location in a popup window.

Tracking Teams

Not only can you track individual responders in NICS, but you can also group individuals into teams.

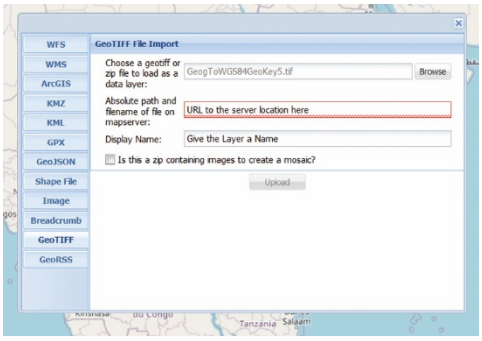
1. Click Import Data.
2. Click Breadcrumb from the button list.
3. Open the tracking teams panel by clicking on the down arrow.
4. Look up as many users as you would like to add to the team.
5. Assign an icon (upload a small graphic that will be displayed on the map).
6. Click Upload and the layer will be added to the "Tracking" menu.



Upload GeoTIFF

GeoTIFF is based on the TIFF format and is used as an interchange format for Geo- referenced raster imagery. To upload a GeoTIFF as a data layer, click the Data button on the side of the NICS screen. A list of data folders appears.

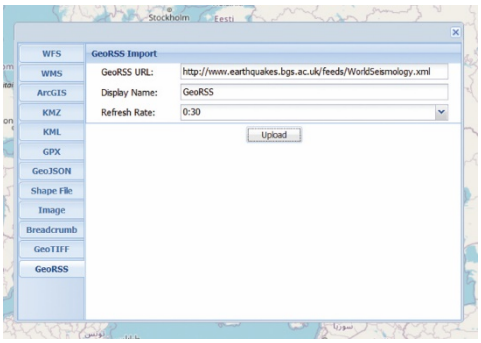
1. Click Import Data.
2. Click the GeoTIFF button from the left side of the pop up menu.
3. Upload a GeoTIFF that is located on your local machine by selecting the browse button.
4. To upload a GeoTIFF from a map server, enter the direct URL link to the server fi
5. If it's a ZIP file used to create a mosaic, be sure to select the check box.
6. Click Upload.



A load screen will appear and confirm that the GeoTIFF has been uploaded.

Upload GeoRSS Feeds

GeoRSS is a specification for encoding location as part of a Web feed. To upload a GeoRSS feed as a data layer click the Data button on the side of the NICS screen.

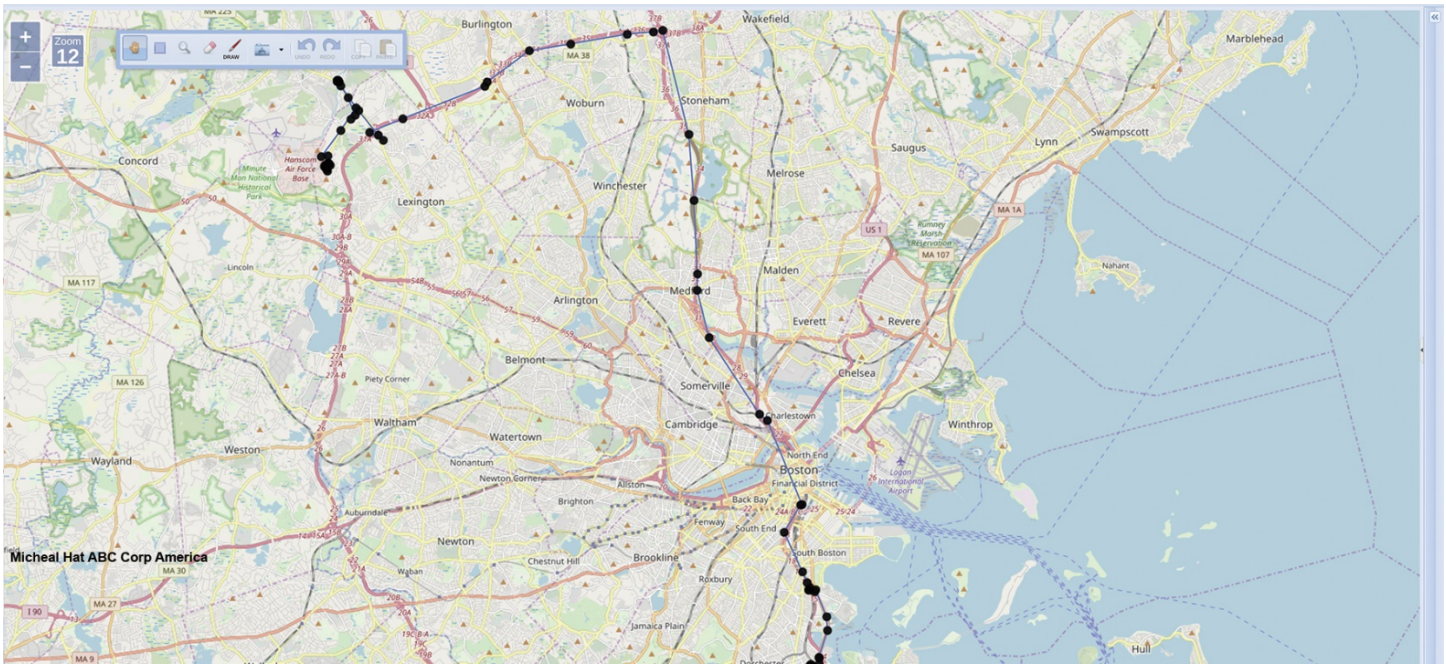


A list of data folders appears.

Click Import Data.
Select the GeoRSS on the bottom left- hand side of the pop up window.
Enter the URL of the GeoRSS you want to upload.
Provide a name for the Data Layer.
Select the refresh rate you would like the GeoRSS feed updated.
Click Upload.

Tracking Dropdown Menu

The tracking menu gives the user the ability to turn on or off tracking layers. It also provides the ability to locate an individual or team quickly by utilizing the search feature.



Types of tracking layers:

1. Individual NICS User
2. Teams of NICS Users

To turn on a tracking layer, simply select the check box next to the tracking layer display name.

Right Click Options on Data Tree

When you are in the Data tree, which can be found by clicking on the Data button on the top right-hand side of the application window, you can right click on a Data layer or folder for more option.

Additional features:

Show Legend:

You can configure a URL on a data layer that should point to a graphic. Toggling Show Legend will create a popup/overlay on the map displaying that graphic. If there's not a URL set, it's grayed out.

Add to Room:

You can add this layer to show in a room you're in. First you have to be in a room. The active room you're in is the one the data will be added to. This way you can organize a handful of layers to be on in a room, but they won't show elsewhere unless you toggle them on via the Data menu. There's also a tab on the side panel, "Room Layers", where you can manage these layers. Toggling it on/off within the room, setting the opacity, and setting whether or not mobile users should have the layer on. You can also remove the layers from the room here.

Folder Management:

If you have the permissions, admin or higher, you can create, rename, and delete folders in the Data menu. You can also move layers into folders by dragging and dropping them.

Export to GeoJSON:

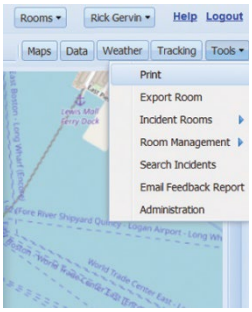
If the layer is of a certain type, it'll show Export to GeoJSON, so not all layers will show this option. You can exports the layer's content as GeoJSON to download.

Section 5

Management & Administration

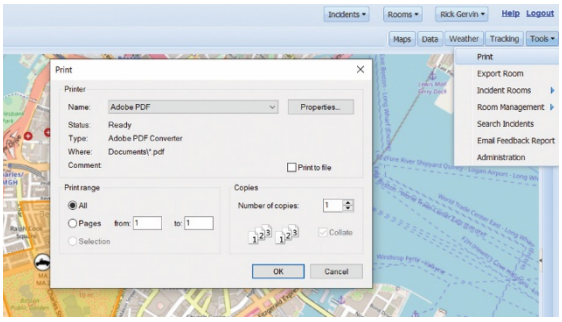
Tools Dropdown Menu

The Tools Dropdown button provides the NICS user with additional options to manage rooms as well as users. It also provides some export and printing options, which can be useful for reporting the situation to other organizations or preparing briefings. From this button, you can also report bugs or issues with the application to the NICS development team, and search for other incidents.



Print the Map

In order to print the current map view you need to click on the Tools button. A dropdown menu will open; select the Print option from the menu. This will open the native printer application you use to print on your computer.



Incident Rooms

Incident rooms provide a list of rooms that currently exist in this incident. You are able to add an overlay of that room (if you have permission) to any other room or workspace you're in.

To access the incident rooms button select the Tools button from the upper right side of the screen. Click on the Incident Rooms button from the drop-down menu, and check the box next to the room you would like layered.

Room Management

See Managing Rooms in Section 3, page (26).

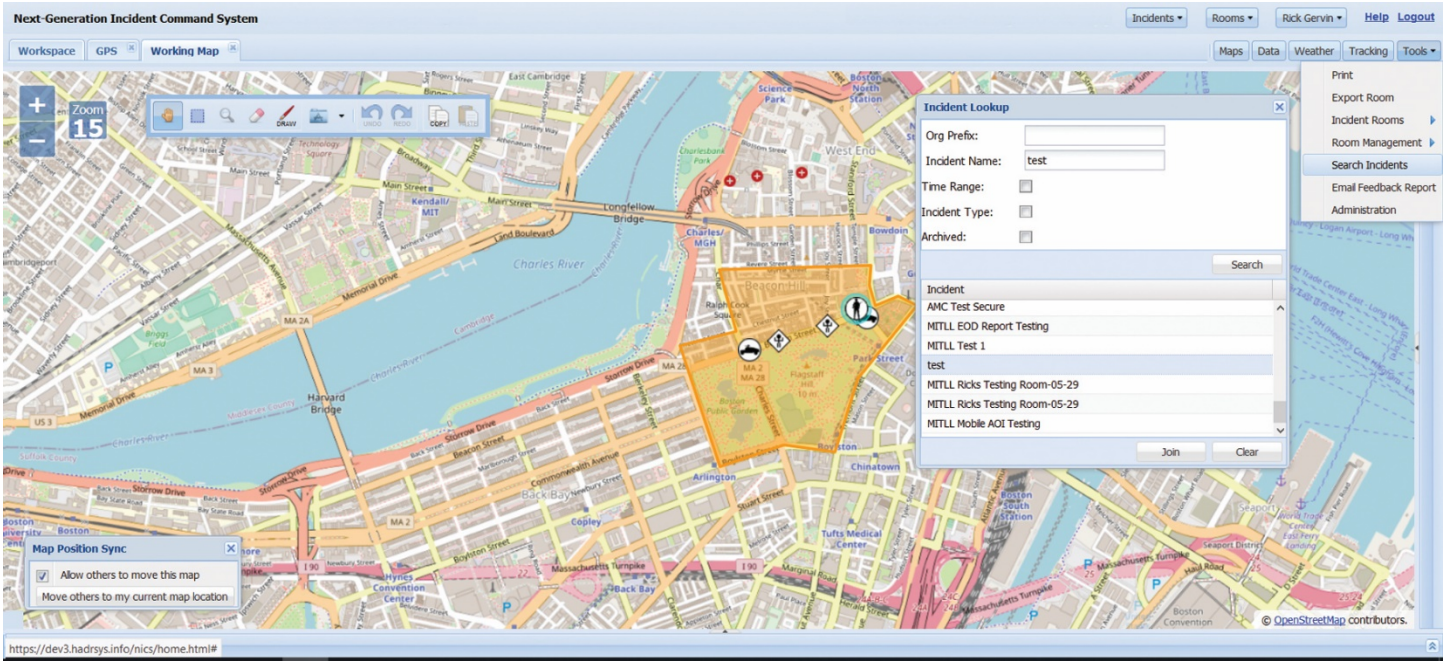
Search Incidents

Once logged into NICS, you are able to quickly search for other incidents by selecting the Tools button. When the drop-down window opens:

Select the Search Incidents button to open the Incident lookup window.
Type the name of the incident into the text box and click the Search button.

The bottom of the window will display all the like-named incidents.

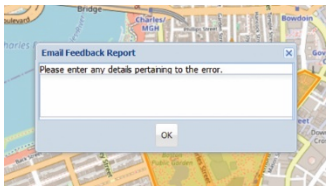
Select the incident you want to join, and click the join button at the bottom of the window.



Email Feedback Report

Feedback reports are a critical tool for the development team to be able to correct bugs in the system. To submit a feedback report, select the Tools button on the right-hand side of the screen.

In the dropdown menu that opens, select the Email Feedback Report.
Write a detailed description of the problem and click the OK button when finished.



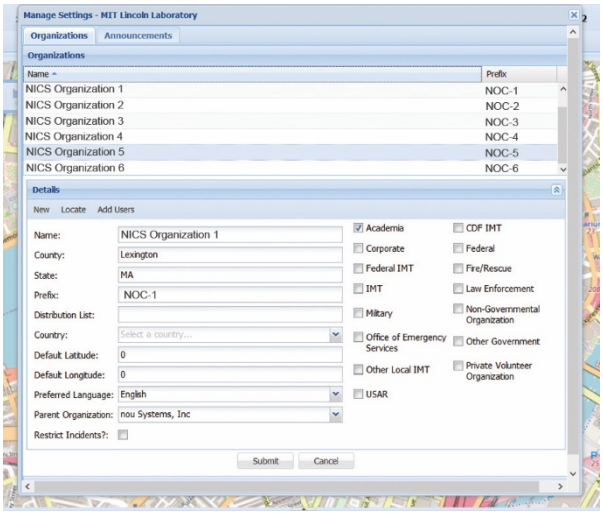
Your report has been sent.

Administration

The Administration panel allows the NICS admin user to make changes to organizations involved in the incident, or add new organizations. To access the Administration panel, click on the Tools button on the right-hand side of the screen. A drop-down menu will open.

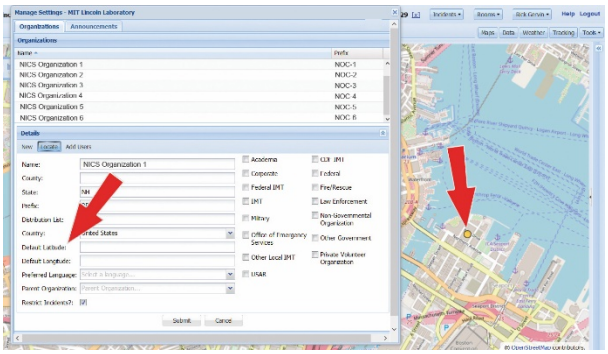
Click on Administration.

Once the Manage Settings popup window opens, select the organization you want to manage or scroll down a little to add a new organization. Once you select an organization from the list, the panels below will auto-populate with that organization's information. You can update or make corrections as needed to the organizational information.



Once you have updated the information click the Submit button to commit the changes. If you need to add an organization to the incident:

1. Click on the NEW button just below the Details header. This will clear any data that was in each field.
2. Fill out the organization's information.
3. Use the Locate button to populate the Default Latitude and Default Longitude fields by clicking on Locate, and then clicking on the desired area on the map.
4. Select the closest check box as to what type of organization you are adding.
5. Click the Restrict Incidents checkbox to restrict all incidents created by this organization to be accessible only by this organization.
6. To add users to the organization, click on the Add Users button next to the Locate button at the top of the screen.
7. Add all users to your organization.
8. Once you have entered all the organization's data and have added your users, click Submit to commit the organization to the incident.



Your organization is now created in the system and will appear in the list of organizations at the top of the window.

You can access your organization and make changes if needed by following the same steps.

Enable / Disable Users

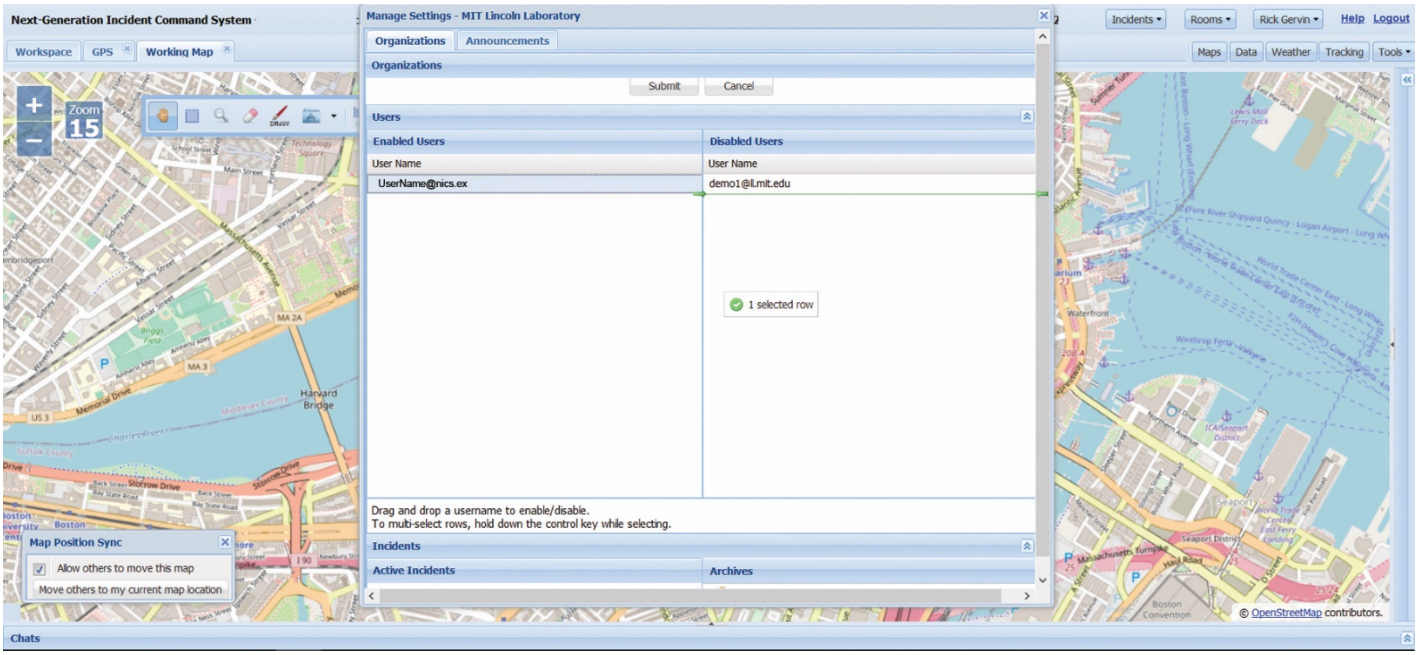
In the User section of the Manage Settings window, you can enable or disable users from the organization simply by dragging and dropping the users from one column to the other.

To multi-select rows, hold down the control key while selecting.

To change a user's role or other information, double-click on the username.

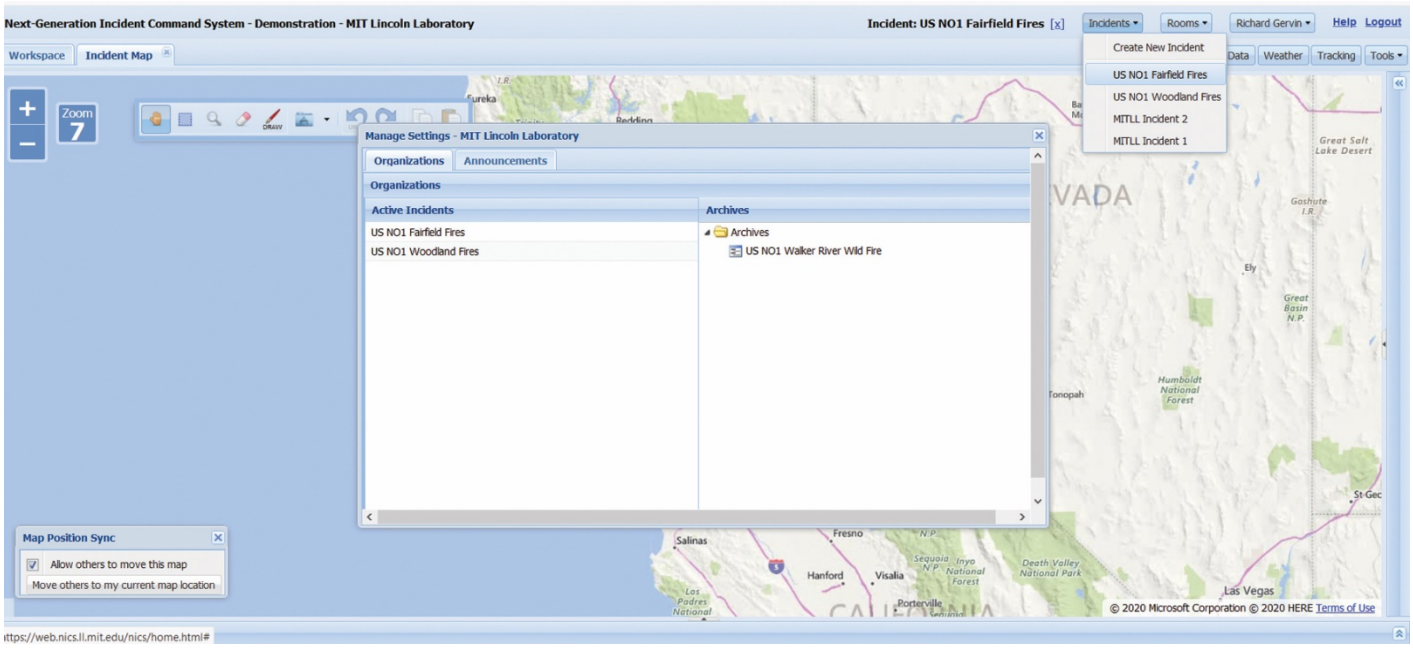
An account information window will appear.

Note: Only super users can promote a user to super.



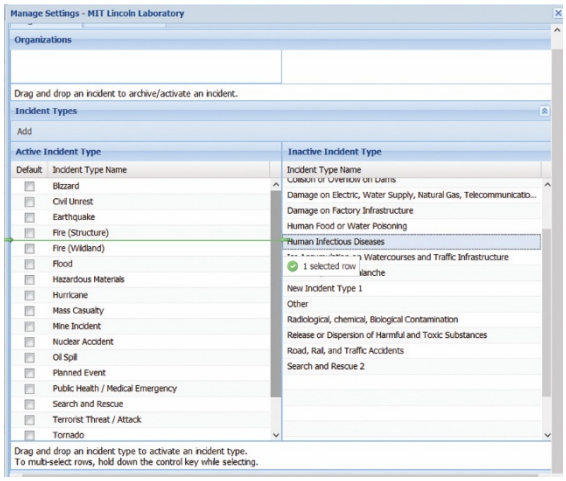
Archiving an Incident

Once an incident has been resolved, you can archive it by dragging and dropping it from the Active column into the Archive column. You can also reactivate an incident by selecting the archived incident, then dragging and dropping into the Active column.



Incident Type

The Incident Type section lists the available incident types that can be assigned to an incident for this organization.



Select all that apply from the Inactive list and add to the Active list by dragging and dropping. To multi-select rows, hold down the control key while selecting.

Clicking the Default checkbox indicates that this is a default incident type for this organization, information that is used in external consumer software developed by different NICS adopters.

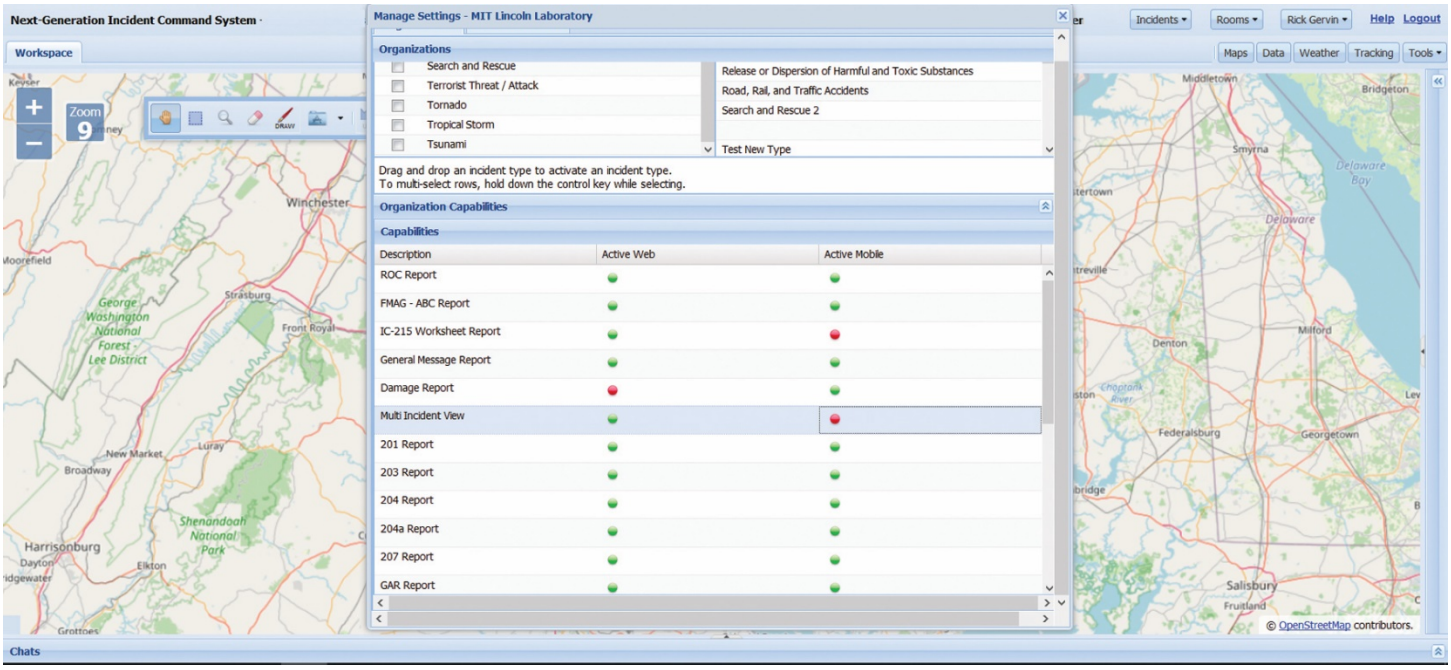
The name of the incident type can be edited by double-clicking on a row.

A new incident type can be added by clicking on the Add button.

Organization Capabilities

An admin or super user has the ability to configure the capabilities that are displayed in the NICS side panel.

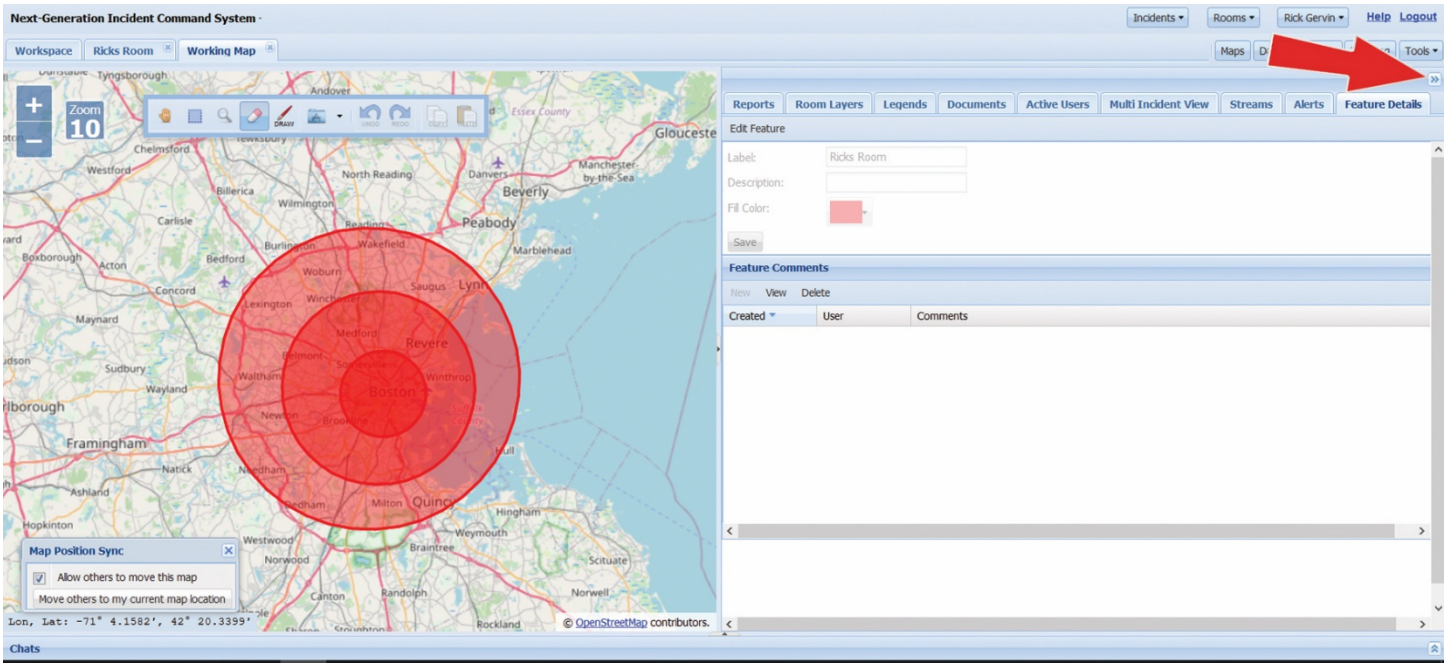
Click on the Active Web red/green buttons to enable or disable this feature in the NICS web client.



Section 6
Side Panel

The side panel is located at the far right edge of the screen and consists of up to nine tabs, depending on your administration's configuration.

1. Reports
2. Room Layers
3. Legends
4. Documents
5. Active Users
6. Multi Incident View
7. Streams
8. Alerts
9. Feature Details

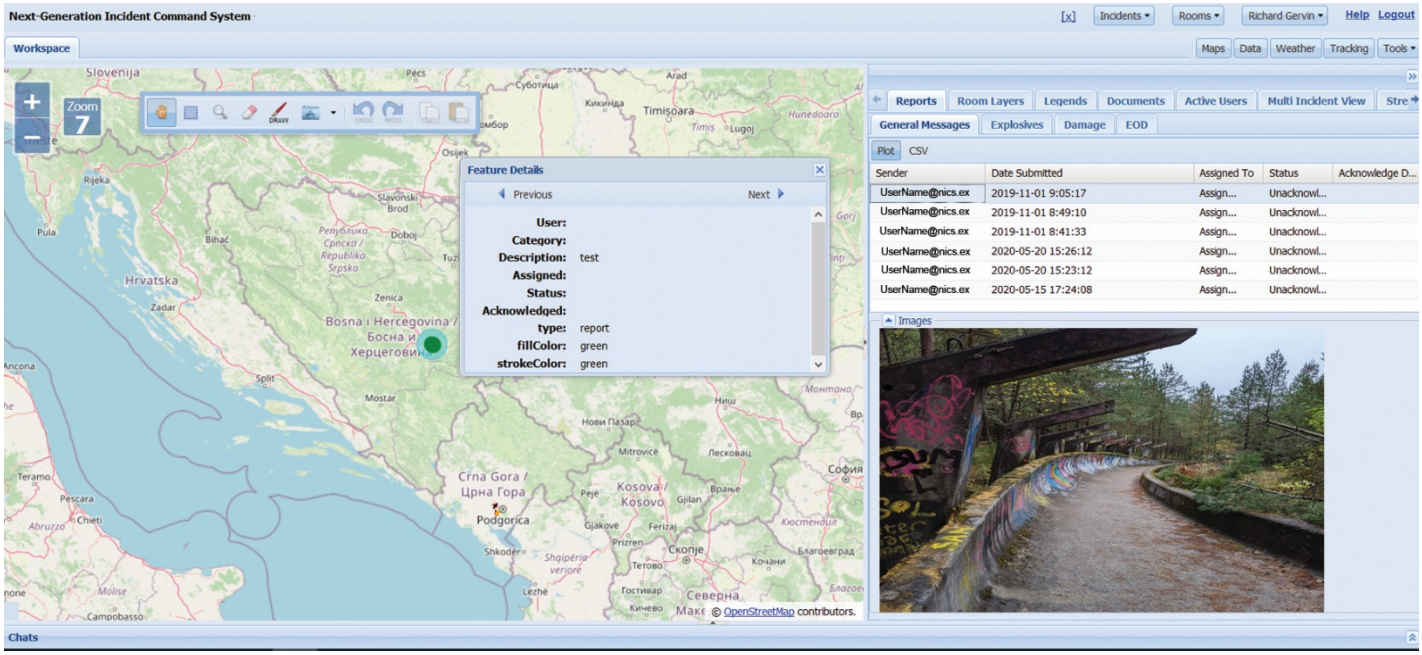


Reports

General Messages

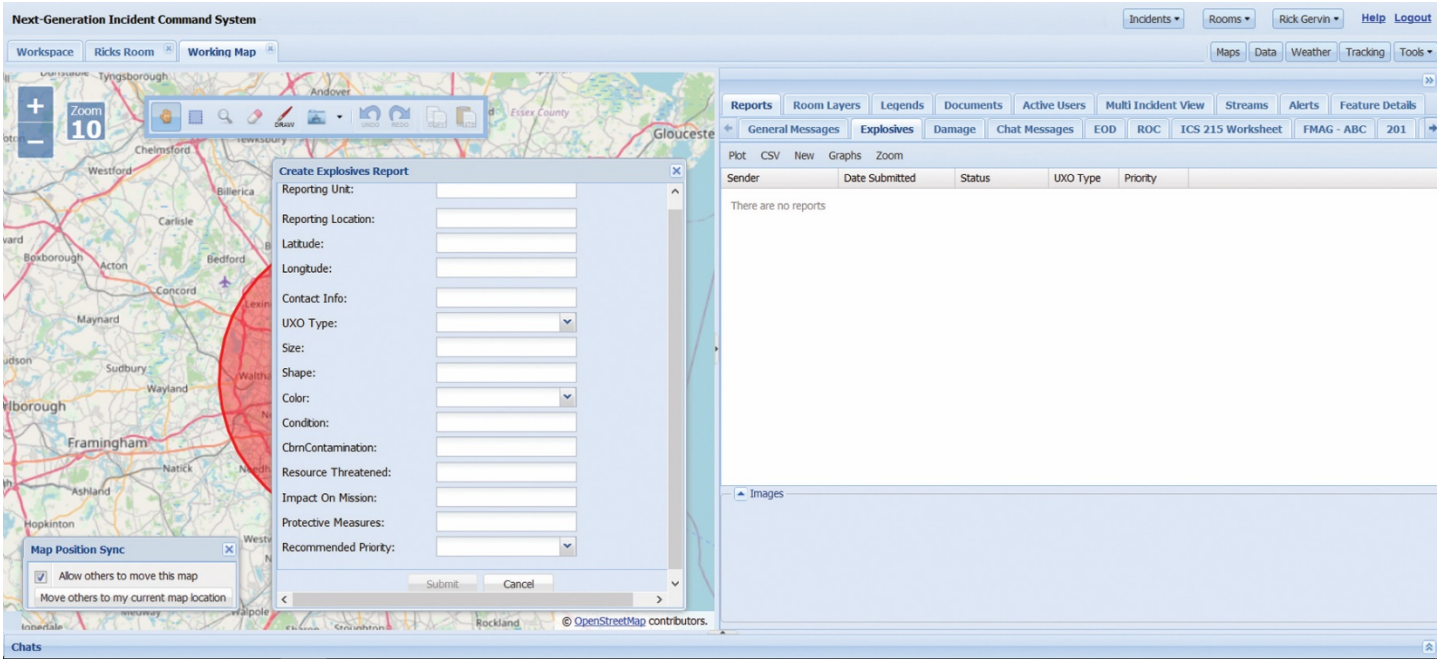
1. General Messages are collected by the NICS mobile application and displayed in real time in the Reports > General Messages tab.
2. When joining an incident, before joining a room, all General Messages will be displayed.
3. Once a user joins a room, the display is filtered to only display General Messages associated with that room.
4. Click **Plot** to geo-locate the General Message report on the map.
5. Click the point on the map to highlight the General Message in the table.

6. Click the row in the table to view the image associated with the General Message.
7. Double-click on the row in the table to view a popup with further details about the message.



EOD Report

Similar to other reports like the General report, the EOD report has a form with contact people/address descriptions, remarks, lat/lon, etc. Users can take a picture, and also can add UXO reports to the EOD report, where they'd attach pictures of the unexploded ordinance



Room Layers

Imported data layers that are displayed here and can be turned on or off to bring them into a room. (See importing data layers)

- Click on the opacity column to change the opacity of the layer

NOTE: The opacity change is persisted and all users in the room will see the update in real time.

Legend

A user can right click on a layer in the Data, Tracking, or Weather tree and turn on the legend if one exists. The legend will also be displayed in this panel.

Documents

Documents can be uploaded to an incident or an organization. This make it easy to have all documentation in one location.

For example: border crossing memos were uploaded to this section during the 2019 NICS Montenegro Field Exercise reducing the border crossing process, allowing international responders to arrive at the Base of Operation in a record time.

To upload a document for a specific organization:

1. Make sure to choose that organization at login.
2. Click on Documents > Orgs.
3. Click on Add.
4. Browse to the desired document (NICS currently supports Word, Excel, and PDF).
5. Add a name and a description.
6. Click Upload.

To upload a document to an Incident:

1. Join the Incident.
2. Click on Documents > Incident.
3. Repeat steps 3 – 6 above.

To add an updated version of the document:

1. Highlight the row
2. Click on the Update button
3. Browse to the new version
4. Click Upload

A new time stamp will be added to the “Version” column.

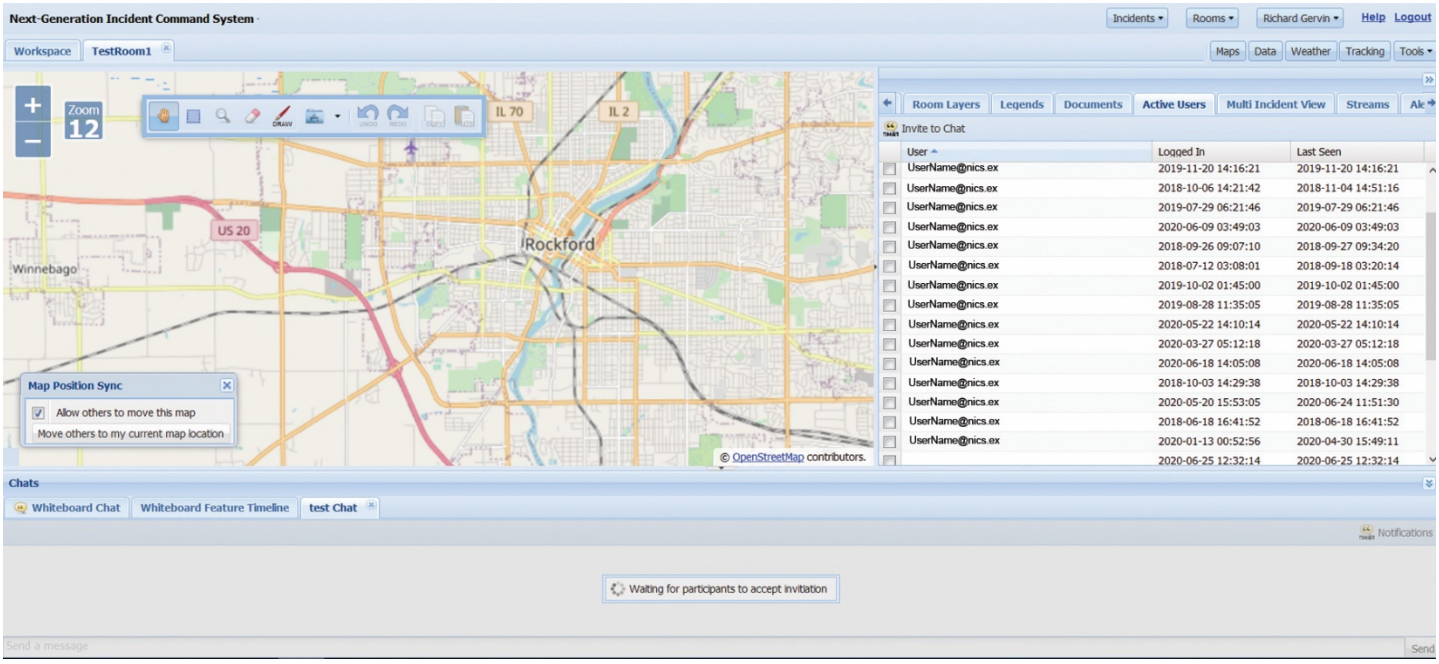
To download a document:

1. Highlight the row
2. Choose the version from the dropdown menu
3. Click **Download**

Active Users

Active Users is a list of all the NICS users who have logged into the incident. You can chat with anyone on the Active Users list by selecting the checkbox next to their name and clicking on the Invite to Chat button that becomes selectable.

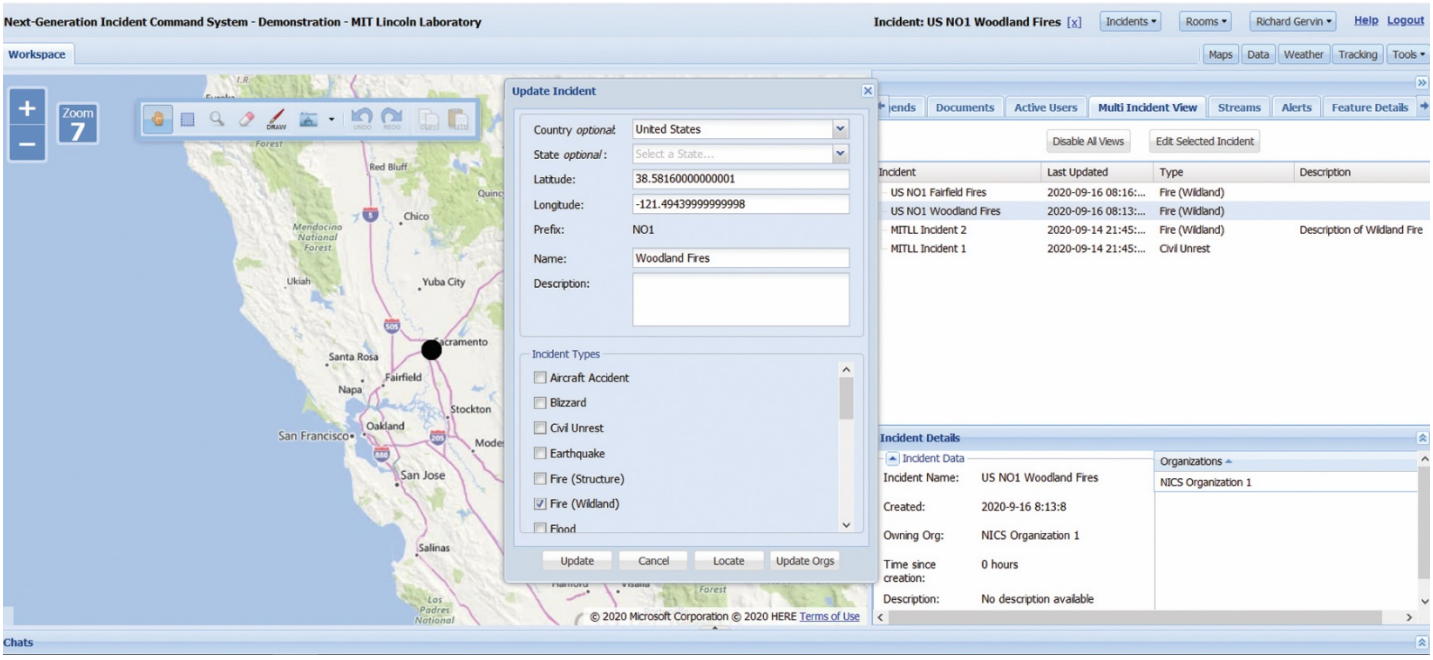
Once you have selected all the individuals you would like in the chat room, select the Invite to Chat. A popup window will open, name the chat room and click OK.



The chat will open in the bottom panel. (See Section 7 for Bottom Panel)

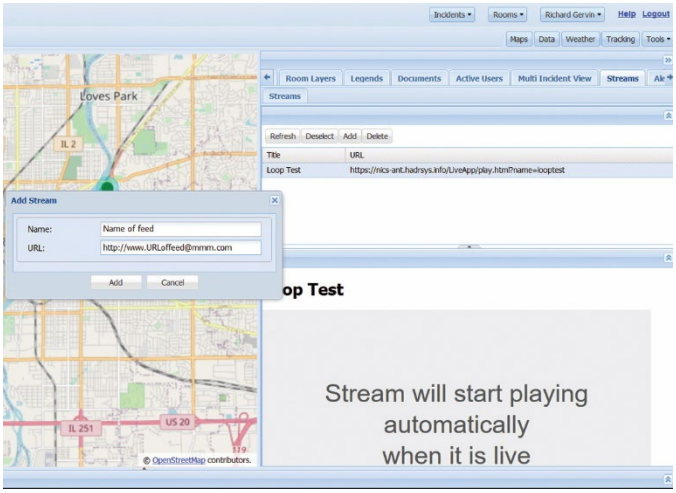
Multi Incident View

The Multi Incident View allows users to see all active incidents and get a short description of them. This is also where an Administrator or Super User can edit an incident, add organizations to an incident, and locate the center point of the incident by highlighting the incident in the list and clicking the Edit Selected Incident button. If the button is not enabled, the user does not have permission to edit the incident. Permission is granted to all super users and administrators of the organization that owns the incident. The owning organization is listed in the detail box when the incident is selected in the grid.



Streams

Streams is where you can add links to video, either hosted by your organization, or a public link to a video stream. It also allows the NICS users to manage multiple drone feeds displaying video from the requested drone.



To access the Stream feature, select the Stream tab from the side panel.

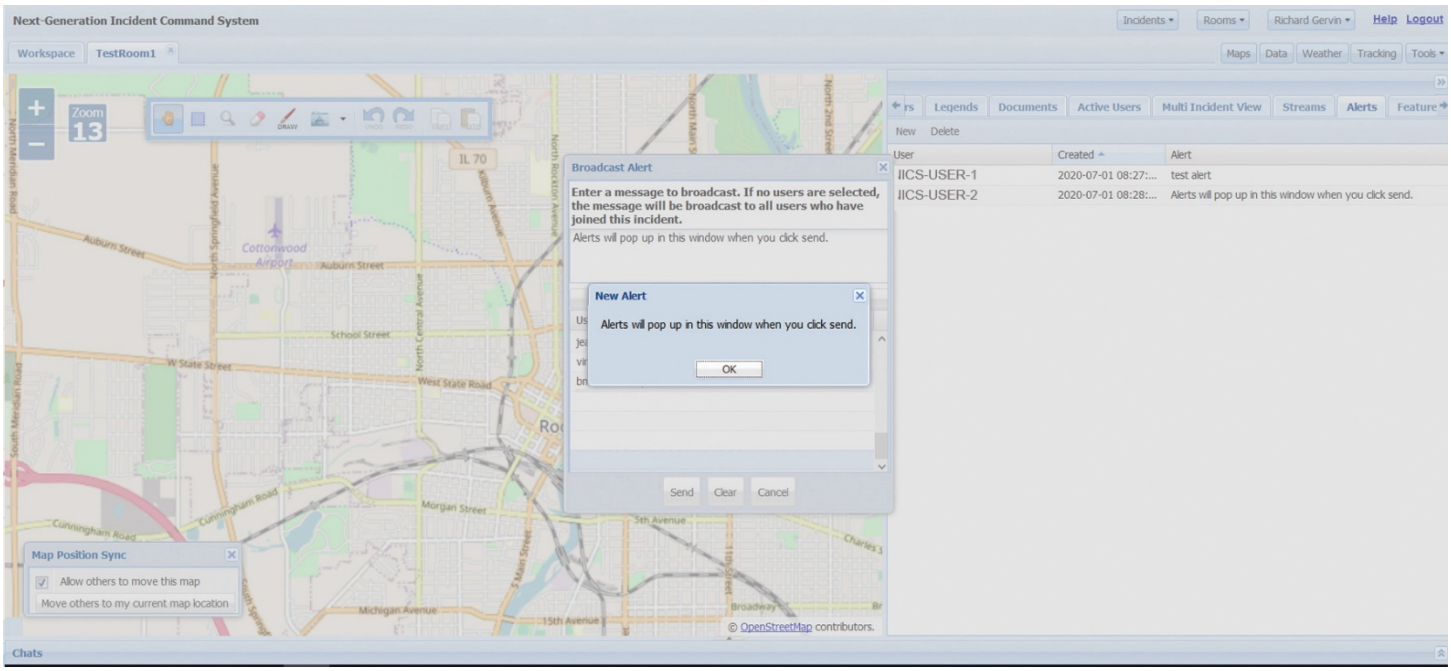
1. Select the Add button to add a new streaming video feed.
2. Give the feed a name and provide a URL to the video feed.
3. Click Add.

Alerts

You can send out Alerts to an individual NICS user, or you can broadcast the Alert to everyone by selecting the side panel and then clicking on the Alert tab. This will open a list of previous alerts in a waterfall grid you can double click on the alerts in the grid to see the full alert or you can create a new alert or delete old ones.

To create a new alert select New at the top of the window.
Select the users you would like to alert.
Write the message.
Click Send at the bottom.

If no users are selected, the message will be broadcast to all users who have joined this incident.



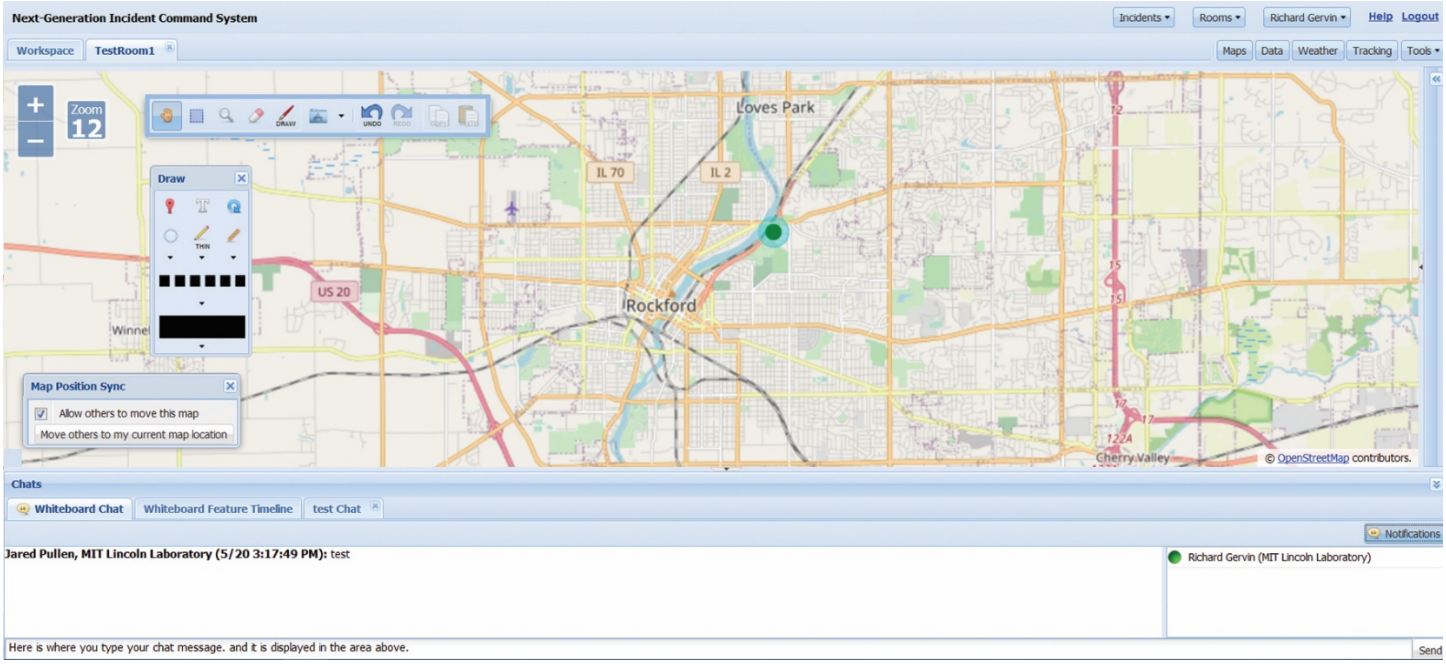
Section 7

Bottom Panel, Chat, & Timeline

Whiteboard Chat

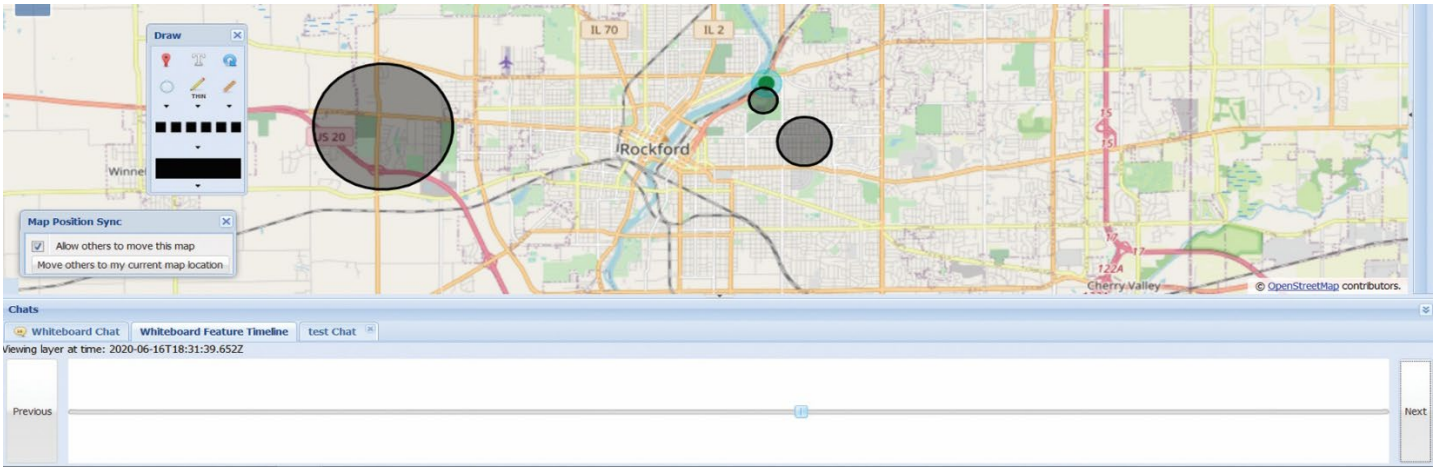
Each collaboration room has an associated Chat whiteboard. Click on the bottom panel arrows to open the chat feature. It works like any other chat web chat room; simply type your message in the text line and press the Enter key or click on the Send button.

This chat message will be sent to all the users logged into the incident. You can private message an individual NICS users by opening the side panel clicking on the active users and selecting invite to private chat. The private chat will be listed in the chat tabs at the top of the chat room window



Timeline

The timeline feature allows NICS users to play back the order in which the map mark-up was added to the collaboration room.



Section 8

Mobile Application Version 7.0.7

Introduction

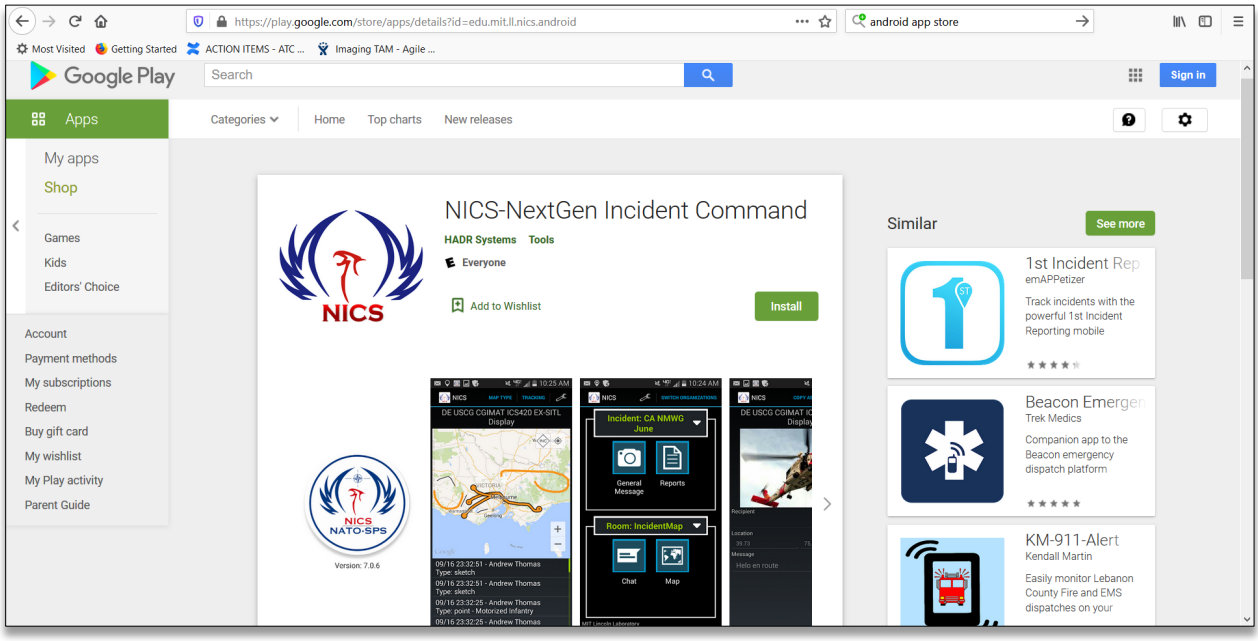
The Next Generation Incident Command System (NICS) also supports a robust Android mobile application that provides additional tools to the first responders operating in the field. These tools allow the responders to communicate via chat message, send field reports, update/draw on the incident map, and gain overall situational awareness of the incident as it unfolds.

The App can be downloaded for free from the Google Play Store by following the link below:

https://play.google.com/store/apps/details?id=edu.mit.ll.nics.android

System requirements

Current Version 7.0.7 (as of the writing of this document)
Download Size 19M
Requires Android 5.1 and up



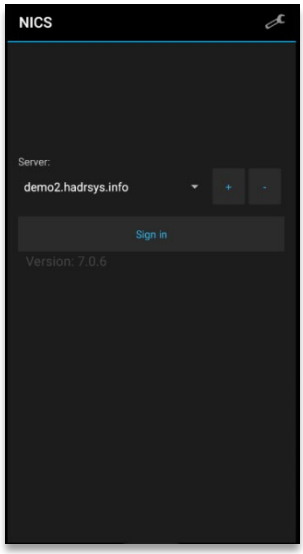
Getting Started

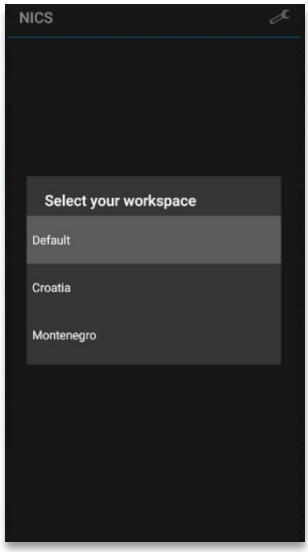
After downloading/installing the NICS mobile app, select the app icon on your mobile device (i.e., Cell phone, Android tablet, etc.) to open the app and you will be presented with the loading/splash screen. For the most up to date features, ensure you have the latest version installed.

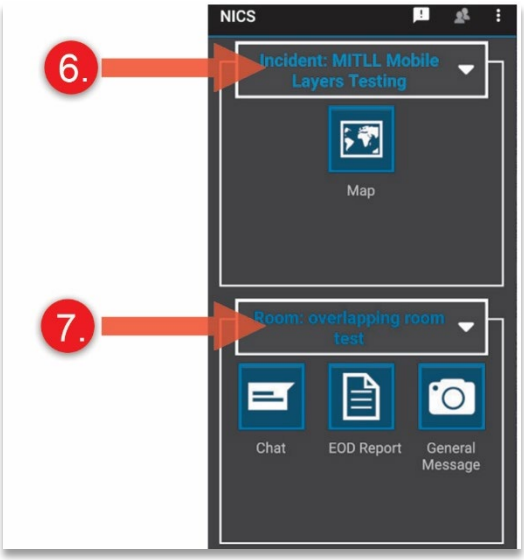
Once the app has loaded you will be presented with the first part of the login process.

1. Select the server in which your organization is operating, or add a new server
2. Select the sign in button
3. Enter your credentials (email and password). If you have not previously registered, select the "Register" text at the bottom of the screen

If you are part of more than one workspace or organization, you will be prompted to Sign in and:







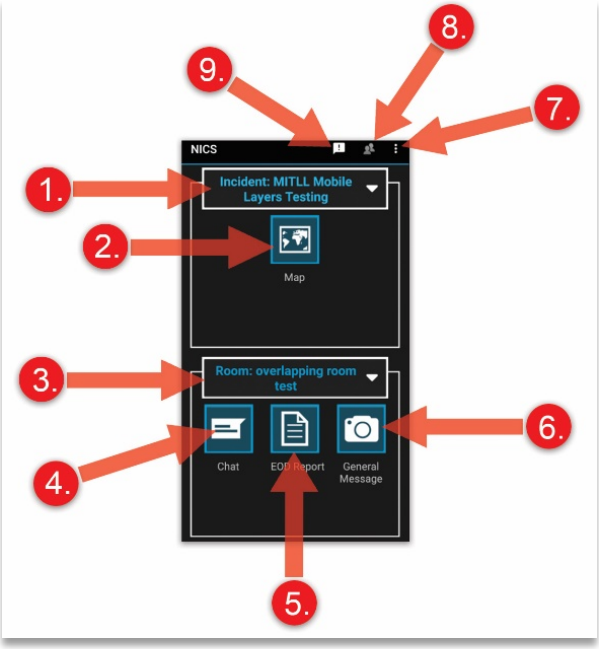
4. Select your Workspace
5. Select your Organization
6. Select an incident

NICS is organized by named incidents. During a natural or man-made disaster multiple incidents can occur simultaneously.

7. Select a room

Within each incident, there are separate collaboration areas called Rooms. These rooms are meant to separate areas of responsibility, and to allow individual teams to collaborate on their part of a larger incident. Rooms can be open to anyone or restricted to certain users.

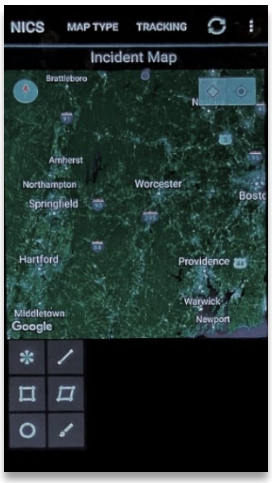
Overview Page, User Interface



1. Incident Selection dropdown menu
2. Map view
3. Room selection dropdown menu
4. Chat Messaging
5. Explosive Ordinance Disposal Report (EOD)
6. General Messages
7. Settings/Logout/NICS Help
8. Organization Selector
9. Broadcast Alerts

Map View

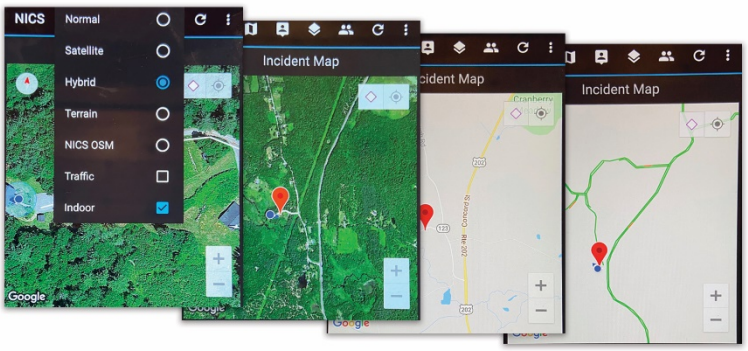
The map view provides NICS operators a working map that can be marked up with various tools to help provide situational awareness as an incident unfolds. This view is also where you can overlay multiple layers from different rooms and apply your tracking layers for real-time team/individual tracking.



Map Type

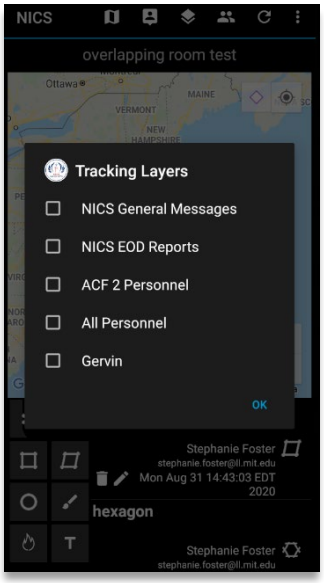
1. Normal
2. Satellite
3. Hybrid
4. Terrain
5. NICS OSM

You can also indicate that you are indoors and can toggle the traffic layer on by clicking the checkbox next to the appropriate option.



Tracking Layers

Tracking Layers are created using the web app. By Enabling the tracking layer feature in the NICS mobile app the NICS user can track the locations of their fellow responders, as long as the users have the tracking enabled on their mobile device. You can also track grouped users, teams, as well as the location of reports and messages. To access the Tracking Layers feature:



2. Select the checkbox next to the layer type you wish to track
3. Select the OK text at the bottom of the screen

Once a tracking layer is enabled it will appear on the map. For example, an individual would be shown as a red dot, where as an EOD report is the US Army EOD unit marker. Your organization can have the team/individual symbology updated from the web app if needed.

Room Layers

The room layers are layers that are set specifically for the selected collaboration room. The layers are added to the room on the web application. The supported layer types as of now are: GeoJSON, WFS, ArcGIS, and WMS. More types will be added in the future.

Incident Rooms

While in the map view the NICS user can overlay data from other rooms onto their current map view. To do this:

2. Select the check box next to the room you wish to see the data from.
3. Select the OK text at the bottom of the popup window.

You can select multiple rooms at the same time if needed.

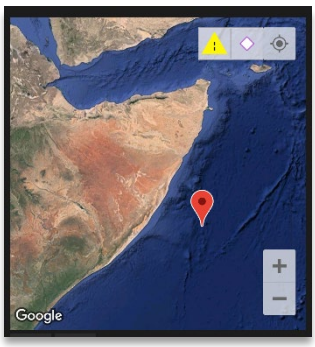
Additional Dropdown Options

To access additional options from your map page, select the triple vertical dots/menu icon on the top right side of the page. The following options are available:

1. **Geocode Location**

This option allows you to find a location using the various Geocode options:

a. Address/Place
b. Degrees, Minutes, Seconds
c. Degrees, Decimal Minutes
d. Decimal Coordinates
e. USNG/MGRS
f. Coordinate Reference System



Select the Geocode option you wish to use and fill out the required fields. Select the Locate button at the bottom of the popup window.

2. **Show Alerts**

This option will show all the current Broadcast Alerts with the poster's information, date, and time of the Alert.

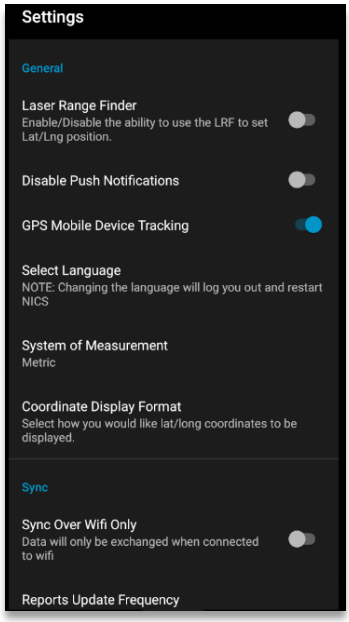
3. **Switch Organizations**

If selected, and you have authorized access to other organizations, a list of organizations will open in a popup window. Select the organization you wish to switch to and select the OK text at the bottom of the window.

4. **Settings**

The settings option is the same as the settings option on the overview page. Settings are broken down into two parts:

Part 1. General Settings



a) Laser Range Finder

Enables/Disables the ability to use the LRF to set your Lat/Long position

b) Disable Push Notification

When disabled, push notifications will no longer display the popup notifications that a new chat or report is available.

c) GPS Mobile Device Tracking

Enables/Disables the NICS mobile app from sharing your location via the onboard GPS. If this is disabled other responders will not see your location on the tracking layers.

d) AOI Hazard Detection

e) Select Language

This setting allows the user to change the language the NICS mobile app displays. The default language is English. Currently the only available languages are:

a. English
b. Spanish
c. Montenegrin

NOTE: If the language is changed during the operation of the mobile app, the app will force a restart.

f) System of Measurement

This allows the user to switch the unit of measurement from Metric, Imperial, or Nautical.

g) Coordinate Display Format

This option lets you select how your Lat/Long coordinates are displayed while using the NICS mobile app.

Part 2. Sync Settings

a) Sync Over Wi-Fi Only

When selected data will only be exchanged when you are connected to WiFi.

b) Reports Update Frequency

Select how often your reports will be updated.

c) Map/Chat Update Frequency

Select how often your map and chat will be updated.

d) MDT Update Frequency

This is how often NICS polls for the mobile device tracking layers, which would then be updated on the map at intervals set by the WFS Layer Update Frequency.

e) WFS Update Frequency

f) Hazard Detection Update Frequency

g) Clear Local Map Data

Clears the local Database, the next data pull will then populate with the most recent data

h) Clear Local Chat Data

Clears the local Database, the next data pull will then populate with the most recent data

i) Clear Local Report Data

Clears the local Database, the next data pull will then populate with the most recent data

5. Logout

Logout will log you out of the NICS mobile app and return you to the login page.

6. Debug Console

The debug console shows logs that are happening in the code. This has two functions.

a. Helps with debugging, any errors appear directly in the app.

b. Users can take a screenshot of the error log to send to tech support if they are noticing an issue.

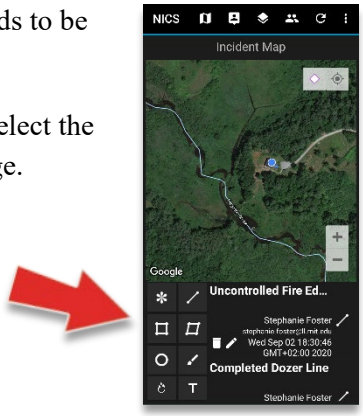
7. NICS Help

NICS Help is a link to the NICS help website which can provide additional instruction on the Mobile and web apps.

Drawing on the Map

Drawing is one of the primary methods of communication in NICS. When information needs to be transmitted quickly and efficiently, a sketch on the map is often the most effective way.

To begin drawing, open the map view in the room you would like the drawing to appear. Select the drawing tool you would like to use from the drawing tools at the bottom left side of the page.



Drawing Tool Options

ICON	TOOL	DESCRIPTION
	Symbol/Marker Placement	Add symbology to the map to help provide situational awareness
	Draw Line	Draw basic lines
	Draw Square	Adds a square to the map
	Draw Polygon	Addes a filled polygon to the map
	Draw Circle	Adds a circle to the map
	Freehand Drawing	This allows you to free draw lines / shapes on the map
	Draw Fireline	Select from a variety of fire line options
	Label	Place text on the map

Placing Symbols on the map

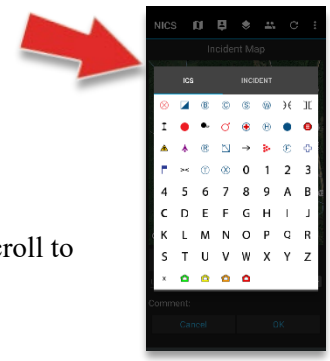
You can place symbols and markers onto the map via the mobile app to help provide additional situational awareness. In order to add symbols/markers to the map:

1. Select the Symbol/Marker icon

This will open the symbol placement options at the bottom of the map.

2. Select the "Select Symbol" button to open the symbol options.

With the symbol option window open, choose the symbol you would like to place. You can scroll to see more more symbols by swiping left on the icon header.



3. Place the symbol by tapping the map on the location where you would like the symbol to appear on the map. To quickly place the symbol at your current location select the location icon next to the Lat, Long.

Note: You can type the Lat, Long into the blank text fields if you have them. You can also relocate the symbol by tapping a new location before selecting the OK button.

4. You can add a comment or description that will accompany the symbol by selecting the text area labeled "Comment" and typing your comment/description.

5. Once you are satisfied with the location of the symbol, select the OK button at the bottom of the page. This will add it to the map for others to see.

Drawing a Line on the Map

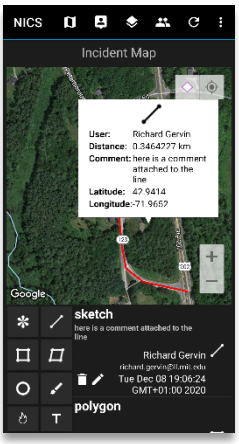
There are many reasons you might need to draw lines on the map. Whether it's a fire line or you need to convey that an area is off limits. The line tool is a quick way to do this. To place a line on the map:

Note: To change the line color, before drawing your line, select the color picker button and choose your color.

2. Tap the map location where you would like the line to begin, then continue tapping out your route. If you make a mistake on the placement you can select the remove selected point button (This will remove the last point placed).

3. Once you are satisfied with the placement of your line, you can change the line thickness by moving the slider left for thinner and right for thicker. You can also add a comment to be associated with the line.

4. To commit the line to the map, select the OK button at the bottom of the page.



Note: You can view the total distance of the line by selecting the ruler icon next to the Lat, Long.

Draw a Square on the Map

The Square tool can be used to mark an area on the map. To add a square to the map:

2. Select the color of the square by selecting the color picker button (The default color is white).

3. To begin drawing a square, tap the map where you would like the bottom left hand corner of the square to be placed.

You can adjust the width of the outer line by sliding the scroll bar to the left for thinner and right for thicker. You can add an associated comment by typing in the text area next to “Comment”.

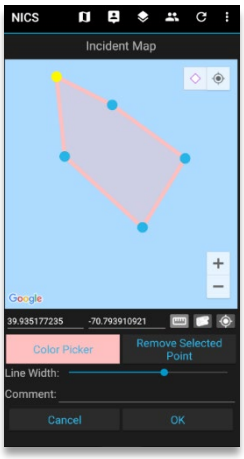
4. To commit the square to the map select the OK button at the bottom of the page.

Draw a Polygon on the Map

The polygon tool can be used to more accurately mark an area on the map. To add a polygon layer to the map:

2. Select the color of the polygon by selecting the color picker button (The default color is white).

3. Begin drawing your polygon shape by tapping the map at each corner of the area you want the highlighted.



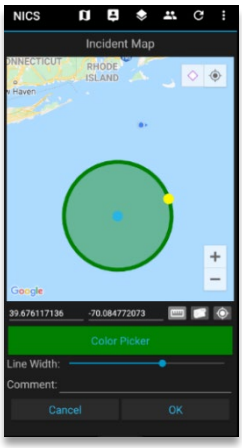
You can adjust the width of the outer line by sliding the scroll bar to the left for thinner and right for thicker. You can add an associated comment by typing in the text area next to “Comment”.

4. To commit the polygon to the map, select the OK button at the bottom of the page.

Note: You can view the total land area squared by selecting the ruler icon next to the Lat, Long.

Draw a Circle on the Map

To add a circle to the map:



1. Select the Circle tool from the tool icons at the bottom of the map page.
2. Select the color of the circle you wish to place.
3. To begin drawing a circle, tap the map where you want the center of the circle. Then tap the location of the circle's perimeter.

You can adjust the width of the outer line by sliding the scroll bar to the left for thinner and right for thicker. You can add an associated comment by typing in the text area next to "Comment".

4. To commit the circle to the map select the OK button at the bottom of the page.
5.

Note: You can view the total land area by selecting the ruler icon next to the Lat, Long.

Free Drawing on the Map

Having the ability to freehand draw on the map is a very powerful tool in NICS. This tool allows the user to draw polygon-like shapes with the stroke of the finger. To begin free hand drawing:

2. Select the color.
3. Enable drawing mode by selecting the free hand drawing icon next to the Clear Points button.
4. Using your finger, free draw the shape you want.

You can adjust the width of the outer line by sliding the scroll bar to the left for thinner and right for thicker. And can add an associated comment by typing in the text area next to "Comment".

5. To commit the free hand drawing to the map select the OK button at the bottom of the page.

Note: You can view the total land area by selecting the 'measurement tool toggle button' *next to the Lat, Long.*

Drawing Fire lines on the Map

Like the NICS web application, the mobile app is rooted in wildfire response, and has the fire line drawing options. These options allow the user, while in the field, to draw or update the location of various types of fire lines. To access the fire line drawing tool options:

2. Select the fire line you want to draw from the eight available options on the bottom right side of the page.
3. Like drawing a regular line, tap the start and stop points of the line.

Symbol	Name	Description
	Planned Fire Line	A fire edge that is actively burning and spreading across the landscape.
	Secondary Fire Line	A fall back secondary fire line in case the fire jumps the main fire line.
	Completed Fire Line	A line indicating a control line has been completed around the fire, and any associated spot fires, which can reasonably be expected to stop the fire's spread.
	Fire Spread Prediction	The predicted area of the spread of the fire.
	Management Action Point	Management Action Points (M.A.P.s) are clearly specified incident conditions that, when reached, prompt a predefined modification to existing fire management actions, or trigger the implementation of new strategies and/or tactics.
	Completed Dozer Line	Completed fire line constructed by the front blade of a dozer. The map symbol for this line is often interpreted to encompass a fire line created by all mechanical means.
	Proposed Dozer Line	Proposed fire line constructed by the front blade of a dozer. The map symbol for this line is often interpreted to encompass a fire line created by all mechanical means.
	Uncontrolled Fire Edge Line	A fire edge that is actively burning and spreading across the landscape.

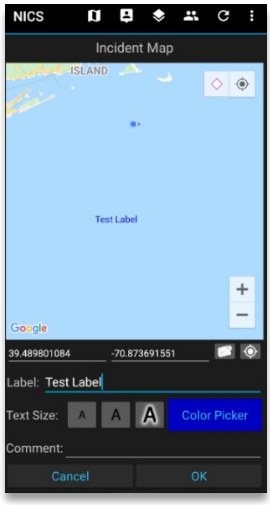
You can add a comment that will be associated with the fire line by selecting the comment text area and adding your comment.

Note: You can view the total land area by selecting the ruler icon next to the Lat, Long.

Adding Labels to the Map

To add a Label to the map view:

1. Select the Label icon tool **T** from the tool icons at the bottom of the map page.



2. Select the blank text area next to the Label title.
3. Enter the text by using the Android keyboard that opens and press the return key when completed.
4. Tap the map where you would like the text to appear.

You can adjust the text size and color by using the text size buttons (small, Medium, and large) and the color picker button.

A more in-depth comment can be associated with the label by selecting the comment text area and adding your comment.

5. To commit your label/text to the map, select the OK button at the bottom of the page.

Chat Messaging

One of the key features of the NICS mobile app is the ability to message other NICS users cross-platform. This ensures that communication is shared all in one place and is accessible to the appropriate personnel responding to an incident. To send a Chat message:

1. Select the Chat icon on the main page.
2. Tap the Enter chat message… text at the bottom of the page.
3. Type your message.
4. Select the Send button at the bottom right side.

Explosive Ordinance Disposal Report (EOD)

Explosive Ordinance Disposal (EOD) reports allow the NICS operators in the field using the mobile device to send EOD tasking reports to everyone in the incident. The EOD form is modeled off a typical EOD report that would be filled out on a desktop application. You can provide your team's information along with your location. You can fill out an EOD task form, which is a more in-depth description of the task that was performed by the team. You can also add as many Unexploded Ordnance (UXO) reports as needed that are relevant to the EOD form. You can upload an image or capture one from the onboard camera on your mobile device (Cell phone or tablet) for more context.

To view the EOD report board:

1. Select the EOD report icon on the overview page.

A list of reports will open in a new page, with the most recent report located at the top of the page. The report header will consist of:

- Sender's email address
- Date and time the message was sent

2. Select the report you wish to see.

Once the report is displayed you have the option of copying the report as a new report by selecting the **COPY AS NEW REPORT** text at the top of the screen.

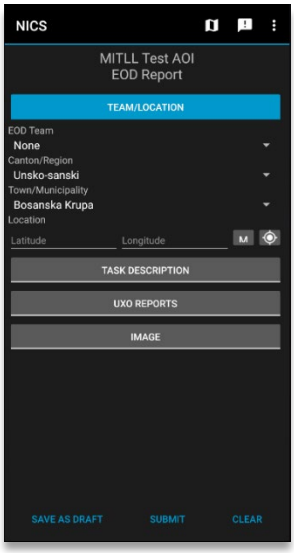
If you choose to copy as a new report you can update or change the text, and upload or capture new photos if needed. Once you have made your changes, select the submit button at the bottom of the screen to send the report.

If you choose not to send as a new report, select the back arrow at the bottom of the screen to close the message and return to the previous page of listed messages.

If you need to create a new message.

1. Select the plus (+) symbol at the top of the page.

2. Select the first tab to input team and location information.
   (You can toggle all of the tabs to show and hide them)
   a. Select the EOD team from the dropdown.
   b. Select the Canton/Region from the dropdown.
   c. Select the Town/Municipality from the dropdown.
   d. Add your location data.
   You can quickly obtain your current location by selecting the small location icon next to the latitude and longitude fields on the page. This will fill in the blank latitude and longitude fields for you. If you wish to indicate a different location than your current location, you can manually type the location into the Lat/Long fields or select the (M) icon which will bring up a map view. Find the location you want associated with the message (zooming in and out of the map using the two-finger method), tap the desired location, then select the confirm button that appears in the upper left side of the map.

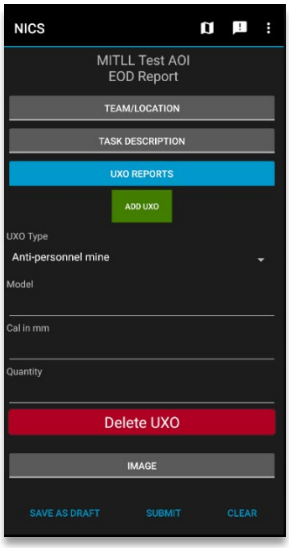


3. Select the second tab to input the task description.
   a. Select the task type from the dropdown.
   b. Enter a MAC ID into the text field.
   c. Enter the Medevac Point Time Distance into the text field.
   d. Enter the Contact Person into the text field.
   e. Enter the Contact Phone into the text field.
   f. Enter the Contact Address into the text field.
   g. Enter the Remarks/Opis into the text field.
   h. Enter the Expended Resources into the text field.
   i. Enter the Directly Involved in the Realization of the Task into the text field.

4. Select the third tab to add UXO reports.
   a. To add a UXO report, click the green button and fill out the form.

i. Select a UXO Type from the dropdown.
ii. Enter the Model into the text field.
iii. Enter the Caliber in mm into the text field.
iv. Enter the Quantity into the text field.

b. You can delete individual UXO reports by clicking the red button below each one.
c. You can add as many UXO reports as you need by clicking the green button. The forms will be added to the bottom for you to fill out.



5. Capture an image if needed by selecting the capture Image button, which will open the camera app on your phone or tablet.

6. Take the photo and select the check mark if the photo is what you wanted. If the photo is not what you wanted, select the trash can icon to delete it and take a new photo.

7. If you wish to upload an image that is already stored on your mobile device, select the browse gallery button and browse your photo gallery to select an image.

8. Once completed, select the Submit button to send the message.

General Messages

General Messages allow the NICS operators in the field on the mobile app to send situational reports to everyone responding to the incident, and is associated with the rooms the sender is in. You can provide a location associated with the message, along with the message text, and the option to upload an image either captured by the onboard camera, or one already on your mobile device (Cell phone or tablet).

To view the general message board:

3. Select the general message icon on the overview page.

A list of messages will open in a new page, with the most recent message located at the top of the page. The message header will consist of:

- Sender's email address
- Date and time the message was sent

4. Select the message you wish to see.

Once the message is displayed you have the option of copying the message as a new report by selecting the **COPY AS NEW REPORT** text at the top of the screen.

If you choose to copy as a new report you can update or change the text, and upload or capture new photos if needed. Once you have made your changes, select the submit button at the bottom of the screen to send the report.

If you choose not to send as a new report, select the back arrow at the bottom of the screen to close the message and return to the previous page of listed messages.

If you need to create a new message.

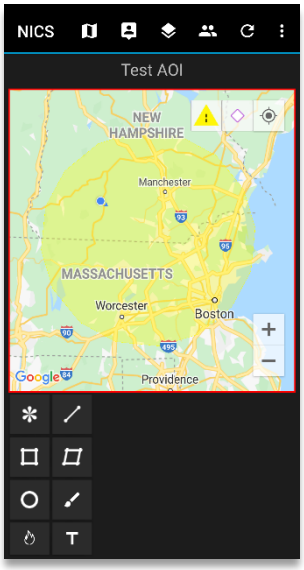
9. Select the plus (+) symbol at the top of the page.
10. Add your location data.

You can quickly obtain your current location by selecting the small location icon next to the Lat/Long fields on the page. This will fill in the blank latitude and longitude fields for you. If you wish to indicate a different location than your current location, you can manually type the location into the Lat/long fields or select the (M) icon which will bring up a map view. Find the location you want associated with the message (zooming in and out of the map using the two-finger method), tap the desired location, then select the confirm button that appears in the upper left side of the map.

11. Enter your message in the message field.
12. Capture an image, if needed, by selecting the capture Image button, which will open the camera app on your phone or tablet.
13. Take the photo and select the check mark if the photo is what you wanted. If the photo is not what you wanted, select the trash can icon to delete it and take a new photo.
14. If you wish to upload an image that is already stored on your mobile device, select the browse gallery button and browse your photo gallery to select an image.
15. Once completed, select the Submit button to send the message.

AOI/ Hazard Detection Service

Alerting on an Area of Interest (AOI) allows the NICS Web based users to designate an area by drawing on the map or uploading a datalayer and identifying the drawing or datalayer as a hazardous area. This area will appear on the map for both the web based users as well as mobile app users. If a responder enters the AOI/Hazard area they will receive an alert notification/warning that they have entered a hazardous area.



The warning will appear in a popup notification. If the responder selects the notification, the map will open and zoom to the hazard. While the responder remains in the hazard area the map view will have a red box around it, and an alert icon will be in the upper right-hand corner of the map.

AOI/Hazardous areas are added in the web app. See section 6 Side Panel, AOI Hazard Detection.

Settings/Logout/NICS Help

For Settings, see Settings section in **Additional Dropdown Options**

Logout will log you out of the NICS mobile app and return you to the login page.

NICS Help is a link to the NICS help website which can provide additional instruction on the Mobile or the web apps.

Organization Selector

This is where you select the organization you work for.

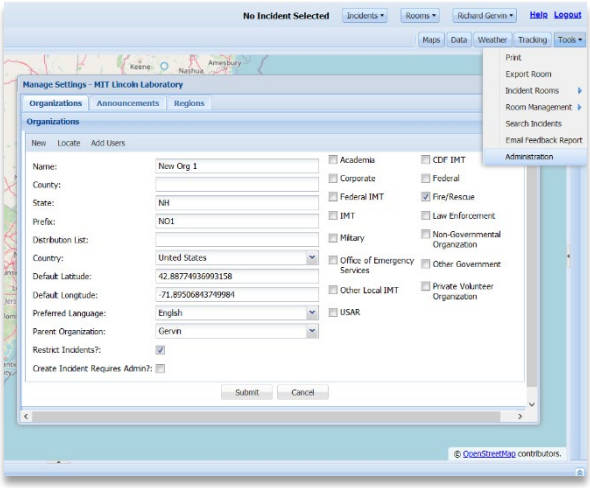
Broadcast Alerts

This will open the Broadcast Alert popup window showing all un-cleared Alerts.

NICS 7.0.7
User Manual Updates

Assigning Organizations to Incident Types:

Super Users can register an organization by selecting the tools button in the upper right hand side of the application window. This will open a popup menu.

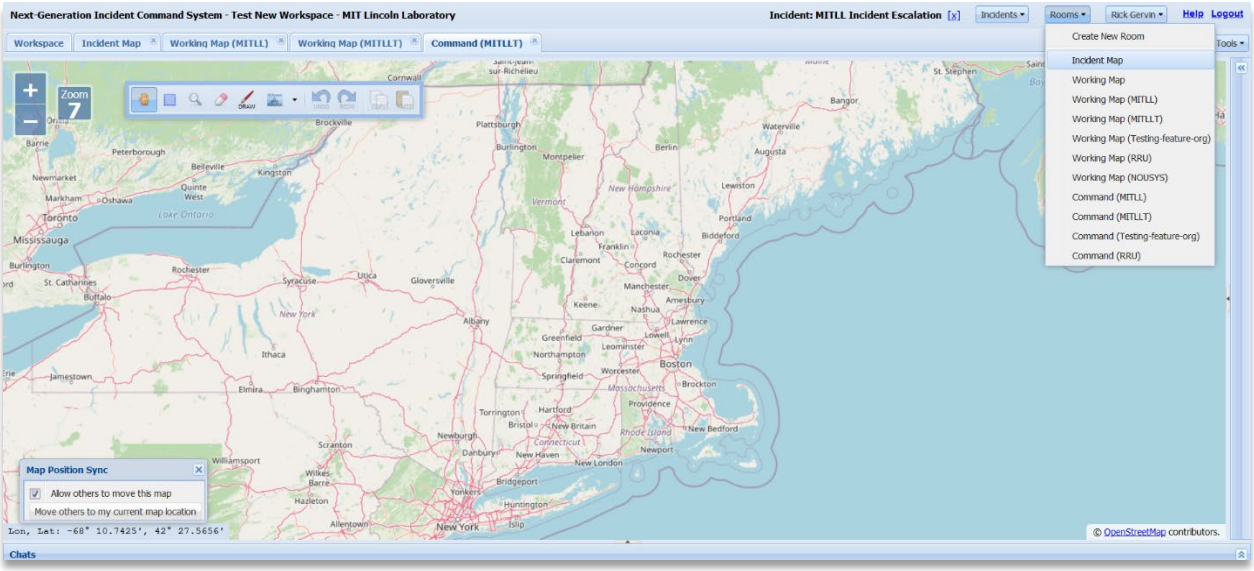


1. Select the Administration button.
   This will open the admin panel and will list all the registered organizations. To begin registering a new organization, scroll down to the Details section.

2. Fill out the organization's information. When you get to Default Lat/Long, select the locate button on at the top of the organization Details section, then select a point on the map where your organization is located (this will automatically add the coordinates for you).

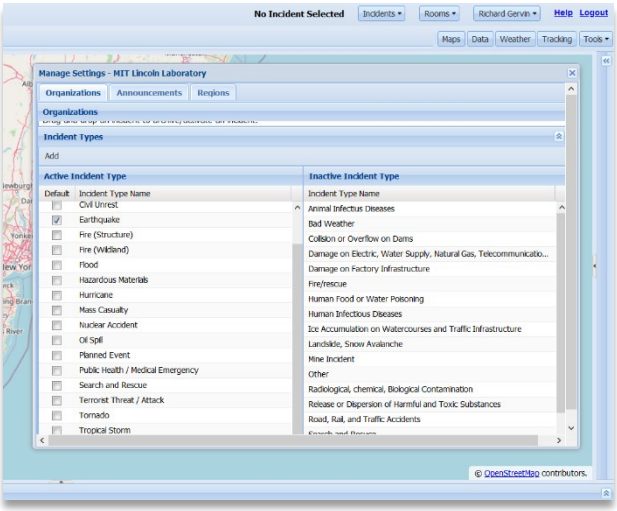
3. Once you have filled out all of your organization's information, select one of the options to the right. This indicates what type of organization you are.

4. Scroll down to the Active Incident Type section and select the incident types your organization responds to (you can select more than one). If the incident has already been created, scroll back up to the



Organization section and click the submit button. If the incident has not already been created submit the organization, then create the incident, then apply the incident type to the organization

By registering with an incident type, your organization will automatically have their own set of rooms generated when the incident type matches the Organization's incident type.



NOTE: There is a template property you can configure in the incorg-consumer's property file to customize how the rooms are named, however there may be some character limitations.

- Command room, denoted by the Organization's prefix in parenthesis, e.g., "Command (MITLL)"
  - The Command room is restricted to the Organization shown in parenthesis

- Working Map, denoted by the Organization's prefix in parenthesis, e.g., "Working Map (MITLL)"
  - The Working Map room can be viewed by all for collaboration

- There still remains a single Incident Map room per Incident

Parents dynamically inherit access to the Incidents and Collaboration Rooms of their children. So an Organization's parent organization is also given permission to view the Incident.

Incident Escalation:

An incident can be escalated from the child organization to that organization's parent organization. When an incident is escalated, new rooms are created that both the parent and child organization have permission to access.

- These escalated rooms are denoted the following way:
  - Working Map (Parent Org Prefix, Child Org Prefix)
  - Command (Parent Org Prefix, Child Org Prefix)

- These rooms behave in the same way as the ones created for the Child Org via Incident Type registration

AOI/Hazard:

Area of Interest/Hazard Areas can be identified on the map by the following steps:

1. Select your drawing tool (whether a polygon, circle, or square).

2. Select the area you wish to mark as and AOI/Hazard.

3. Open the side panel by selecting the small arrows on the right side of the application window.

4. Scroll over to the Feature Details tab in the tab menu.

5. Select the feature using the hand tool.

6. Select the Mark as Hazard button at the top of the side panel.

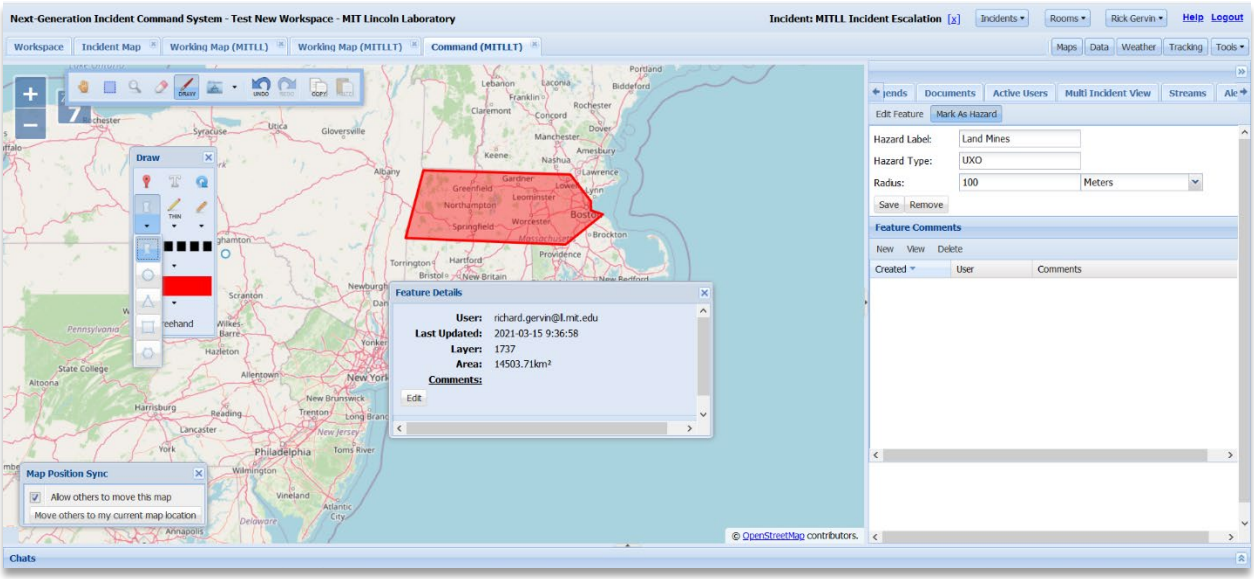
7. Label the AOI/Hazard (e.g., Land mines).

8. Add a Hazard Type (e.g., UXO).

9. Add a standoff distance/radius. This is the distance from the hazard at which you want the responders in the field to be notified that there is a hazard in the area. This can be measured in meters or kilometers by selecting from the dropdown menu.

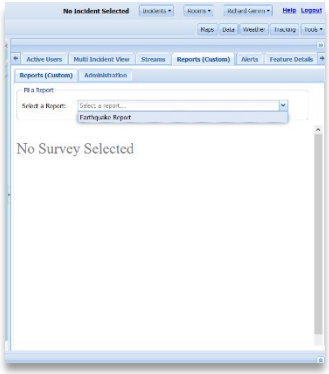
10. Select the save button.

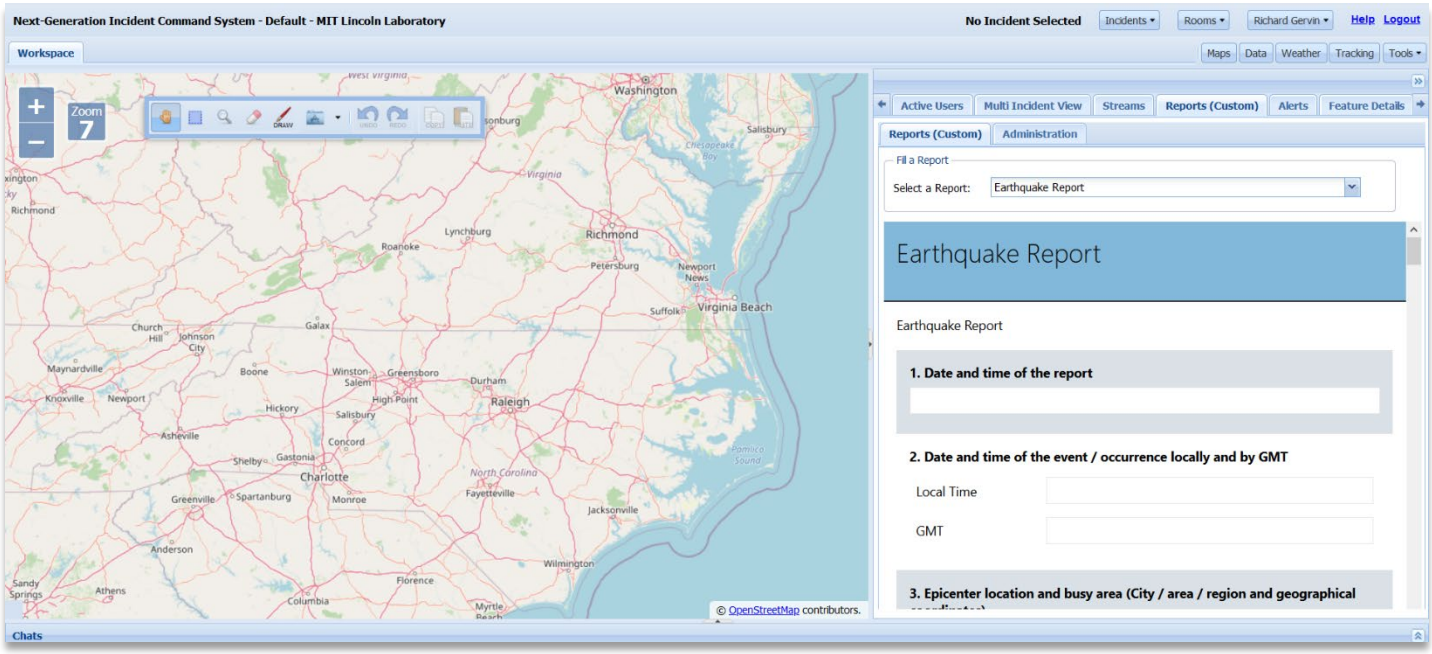
This feature will appear on the web application as well as mobile devices and will show the standoff area to the users in the field. If a responder enters the standoff area or the AOI/Hazard area, they will receive an alert via the mobile app. For more information on the AOI/Hazard mobile feature, see the mobile section of the NICS user manual.



Custom Reports with Incident Type Association:

NICS Users can create custom reports by going to www.surveyjs.io/creator, where you can use their drag and drop method of creating custom forms. As a super user, you can save the JSON representing the form, and associate it with an incident type. When you join an Incident, the Reports (Custom) tab will automatically be populated with all associated reports in the reports list dropdown menu. Users can then fill in the report.





Note: These reports act like the ROC, where you create an initial one, and then you can only create edits of past reports. Each version is saved.

Export KMZ:

There have been a few improvements to exporting KML/KMZ.

If the Collaboration Room you are exporting contains Markers, exporting will now package up those markers into a KMZ file that contains both the KML and the Marker files, so that the KMZ can be used stand-alone in third-party viewers, without the need to use network links to files on a web server.

Another addition to KMZ files is that now all exported drawings are written to the KML file, so that when they are loaded in a supported viewer, like Google Earth, the viewer will be able to pan and zoom in on the features.

If there are no markers in the Room, you will receive just the usual KML file.

NICS 7.0.7

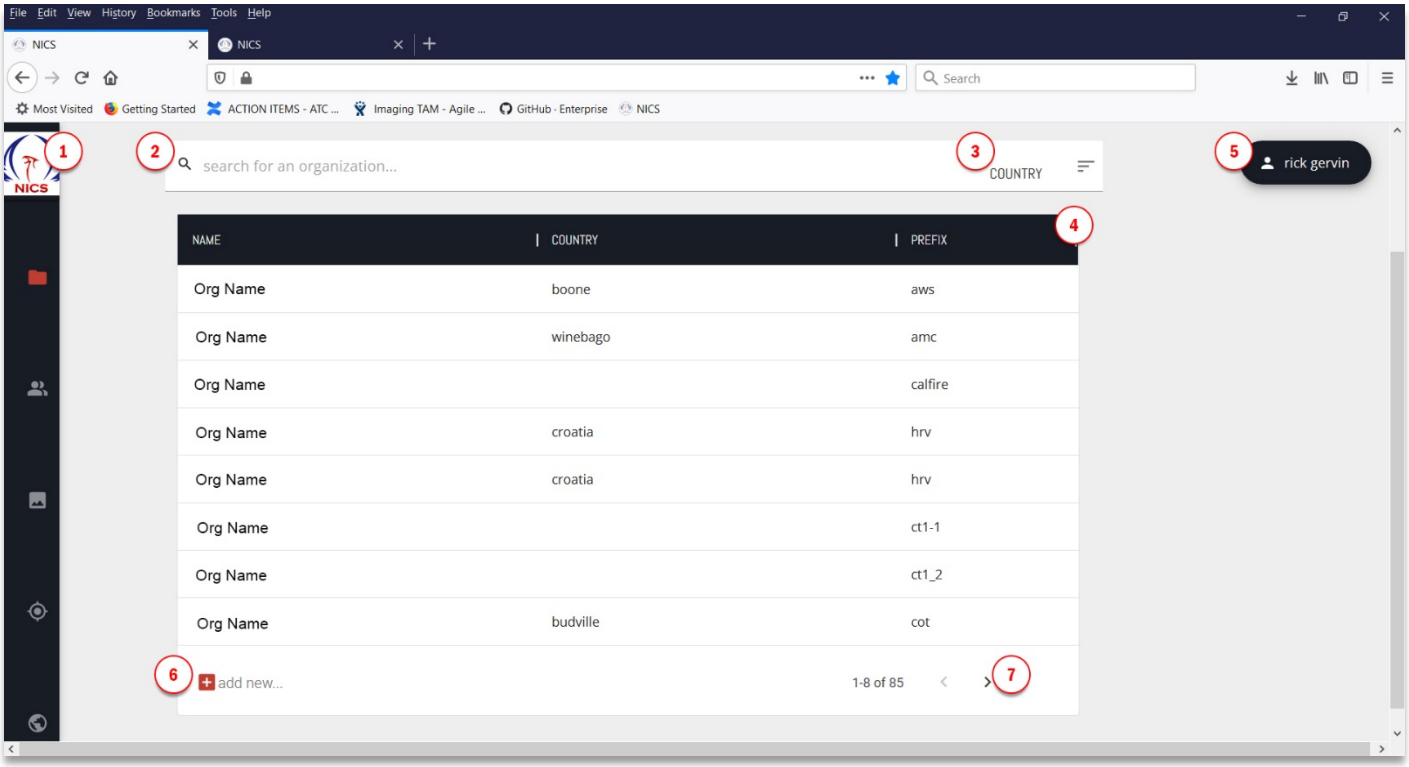
Updated Administration Panel

NICS Updated User Interface for Administrational Users

The New Administration panel allows the NICS administration user to make changes to organizations involved in an incident, or add new organizations in a much more streamline fashion. To access the Administration panel, click on the Tools button on the right-hand side of the screen. A drop-down menu will open.

Click the Administration button.

The new Admin panel opens on the Organizations section. Let's take a moment to orientate ourselves to the new administration panel.



1. Side Navigation Bar
2. Admin Panel Search Feature
3. Sort Feature
4. Data Table
5. Current User
6. Add New (Org, User, Incident…)
7. Table Navigation

Organizations

In this section an admin user can make changes to existing organizations already in NICS, or add new organizations. To make changes to an existing organization first find the organization in the list.

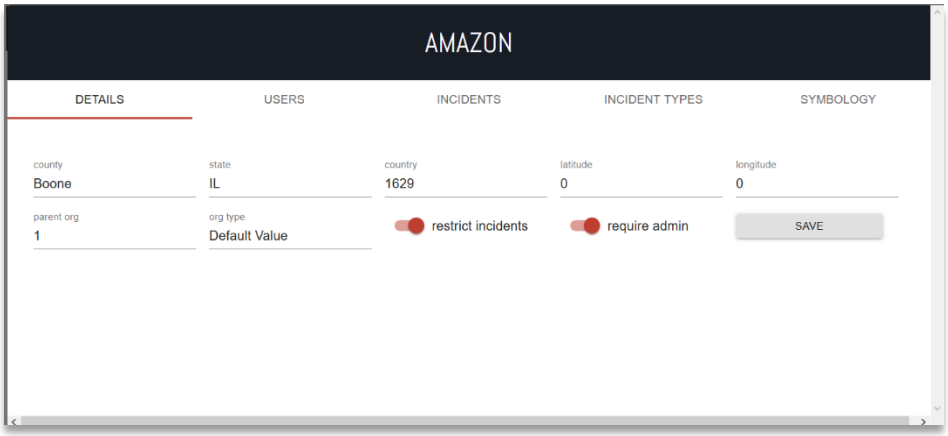
The list can be sorted by;

- Organization Name
- Organization Country of origin
- Organizations PREFIX

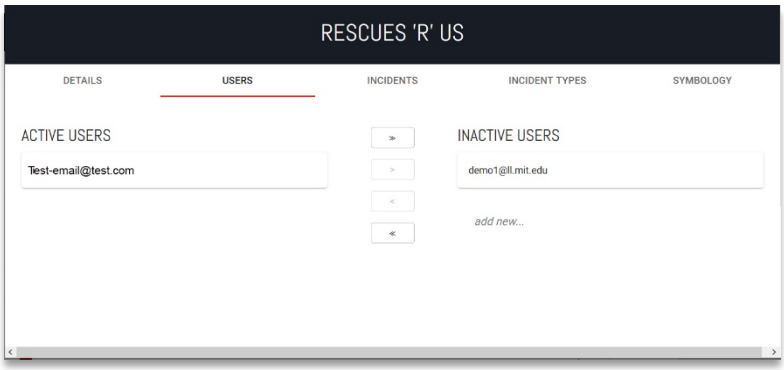
You can also use the search feature to quickly find your organization.

To open the organizations details simply click on your organization. This will open a modal window with the following sections;

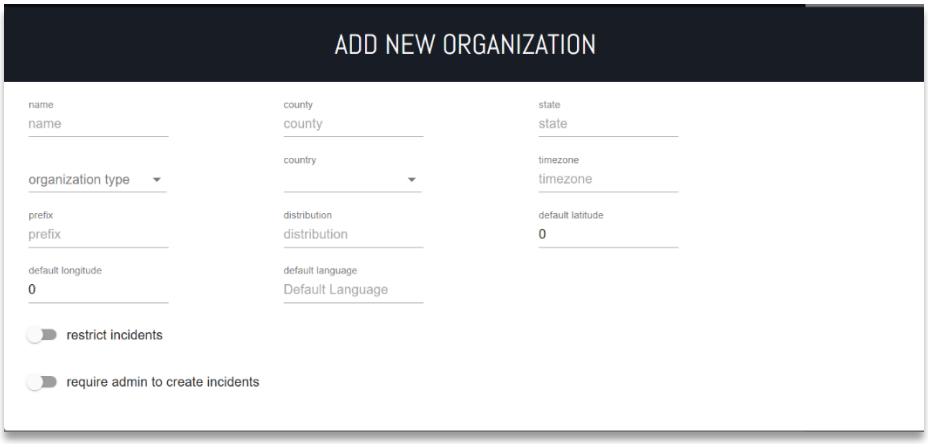
- Organizational Details
- Users
- Incidents
- Incident Types
- Symbology



All the information in each section can be updated as needed by filling out each form or selecting the information and moving it from inactive to active and vice-versa.

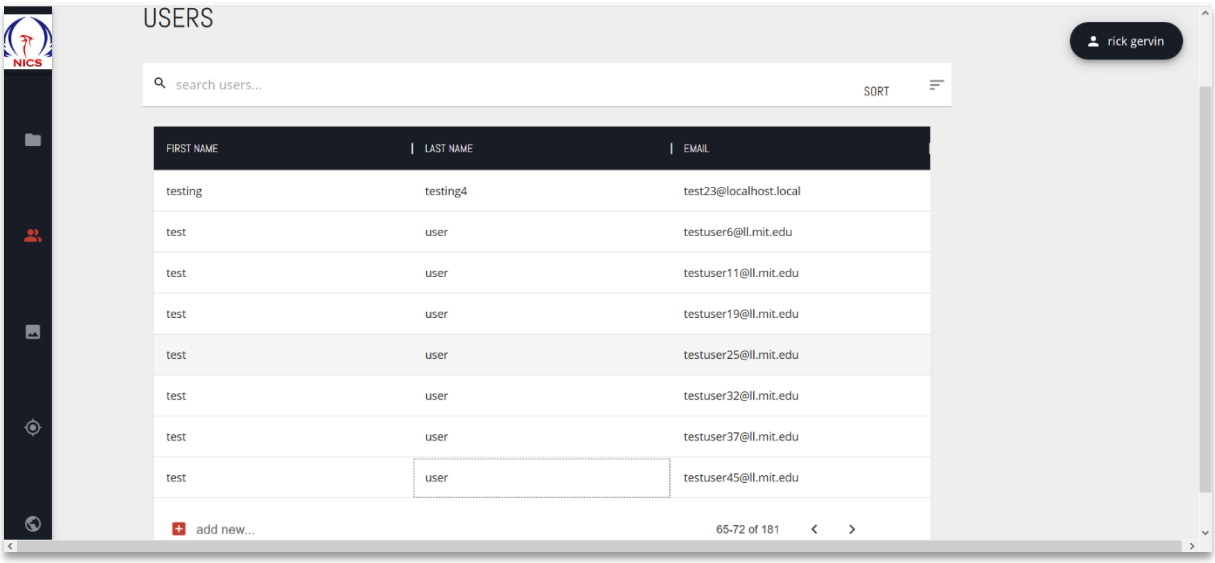


The admin user can also add new organizations by selecting the Add New button at the bottom left hand side of the data table and filling in the required fields.

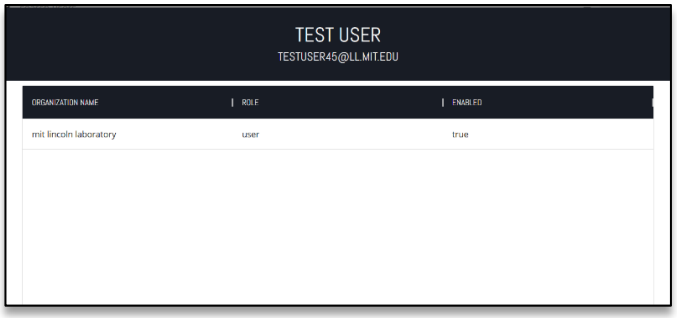


Users

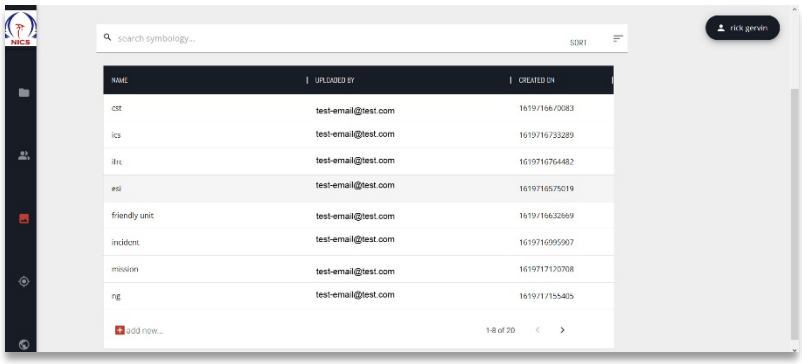
The User section of the admin panel provides a list of all the registered users in NICS. You can obtain more information on each user by selecting them in the data table. This will open a modal widow with the following additional information about the selected user.



- List of organizations the user is registered with.
- What type of NICS user are they.
    - Read Only User
    - User
    - GIS User
    - Admin
    - Super User
- Have they been enable in the current Workspace.



Symbology

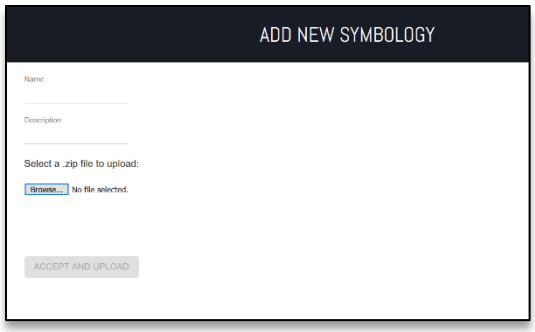


Symbology is a powerful way to display information on the map. NICS now offers a way to upload customized symbology sets and assign to any organization, or you can use already uploaded symbology that your team is familiar with.

To upload your organizations symbology;

1. First navigate to the Symbology section of the Admin panel by opening the side nav bar, and clicking on the Symbology button.
2. Next click on the Add New button at the bottom left hand side of the data table. This will open the upload form.

Note: All symbology icons need to be placed into a .ZIP file for upload.

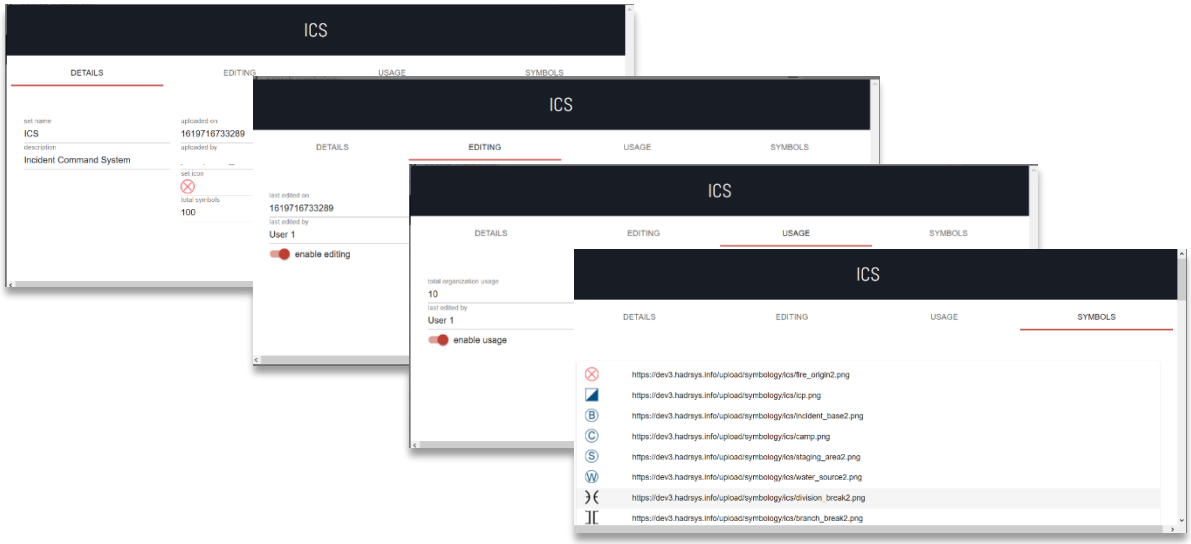


3. Give your symbology a name and provide a general description by filling out the form.
4. Select the .ZIP file for upload.
5. Click the Accept and Upload button.

Your symbology is now available in the data table.

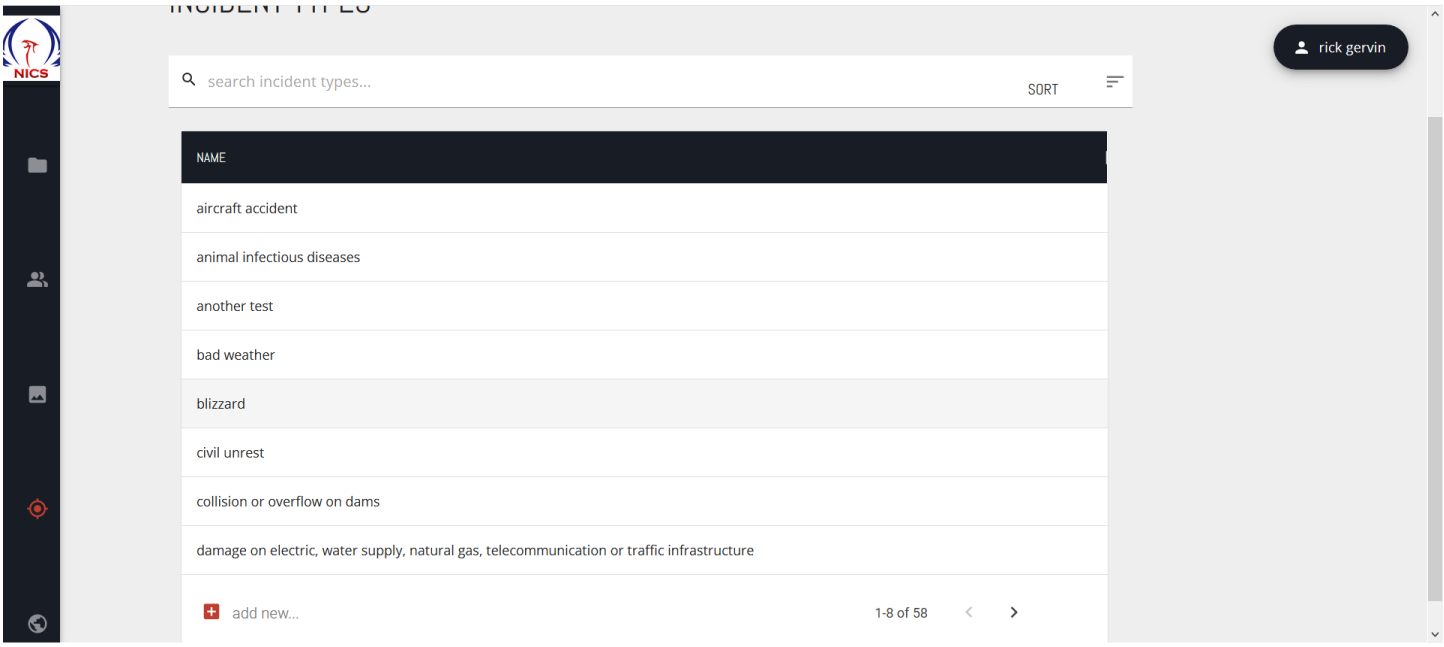
To find out details about a symbology set in the data table simply click on the name you would like more information on. A details modal window will open providing you with the following options;

- Details
- Editing
- Usage
- Symbols



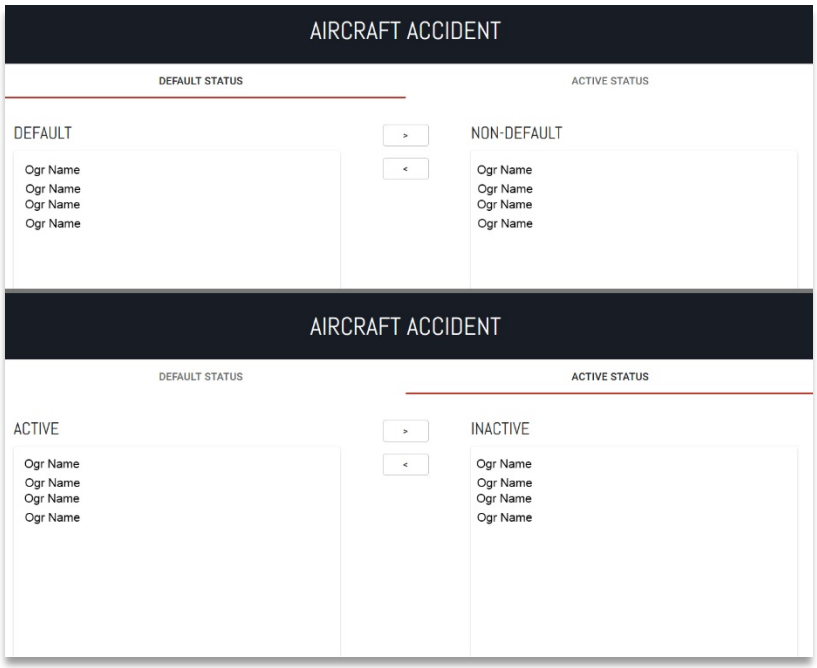
Incident Type

Incident types can be associated with an organization based upon that organizations functional specialty. You can use the information populated in the data table in the incident type section of the admin panel to see what organizations are registered to create a particular incident type by clicking on the incident type in the data table.



This will open the incident type modal window that is divided into two sections;

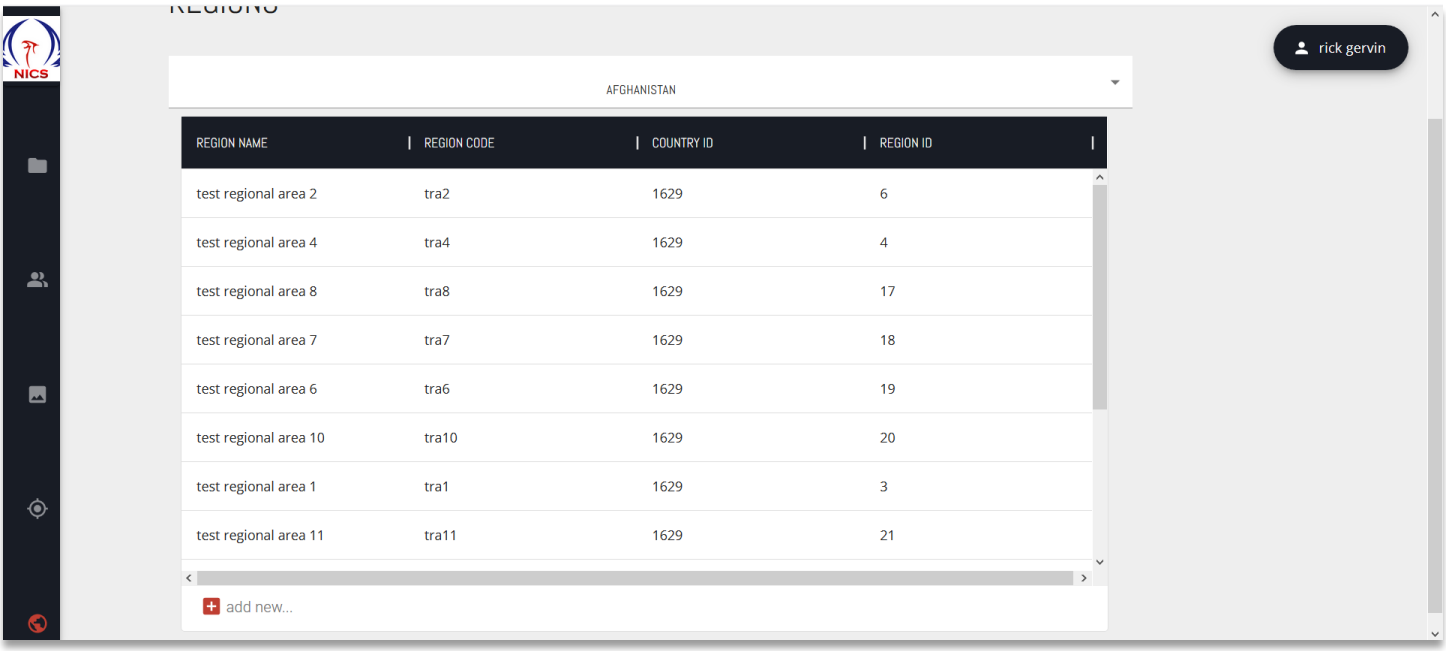
1. Default Status; this shows all of the organizations that specialize in responding to that incident type and can create the selected incident type upon logging in to their organization. On the right hand side of the window a list of other organizations that could respond to the incident but can't create the listed incident type by default.



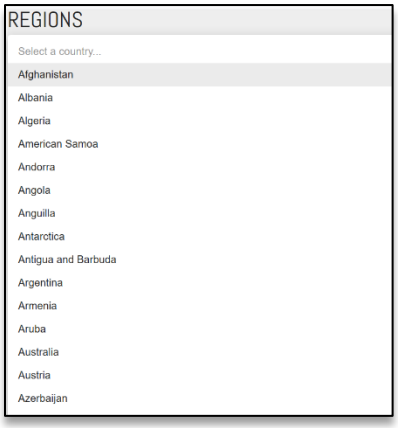
2. Active Status; Shows all the organizations that are actively assigned as an organization that can respond to that type of incident. It will allow the active organization to review certain types of reports and or information that might now be available to a non-active org. To activate an organization simply select the organization you want to active and click the left arrow. This will move the organization to the active side.

Regions

The regions section allow you to select a region that your organization operates in. Once regions are established for a country, they can be used in the naming convention when an incident is created.

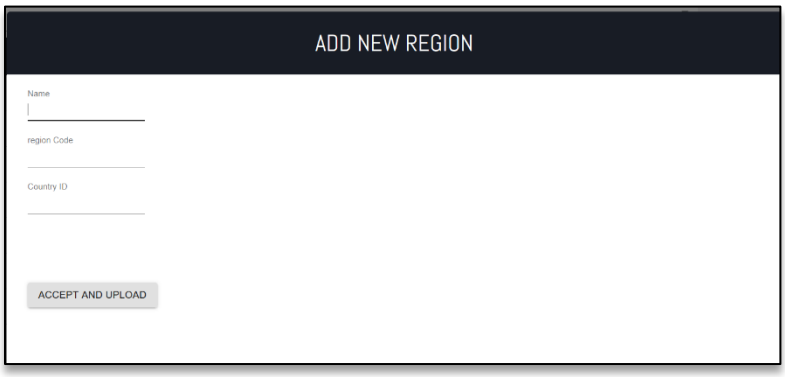


By selecting the dropdown menu at the top of the screen you can choose the country you are operating in. Once you have chosen the country the data table below will populate with the known regions.



Note: NICS has not populated all regions for every country.

If your country of operation is not populated with region information you can add it by clicking on the Add New button at the bottom of the data table. This will open a form to enter the your regional information.



Translation

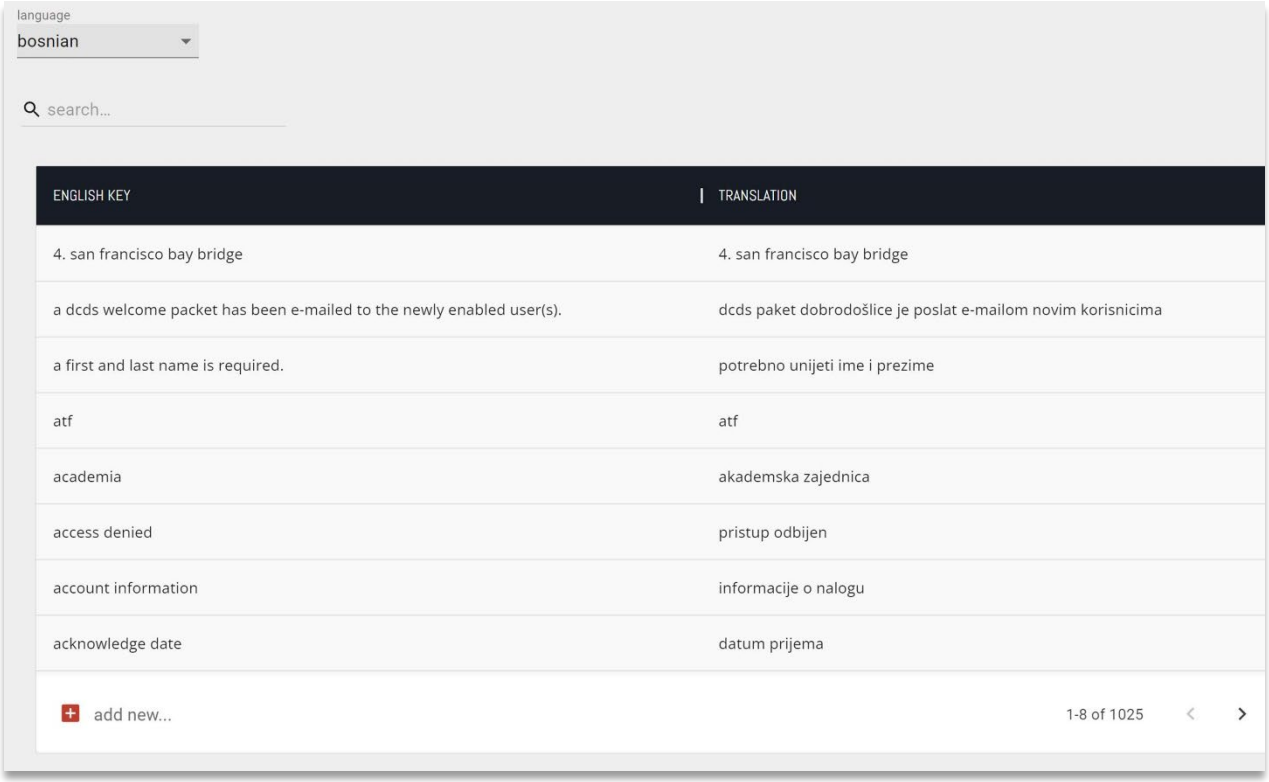
The translation management interface is a new feature for translating English terms. This feature is primarily targeted for translating data layer & folder names. If there is a data layer in English (e.g. “topography”), the translation management interface can add a new entry with the English term “topography” and the translation for the selected language. When NICS loads the data layer tree, it will display a translation value if it exists otherwise it will be the English term.

Note: NICS does not use this translation service in collab-rooms; chat or map feature comments.

To begin translation;

1. Open the Administration panel and select the translate button in the side nav bar.
2. Select a language from the dropdown menu.

To edit a translation value click on a row to open a dialog window and change the needed values.

To add a new translation value click the Add New button at the below the data table this will open a new translation key & value modal window.

After changing a translation key (or adding new ones for like data layer names), refresh the NICS web-app and those translations will be shown.