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1.0 Communication Assets Survey (CAS) Operations

The CAS component of Communication Assets Survey and Mapping tool provides the method for collecting data on public safety/first responder agency radio equipment and infrastructure information. Being web-based, the execution of the tool is via a web-browser (e.g., Microsoft Internet Explorer). The specific URL (https://franz.spawar.navy.mil) provides access to the CASM tool via the ICTAP Technology Tools Server. You must select the Communication Assets Survey (CAS) Login which will prompt you for the login Information.

Once you are logged into the CAS, you may add, edit and delete data related to any agency that is associated to your user account.
A user with State/Urban Area privilege may add, edit and delete data for any agency in the state/urban area. A user with Jurisdiction privilege may add, edit and delete data for any agency in their assigned counties. A user with Agency privilege may add, edit and delete data for any agency that is assigned to them.

The starting point in CAS is to enter the list of agencies that operate in your area of interest. For example, if you have jurisdiction privilege and are assigned to two counties, start on the State/Urban Area Homepage by entering data for each agency, such as the county sheriff and city police departments. You may then go on to define the radio system(s) used by each agency, etc.

Each page contains a link to the online CAS Help (the “? Get Help”). The Help can be accessed at any time and provides a detailed explanation of the information requested on each page.

In many cases, data that is entered in one section of CAS, will appear in the select lists on other sections. For example, once you enter the agencies that operate in your counties, you will see these agency names appear in the select list when identifying which agencies may use a radio system, or which agencies are served by a dispatch center.

Where multiple items of the same type (e.g., towers, gateways, channels) exist, a summary table will list the individual items. By selecting the EDIT button next to the item in a summary table, all information saved for the item will be presented in the data fields of the page for review/modification. All deletions are made using the DELETE button next to the item in the summary page and a confirmation prompt must be acknowledged to confirm the item deletion.

All data fields on the information page for an object should be completed, but it is not necessary. Partially completed pages can be saved and updated later, even during another login session. Some fields in the page are required to provide the minimum information (e.g., name field, asset owner) and must be completed before the information on the form can be saved in the moment. On each form, the Save button will not enable until the required data is entered.

A SAVE button located at the bottom of the page is used to save the entered data for a specific object (e.g., radio system, base station, channel) into the database. Upon clicking the Save button, all new or changed data will be saved to the database. If the user navigates away from a page, for example, by clicking a new form on the CAS Navigation Bar, data that may have been entered will NOT be saved and no warning is given for leaving a page without first saving the data.

A base set of information is populated in the database to support the selections that you will make, specifically, the state/urban areas and jurisdictions in the state/urban area. The tool supports the entry of new jurisdictions, if not available in the base set for selection.

Your User Account will have been created by an authorized Administrative Manager (AM) user who has the authority and knowledge to assign you to a state/urban area, jurisdiction(s) or agency(s) for access to the tool.

1.1 Agency and System Perspective

The CAS component supports the entry of the communication asset information by an agency representative or by a communications manager representing a public safety communications organization (i.e., radio shop) contracted to manage/operate the system(s) for one or more agencies.

If you are representing an agency (e.g., MyTown Police Dept., County Ambulance Service), then the information you enter will be from that agency’s perspective (e.g., what system does the agency use, does the agency own the system, what channels does the agency use, does the agency own a radio cache). A user can be authorized to represent one or more agencies.
You might find the Agency Usage menu option a help, but will likely need to visit other sections as well.

If you are representing a public safety communications organization, you may be a communications manager responsible for one or more radio systems providing service to one or more agencies. The information you enter will be from the radio system perspective (e.g., define the radios system, define the channels/talk groups provided by the radio system, identify the agencies that use it, the channels used by each agency, define a dispatch center, identify the agencies that are served by the dispatch center). You will probably want to start with the Radio System section, but you still need to be able to add, edit and delete data for at least one agency. Visit the State/Urban Area Homepage section to enter data about the agencies that use the systems you will be defining.

2.0 Page Details

The following paragraphs describe the functionality of each major category of data. For each major category, specifics on each web page are provided. Required fields are indicated with an asterisk, same as they are on the web page.

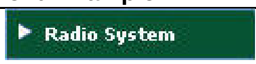
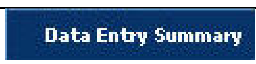
2.1 General Conventions

This section describes several general conventions used throughout CAS.

2.1.1 Sub-Menus

In each main data entry section, such as a radio system or dispatch center, when you are editing a primary data element, a sub-menu will appear to the left of the main data entry area.

These sub-menus are color-coded and include icons to assist you in completing your data entry task. The colors and icons have the following meaning:

Menu Example	Meaning
	The green menu option means that the definition is complete or at least one record has been entered for this section. The small white triangle means that this is the page you are currently on. This menu option is active and may be clicked at any time.
	The red menu option means that no data has been entered for this section. The menu option is active and may be clicked at any time.
	The red menu option with the Exclamation Point icon means that no data has been entered for this section, but you are unable to enter this data until something else has been entered first. The menu option is inactive and may not be clicked. Bubble help is available on the menu option.
	The grey menu option means that this section is not applicable to your data entry task, based on information you provided in the definition of the object. The menu option is inactive and may not be clicked. Bubble help is available on the menu option.
	The blue menu option means that the option is always available.

2.1.2 Data Entry Summary

The Data Entry Summary page enables you to review the level of completeness on data entry for the specific object.

The icons represent the basic status of data entry per section.

Icon Example	Meaning
	The green check mark icon means that at least one record has been entered in this area.
	The red flag icon means that no records have been entered in this area and this page should be visited.
	The italic i icons means that no records have been entered in this area, but the area is optional, so it need not be completed.
	The red slashed circle icon means that no records have been entered in this area, but this area is not applicable to your data entry task, based on the information you provided in the definition of the object.

2.1.3 Table Filters

On all main tables, such as on the State/Urban Area Homepage or Radio System page, you have the ability to filter the table so that you just see the text that you are interested in.

You may filter on any table column.
For example, on the State/Urban Area Homepage, the table lists all agencies in the state/urban area. If you wished to

limit the table contents to only the agencies whose agency name starts with the letter “c”, make sure the Filter Column radio button is set to “Agency” and type a “c” in the filter box. The list will constrict to show just those rows.

To clear the filter, click the Clear Filter button.

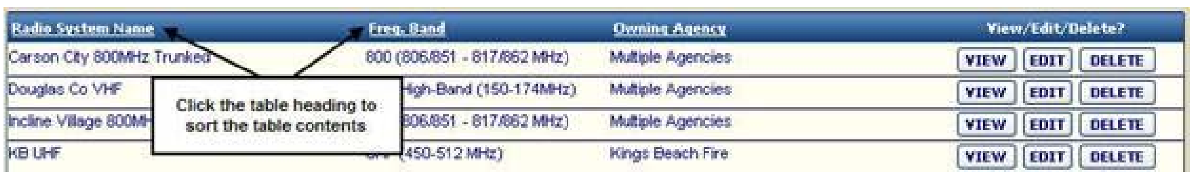
For users with Agency and Jurisdiction privilege, all main tables will be pre-filtered to show just the data that is owned by their agencies. You can remove this filter by clicking the checkbox in the red heading. Here is an example from the Radio System page:

2.1.4 Table Sorting

All tables presented in CAS enable you to sort the table based on any of the table headings.

To sort a table, click on a table heading, the table rows will be re-sorted in ascending order according to the contents of that column. If you click the table heading again, the table rows will be re-sorted in descending order.

All tables are initially sorted in ascending order by the contents in the first column.



2.1.5 Agency Select List Sort Options

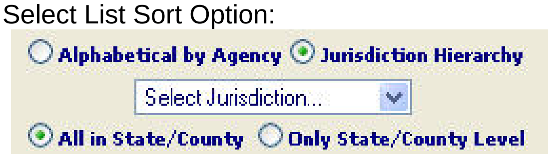
For users that have jurisdiction or state/urban area privilege, wherever agencies must be selected, you have the option to sort and/or filter the agency selection list by either by:

- Alphabetical by Agency Name (default)
- Jurisdiction Hierarchy

If you select Jurisdiction Hierarchy, you will be presented a new selection list populated with the state(s) and counties that exist in your state/urban area. And you will be able to select from two more options for filtering the list of agencies from which to eventually choose:

- All agencies in the selected jurisdiction (default)
- Only those agencies that are at the selected jurisdiction level

Here is a screenshot of the Agency Select List Sort Option:



If you select a jurisdiction and leave the default filter option, the agency list will be populated with all agencies whose primary jurisdiction exists within selected jurisdiction. If you select a jurisdiction and select the second choice (only those agencies at the selected jurisdiction level), then the agency list will be populated with all agencies whose primary jurisdiction is the selected jurisdiction.

For example, let’s say you have state/urban area privilege for the state of California. The agency list will get very long and it is difficult to find the agencies you want to enter data for. You use the Jurisdiction Hierarchy filter to drill down into the list to find the agency you are particularly interested in. You now see the Select Jurisdiction list and it is populated with California and the counties within the state, such as San Diego. You select San Diego. If you leave the default filter to “All in State/County” you will see the Select Agency list populated with all agencies that are in San Diego County. If you change the filter to “only State/County Level”, you will see the Select Agency list populated with only the county-level agencies in San Diego County. You may now find your agency from the filtered list and select it.

2.1.6 Talk Group Select List Sort Options

For users that encounter select lists with talk groups, you may select to sort the lists either by:

- Talk Group Name (default)
- Talk Group ID

The ability to control the sort order of the lists should assist you in finding the talk group you are interested in.

2.1.7 Latitude / Longitude

The CASM tool utilizes latitude and longitude (lat/lon) coordinates to plot icons on a map in CAM. There are a number of places in the CAS component where you may enter coordinates and control where icons plot on the map.

There are six data entry areas where the latitude/longitude coordinates are requested:

- Adding a new Tower/Site (required)
- Adding a new Jurisdiction (required)
- Adding a new Radio System (optional)
- Adding a new Gateway (optional)
- Adding a new Radio Cache (optional)
- Adding a new Dispatch Center (optional)

If you do not provide a lat/lon in the optional areas, the icons will plot on the map at the owning agency's primary jurisdiction location.

When entering a latitude/longitude, you have a number of options. You may enter the data in:

1. degrees, minutes, seconds format
2. decimal format
3. or you may cut and paste into a text field that the tool will interpret
4. In some cases, you may enter a street address, click the Lookup button, and have the tool attempt to find the coordinates based on the address you provided. Note: not all addresses can be converted to lat/lon coordinates.

Note: if you are entering lat/lon data manually, all coordinates in the United States, including Alaska and Hawaii have a latitude direction of "North" and a longitude direction of "West". In decimal format, that translates to the latitude as a positive number and the longitude as a negative number. The CAS software will assist you by validating your entry and providing guidance if you enter values that are out of bounds.

2.2 Login

Navigation (1) Launched from CASM home page.
(2) Launched from Menu Bar, Logout selection.

Enter your username and password. Click Login.

The Login page enables you to gain access to the CAS component of CASM. You are required to enter the username and password that was provided to you by your Administrative Manager in order to login. No access is allowed unless the correct user name/password pair is entered during the login procedure.

Having trouble?
You may make three consecutive attempts to correctly login to the CAS component. Upon the third login attempt with an incorrect password, your account will be locked and you must contact your Administrative Manager to unlock it.

If your login is unsuccessful, you will be provided the reason. You should contact your Administrative Manager (AM) for assistance in resolving the problem.

TIPS

1. Check to see if you are spelling your username and password correctly.
2. Check to see if the CAPS LOCK is on. If so, turn it off. The password field is case sensitive.

2.3 State/Urban Area Selection

Navigation (1) page following successful login for users with multiple State/Urban Area access.
(2) Top menu, State/Urban Area, State/Urban Area Selection.

The State/Urban Area Selection page enables you to select the state or urban area that you wish to enter data for. If you are authorized to access a single state/urban area, you will not see this page during login.

SELECT Click Select to register your selection.

Field-level detail:

Field	Notes
Select State/Urban Area	Select the state/urban area that you wish to enter data for. The list is populated with all the states/urban areas that you have authorization to enter data for. Required.

2.4 State / Urban Area Homepage

Navigation Left menu, State/Urban Area Homepage

The State / Urban Area Homepage page presents you with a list of all of the first responder agencies that have been entered in your state/urban area.
This page is the launching pad from which to add new agency records and view, edit or delete existing agency records.

The primary jurisdiction column displays the county name – city name for agencies whose primary jurisdiction is a city, it displays state name – county name for agencies whose primary jurisdiction is a county, and it displays just the state name for agencies whose primary jurisdiction is the state.

Users with jurisdiction or state/urban area privilege have the ability to add new agencies.

Important!
If there are no agencies in your list that you may edit, you must create a new agency before you can do any other data entry in CAS.

What is an agency?
In CASM, an agency is defined as a first responder agency or organization, such as a police department, sheriff, or fire department. It may also be a governmental agency, organization or emergency management group. Think of an agency as a group of people providing a service in the interest of public safety that other public safety agencies need to interoperate with. An agency may own, maintain, or use communication assets.

Steps for entering data for an agency:

1. Review the list in the table to determine if your agency(s) have already been entered by another user. You may need to click the "Clear Filter" button to see all agencies in your state/urban area. There are three possibilities:
   a. If you see your agency and the edit button is enabled, you can edit the data.
   b. If you see your agency and the edit button is not enabled, contact your Administrative Manager (AM) to modify your permissions so you can have access to this agency.
   c. If the agency is not in the list, it is your job to add it; proceed to step 2. (Users with Agency Privilege – contact your Administrative Manager to add a new agency for you.)
2. Click the Add New Agency button. Enter agency general characteristics. Click Save.
3. Click the POC Information menu option. Enter point of contact information for the agency.

ADD The Add New Agency button is located above the table. This will open a new window that enables you to add a new agency record. This button is only enabled for users with State/Urban Area or Jurisdiction privilege.

VIEW Click View to open a small window to show you the details about the agency in a read-only format.

EDIT Click Edit to open a window that enables you to edit the details about the agency. The Edit button will be enabled for all agencies you have authorization to enter data for.

DELETE Click Delete to completely remove the agency from the database. You will be asked to confirm that you really want to delete the agency before the delete occurs, but once the delete is processed there is no "undo" button.

The Delete button will be enabled for users that have state/urban area or jurisdiction privilege, for the agencies they have authorization to enter data for, with the following exception: *The Delete button is always disabled for all agencies that own/manage a gateway, radio cache or dispatch center.*

If you wish to delete an agency and the delete button is disabled, first determine if it is the owning agency for a gateway, radio cache or dispatch center. If it is, edit that record and reassign the ownership to another agency. This should solve the problem and the delete button will be enabled next time you visit this page.

If you have agency privilege and wish to delete one of your agencies, please contact your Administrative Manager (AM).

2.4.1 Add / Edit Agency or Organization

Navigation Add or Edit button on the State/Urban Area Homepage

The Add/Edit Agency or Organization page enables you to enter general information about an agency/organization. After you enter information and click the save button the page remains open. At this time you may edit your entries and click save again, or move on to the next step. The next step is to click the POC Information menu option. Click the New button if you wish to enter another agency.

Click here for more information about the sub-menu.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

NEW If you are entering multiple agencies, click New to clear the page for a new entry.

Summary Table The summary table presents the list of jurisdictions that are associated to this agency.

DELETE – Click Delete to indicate that the agency does not serve the jurisdiction. At least one jurisdiction must appear in the list. If you wish to delete a jurisdiction and the delete button is disabled, select a new primary jurisdiction, click Save, then you will be able to remove the jurisdiction that you do not want.

Field-level detail:

Field	Notes
*Agency Name	Enter unique name. The name should be representative of the agency's location and function (e.g., My Town Fire Dept). Required.
Agency Address	Enter the address of the agency. Optional.
*Agency Discipline	Select the appropriate or closest discipline. The Government discipline should be used for state and federal government agencies (e.g., FEMA, OES, Naval Facility). The Public Safety Communications discipline should be used for radio shops that provide the maintenance of radio systems and/or other communications assets for the region. The "Other" discipline should be used as a catch-all for agencies (e.g., MyTown CERT) that don't fit any of the other choices. Required.
Agency Capabilities	Select the capabilities that your agency provides from the list of: Hazmat, EOD, and USAR. Optional.
*Primary Jurisdiction	Select the type of jurisdiction that is appropriate to the agency you are entering data for. If you select "States" or "Counties", you will be presented with a select list that is populated with the jurisdictions in your state/urban area that you have authorization to enter data for. If you select "Cities/Towns", next select a specific county and the city list will be populated. If you do not know the county, click the "Generate All Cities/Towns" to get a complete list of names that you have authorization to enter data for. The list is sorted alphabetically. Select the appropriate state, county or city for primary jurisdiction of the agency you are entering. Required.
Other Jurisdictions Served	This list provides you the opportunity to identify other jurisdictions that the agency serves, beyond the one you selected for the primary. As with the primary jurisdiction, start by selecting the type of jurisdiction that is appropriate. Once the list is generated, select individual jurisdictions or hold the CTRL Key and select multiple jurisdictions that this agency serves. The list is populated with all jurisdictions you have authorization to enter data for. Optional.

Agency Comments	Use this space to enter any other comments. Optional.

2.5 Radio System

Navigation Left Menu, Radio System

The Radio System page presents you with a list of all of the radio systems that have been entered in your state/urban area.
This page is the launching pad from which to add new radio system records and view, edit or delete existing radio system records.

If there are no radio systems showing in the table, click the Clear Filter button to see all radio systems in your state/urban area.
The default setting is to only show you the radio systems that are owned by agencies that you may enter data for.

What is a Radio System?
In CASM, a radio system is defined as a Land Mobile Radio (LMR) system; an organized set of channels or talk groups that are used by an agency for voice communications. The channels are likely repeated on one or more structures (towers). The system may be trunked or conventional (non-trunked) or may operate in both modes. It may consist of a single channel or a set of channels.
If it is trunked, it may consist of a small group of talk groups or many, many talk groups. And, it may serve a single first responder agency or 500 (or more!) agencies.

When entering data for a radio system it is important to identify which agencies use the radio system. Furthermore, once the channels and talk groups (if appropriate) are entered for a radio system, it is important to take the second step and identify which agencies use particular channels and/or talk groups on that system.

CAS provides a feature that will automatically import frequencies and structure locations from the FCC database based on a specified call sign. This function can be performed after the radio system is defined and will automate the entry of radio system channels, structures, and base stations.

The repeater/base stations on structures for a radio system may be entered manually or pulled from the FCC database; however, this information is for inventory completeness only and is not used in the interoperability analysis provided by CAM. CAM does not include RF coverage for the analysis.

Steps for entering data for a radio system:

1. Review the list in the table to determine if your radio system has already been entered by another user. You may need to click the "Clear Filter" button to see all radio systems in your state/urban area. There are three possibilities:
    a. If you see your radio system and the edit button is enabled, you can edit the data.
    b. If you see your radio system and the edit button is not enabled, go to the Agency Usage section to identify that your agency uses the radio system.
    c. If the radio system is not in the list, it is your job to add it; proceed to step 2.
2. Click the Add New Radio System button. Enter radio system general characteristics. Click Save. You will be prompted to enter additional information, or cancel this and use the menu.
3. Click the POC Information menu option. Enter point of contact information for the radio system.
4. Click the System Usage menu option. Identify the other agencies that use the radio system.
5. Optional: Click the FCC Import
   menu option if you wish to import data from your FCC licenses. If you do not wish to use the FCC Import feature, go to step 6.
6. Click the Channels menu option.
   Enter specific channels (transmit and receive frequencies) that provide the communications for the radio system, this is especially important for conventional (non-trunked) radio systems.
7. If the system is conventional, click the Channel Usage menu option. Identify the agencies that have these channels programmed on their radios.
8. If the system is trunked, click the Talk Groups menu option. Enter talk groups that make up the radio system.
9. If the system is trunked and you've entered talk groups, click the Talk Group Usage menu option. Identify the agencies that have these talk groups programmed on their radios.
10. Click the Structures menu option.
    Review the summary table at the top of the page to identify the structure(s) (towers/sites) that support the radio system. Go down to the second section of the page to select the structures your radio system uses. You can also enter new structure data here.
    a. Click the Add New Structure button to add a new structure record, if necessary.

11. Click the Repeaters / Base Station menu option. Select a structure and identify the channels that are broadcast on each structure that supports the system.

ADD	The Add New Radio System button is located above the table. This will open a new window that enables you to add a new radio system record.
VIEW	Click View to open a small window to show you the details about the radio system in a read-only format.
EDIT	Click Edit to open a window that enables you to edit the details about the radio system. The Edit button will be enabled for all radio systems where the owning/responsible agency is an agency that you have authorization to enter data for.
DELETE	Click Delete to completely remove the radio system from the database. You will be asked to confirm that you really want to delete the radio system before the delete occurs, but once the delete is processed there is no "undo" button. The Delete button will be enabled for all radio system where the owning/responsible agency is an agency that you have authorization to enter data for.

2.5.1 Add / Edit Radio System

Navigation Add or Edit button on the Radio System page

The Add/Edit Radio System page enables you to initiate a radio system record and to enter specific detailed information to describe the radio system.

Enter the name of your radio system.
Select a name that your colleagues will recognize. Proceed by identifying an agency that serves as the owner or responsible agency for this radio system.
Additional owning/managing agencies may be identified later on the System Usage page. Enter the general characteristics for the radio system and click Save. The data will be saved to the database.

Click here for more information about the sub-menu.
For a list of steps on how to enter data for a radio system, click here.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.
SHOW DATA FIELDS	Optionally, you may wish to enter latitude/longitude coordinates so that your radio system plots at a particular location in CAM. If so, click this link to display the form fields for entering this data.

Field-level detail:

Field	Action
*Radio System Name	Enter a unique radio system name. Select a name that other people in your state/urban area will recognize. We recommend that you name the system with a combination of the city or county and the frequency band in which it operates. Required. This page should only be used for entering radio system records. If you are unsure about what a radio system is, click here.
*Radio System Owner/ Responsible Agency	Identify the agency that owns, operates and maintains this radio system (i.e., has primary responsibility for the system). The list of agencies is populated with the agencies you have authorization to enter data for. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
*Primary or Secondary	Identify whether the owning agency uses this radio system as its primary system for communications or a secondary/backup system. A primary system is used daily by the majority of subscribers. A secondary/ backup system is used in addition to a primary system, but is not the first choice for communications. Required.

Number of Mobile Radios	Enter the number of mobile radios (radios installed on vehicles) that are used by the owning agency on the radio system. Approximate numbers are okay. Optional.
Number of Portable Radios	Enter the number of portable radios (handheld radios) that are used by the owning agency on the radio system. Approximate numbers are okay. Optional.
Notes on agency use	Use this space to enter any other comments about how the owning agency uses this radio system. Optional.
Primary Make (Mfg.) of system components.	Select the primary manufacturer of the radio system, that is, the vendor that provided the majority of the radio system components. If none of the choices are appropriate, select "Other" and you will be provided the ability to type in your own wording. Optional.
System Type	Identify whether the radio system operates as a conventional (non-trunked) system, a trunked system or both. A trunked system has communication over talk groups rather than over dedicated frequency pairs. Required.
Type of Trunked System	If you identified that your system is trunked, you are given the option to identify the type of trunked system it is. The select list is linked to the answer you provided in the Primary Make (Mfg.) field. If none of the choices are appropriate, select "Other" and you will be provided the ability to type in your own wording. Optional.
Model	Enter a model name for the system, if applicable. Optional
Frequency Band	Select the frequency band of your radio system. If none of the frequency band choices are appropriate, select "other" and add a comment in the notes section to describe the correct frequency band information. Required
P25 Compliant	Identify whether the radio system is P25 compliant by indicating P25 Phase 1 (P25 P1) or P25 Phase 2 (P25 P2). If it is not P25 compliant, choose None. Required.
Number of Channels?	Enter the number of channels (frequency pairs) that support this system. Do not enter the number of talk groups. Optional.
Encryption	Select the encryption method provided by this radio system, if any. If the radio system provides multiple encryption methods, select the primary method and add a comment in the notes section to describe the other methods used. Optional.
Year Installed	Select the year that the radio system was installed. This provides an indication of the age of the equipment. Optional.
Repeated or Simplex	Identify whether the radio system's channel(s) operate in simplex mode, are repeated or whether both operations are support by the channels. A simplex channel can be identified by whether the transmit frequency is the same as the receive frequency. A repeated channel can be identified by whether the transmit frequency is different from the receive frequency.
Analog or Digital	Identify whether the radio system transmits communications via analog or digital (or both) transmissions. Typically, digital systems are P25 systems.
Wideband or Narrowband	Identify whether the radio system is transmitting channels in wideband (25kHz), narrowband (12.5kHz) or both formats.
Voted	Click "Yes" if the radio system includes voting as a strategy to extend the coverage. If you are not sure, click "No".
Simulcast	Click "Yes" if the radio system employs a simulcast transmission strategy. If you are not sure, click "No".
Service Area	Enter some detailed text about the coverage area of the radio system and where it may be used. Optional.
Notes	Use this space to enter any other comments. Optional.
Latitude	If you would like to control where the radio system icon plots on the map in CAM, you may enter a latitude location. If you do not specify a location (lat and lon), the icon will plot at the owning agency's primary jurisdiction. Click for more info. Optional.
Longitude	If you enter a latitude coordinate, you must also enter a longitude coordinate. Click for more info. Optional.

2.5.2 System Usage

Navigation Launched from the radio system menu

The System Usage page enables you to specify the other agencies that use the radio system and to indicate how each agency uses the system. Select at least one agency from the Select Agency(s) list, answer the other questions, then click Save. The summary table will list your selections.

It is important to identify the agencies that use the radio system. This information is used to determine interoperability between agencies for this radio system.

If there are no agencies in the Select Agency(s) list it means that all the agencies that you have authorization to enter data for are already associated to this radio system. You should see them listed in the summary table at the bottom of the page.

The summary table at the bottom of the page will be empty if there are no agencies associated to the radio system. You may see entries in the summary table for other agencies that you do not have the ability to enter data for.

For a list of steps on how to enter data for a radio system, click here.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.
Summary Table	The summary table presents the agencies that have been associated to the radio system. Edit and Delete buttons will be enabled for agencies you have authorization to enter data for. EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes. DELETE – Click Delete to indicate that the agency is not using the radio system.

Field-level detail:

Field	Notes
*Select Agency(s)	Select an individual agency or hold the CTRL Key and select multiple agencies. If you select multiple agencies, the other entries you make on the page will be applied to each agency you select. The list is populated with agencies you have authorization to enter data for except for those that are already associated to the radio system. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
System Usage	Identify whether the agency uses the radio system as the primary system for communications or a secondary/backup system. A primary system is used daily by the majority of subscribers. A secondary/backup system is used in addition to a primary system, but is not the first choice for communications. The default is Primary.
Owner/ Responsible for Radio System	Identify whether the agency(s) you selected above owns or is responsible for this radio system. The default is No. By selecting Yes, you will enable anyone who has authorization to edit data for that agency to also edit data for the radio system.
Number of Mobile Radios	Enter the number of mobile radios (mobile radios are installed in vehicles) used by the selected agency on this radio system. Optional.
Number of Portable Radios	Enter the number of portable radios (handheld radios) used by the selected agency on this radio system. Optional.
Notes on agency use	Use this space to enter any other comments. Optional.

2.5.3 FCC Data Import

Navigation Launched from the radio system menu

The FCC Data Import page is the launching pad that enables you to search the Federal Communications Commission (FCC) Universal Licensing System (ULS) database for transmitter information licensed by a specific call sign for a particular radio system.
Based on the data from the license you may import the radio system channels, structures and repeater/base station data. This feature automates the manual entry of these assets. Note: this function only relates to public safety fixed location transmitters; it does not support the licensed mobile transmitters.

To begin, enter a call sign and click Search.
If you do not know the call sign(s) associated to the radio system, you may use the Advanced Search features to find it.
Once you enter or select a call sign, you will be provided information about the license so that you can confirm that you have the correct license. Directly below the confirmation data are three links: Channel Information, Structure Information and Repeater/Base Station Information. The next step is to click the Channel Information link.

An error message will be presented if the call sign is (1) invalid, (2) not associated with any fixed location structures, or (3) not found in the FCC database. If transmitter information is found in the FCC database, the page will list the specific types of CASM assets (e.g., channels, towers, repeaters) that can be created. Once you have imported data from a particular FCC license, the date of the import and your user name is recorded. The last import date information can be used to track the freshness of the data in CASM – i.e., another import may be performed following new licensing.

Steps for entering radio system data using the FCC Import feature:

1. Enter a call sign that has channels and structures associated to your radio system. Confirm the detail that is provided about the licensee.
2. Click the Channel Information link. The channels on the license are presented to you. You may select and/or edit the channel data and click Save. You will be directed back to the FCC Import page. Note that your user name and the date of your submission are recorded on the page.
3. Click the Structure Information link. The structures on the license are presented to you. You may select and/or edit the structure data and click Save. You will be directed back to the FCC Import page. Note that your user name and the date of your submission are recorded on the page.
4. Click the Repeater/Base Station Information link. The transmit channels and their association to structures shall be presented to you. You may select and/or edit the data and click Save. You will be directed back to the FCC Import page. Note that your user name and the date of your submission are recorded on the page.
5. That completes the import process for that call sign. You may now enter a new call sign and repeat the process.
6. Once you are finished, it is important to complete the radio system definition by:
   a. Identifying the agencies that use the system by clicking the System Usage menu option.
   b. If the system is conventional (non-trunked), to identify which channels are used by which agencies that use the system by clicking the Channel Usage menu option.
   c. If the system is trunked, to enter the talk groups on the Talk Group page and to identify which talk groups are used by which agencies that use the system on the Talk Group Usage page, both pages may be access from the menu.

For a list of steps on how to enter data for a radio system, click here.

SEARCH	Click Search once you have entered a call sign that you wish to import. The Search button will not enable until a call sign has been entered.
RESET	Click the Reset button to clear the page.
Advanced Search	Click the Advanced Search button to open the Advanced Search options. This feature enables you to search the FCC database for your call sign(s) using a variety of search criteria. Once the search is complete the Call Sign field transforms to a select list. You may select the correct call sign from the list and proceed.
Links	Be sure to note the links at the bottom of the page which provide the ability to proceed with the FCC Data Import feature. Click the Channel Information link to initiate the process to import channel data for the selected radio system. Click the Structure Information link to initiate the process to import structure data for the selected radio system. Click the Repeater/Base Station Information link to initiate the process to import repeater / base station data for the selected radio system.

Field-level detail:

Field	Action
Call Sign	Enter the call sign that is associated to your radio system and that you wish to import data from. If you used the Advanced Search feature, select the correct call sign from the list.

2.5.3.1 FCC Data Import: Channels

Navigation Launched from the FCC Data Import page.

The FCC Data Import: Channels page enables you to review, edit and import the channels from the FCC license to the CASM database for a specific call sign. The page presents fields very similar to the manual data entry page (Channels) and allows modification and completion of any missing data.

The channel names are automatically generated, but can be overwritten with the common name that agency users would recognize.

You may select to import some or all of the channels from the FCC license by selecting the Import checkbox to the left of each channel detail.
If you are re-editing previously entered data, checkbox will be labeled “update” rather than “import”.

SAVE	Click Save once you have reviewed and modified any of the channel information that you wish to import.
RESET	Click the Reset button to remove changes you have made since the last save.
CLEAR	Click Clear to remove the auto-generated channel names.
RETURN	Click Return to return to the FCC Import main page.
Import Checkbox	Click this checkbox so that a checkmark appears in the box, if you wish to select the channel for import. Click again to remove the checkmark.
Update Checkbox	If you have previously imported data from this FCC license, the import checkbox will be labeled as an “update” checkbox. Click this checkbox so that a checkmark appears in the box, if you wish to select the channel for update. Click again to remove the checkmark.
Select / Deselect All	Click this checkbox if you wish to select or deselect all the import / update checkboxes for every channel on the page.

Field-level detail:

Field	Notes
Tone Type	Select the type of tones that you will be entering for your new channel record. CTCSS are analog tones, CDCSS are digital tones, NAC is for P25 network access and mixed mode enables you to select a mixture of tones on the transmit and receive frequencies.
*Tx	The transmit (Tx) frequency will be populated with data from the FCC license, it may not be edited.
Tx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the transmit frequency. This list is fixed and allows selection of “other”. Optional.
*Tx NAC	Enter the three character hexadecimal code for the P25 Network Access Code (NAC). All NACs begin with a “$”. The default, $293, is the code for CSQ, or Carrier Squelch. Required if NAC is selected.
*Rx	Enter the receive frequency (e.g., 161.625) or leave blank as receive is optional (e.g., transmit only channel). If the Radio System was identified as “simplex”, the Rx will be automatically calculated to match the Tx entry you have made. If you enter a Tx frequency in the 800MHz range, the Rx frequency will be automatically calculated with the correct 45 MHz offset from the Tx frequency. If you enter a Tx frequency in the UHF range, the Rx frequency will be automatically calculated with the correct 5 MHz offset from the Tx frequency. You can override any auto-generated value by entering your own values.
Rx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the receive frequency. This list is fixed and allows selection of “other”. Optional
*Rx NAC	Enter the three character hexadecimal code for the P25 Network Access Code (NAC). All NACs begin with a “$”. The default, $293, is the code for CSQ, or Carrier Squelch. Required if NAC is selected.
Channel Name	Enter common name for the channel. Optional.
Channel Description	Use this space to enter any other comments. Optional.

2.5.3.2 FCC Data Import: Structures

Navigation Launched from the FCC Data Import page.

The FCC Data Import: Structures page enables you to review, edit and import the structures (fixed sites) from the FCC license to the CASM database for a specific call sign. The page presents fields very similar to the manual data entry page (Add/Edit Structures) and allows modification and completion of any missing data.

The structure names are automatically generated, but can be overwritten with the common name that other users would recognize.

You may select to import some or all of the structures from the FCC license by selecting the Import checkbox to the left of each structures detail.
If you are re-editing previously entered data, the checkbox will be labeled "update" rather than "import".

SAVE	Click Save once you have reviewed and modified any of the structures information that you wish to import.
RESET	Click the Reset button to remove changes you have made since the last save.
RETURN	Click Return to return to the FCC Import main page.
Import Checkbox	Click this checkbox so that a checkmark appears in the box, if you wish to select the tower for import. Click again to remove the checkmark.
Update Checkbox	If you have previously imported data from this FCC license, the import checkbox will be labeled as an "update" checkbox. Click this checkbox so that a checkmark appears in the box, if you wish to select the structure for update. Click again to remove the checkmark.
Select / Deselect All	Click this checkbox if you wish to select or deselect all the import / update checkboxes for every structure on the page.

Field-level detail:

Field	Notes
*Structure Name	A unique name for a structure will be auto-generated. You may change it. Required.
Structure Owner	Enter the name of the entity that owns the structure. Optional.
Structure Address	Enter the street address for the location of the structure. Optional.
*Latitude	The latitude information will be populated with data from the FCC license, it may not be edited. Required.
*Longitude	The longitude information will be populated with data from the FCC license, it may not be edited. Required.
Structure Type	The structure type will be populated with data from the FCC license, it may be edited. Optional.
Ground Elevation	The ground elevation will be populated with data from the FCC license, it may be edited. Optional.
Structure Height	The structure height will be populated with data from the FCC license, it may be edited. Optional.
Receive Only	Enter "Yes" if this tower is used for receive only purposes. For example, in a voted system some sites are used to receive signals only. Enter "No" if you are not sure.
Room for more Antennas	Enter "Yes" if there is room on the structure for more antennas.

2.5.3.3 FCC Data Import: Repeaters / Base Stations

Navigation Launched from the FCC Data Import page.

The FCC Data Import: Repeater/Base Station page enables you to review, edit and import the repeater/base station data from the FCC license to the CASM database for a specific call sign. The page presents fields very similar to the manual data entry page (System Repeater/Base Station) and allows modification and completion of any missing data.

Important Note: You must import channel and structure data from the call sign before you can import repeater/base station information. This page will not work until you first visit the FCC channels page and FCC structures page.

You may select to import some or all of the repeater/base station data from the FCC license by selecting the Import checkbox to the left of each item detail.

SAVE Click Save once you have reviewed and modified any of the repeater/base station information that you wish to import.

RESET Click the Reset button to remove changes you have made since the last save.

RETURN Click Return to return to the FCC Import main page.

Import Checkbox Click this checkbox so that a checkmark appears in the box, if you wish to select the repeater / base station for import. Click again to remove the checkmark.

Select / Deselect All Click this checkbox if you wish to select or deselect all the import checkboxes for every repeater / base station on the page.

Field-level detail:

Field	Notes
*Channel	Identified from the previously imported FCC license data. It cannot be edited here. Required.
Make (Mfg)	Select the name of the manufacturer of the repeater/ base station equipment. If none of the choices are appropriate, select “Other” and you will be provided the ability to type in your own wording. Optional.
Model	Enter the model name of the repeater / base station equipment. Optional.
Repeater / Base Station Type	Select the type of equipment. Optional.
Repeater/ Base Station Name	Enter a name for the particular repeater / base station. This field enables you to identify a unique name for a specific channel on a specific tower. Optional.
Antenna Height	Enter the height of the antenna (in meters). Optional.
Antenna Type	Select the type of antenna. Optional.
RBS - Power	The RBS-Power will be populated with data from the FCC license, it may be edited. Optional.
RBS - ERP	The RBS-ERP will be populated with data from the FCC license, it may be edited. Optional.
Notes	Use this space to enter any other comments. Optional.

2.5.4 Channels

Navigation Launched from the radio system menu

The Channels page enables you to enter all of the channels (i.e., Tx/Rx pairs) that make up the radio system. You should enter the frequency detail, even if it only consists of one channel. It is most important to enter channels that are shared by the users of the system.

If this is a conventional radio system, the next step is to click the Channel Usage menu option. For a list of steps on how to enter data for a radio system, click here.

For trunked radio systems, the channel information is not as important as the talk groups. Therefore, channel data entry is optional for trunked radio systems and should be specified for inventory completeness only.

The channels that you enter here will be used in on other forms enabling you to link them to structures, gateways, radio caches and to the agencies that use them.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the channels that have been entered for the radio system.

EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes.

DELETE – Click Delete to indicate that the channel is not part of the radio system.

Field-level detail:

Field	Notes

Tone Type	Select the type of tones that you will be entering for your new channel record. CTCSS are analog tones, CDCSS are digital tones, NAC is for P25 network access and mixed mode enables you to select a mixture of tones on the transmit and receive frequencies.
Channel Frequencies	Select whether you will be entering a transmit-only (Tx Only) channel, receive-only (Rx Only) channel or Both (either a simplex or repeated channel).
*Tx	Enter the transmit (Tx) frequency (e.g., 161.625) or leave blank as transmit is optional (e.g., in the case of a receive-only channel).
Tx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the transmit frequency. This list is fixed and allows selection of “other”. Optional.
*Tx NAC	Enter the three character hexadecimal code for the P25 Network Access Code (NAC). All NACs begin with a “$”. The default, $293, is the code for CSQ, or Carrier Squelch. Required if NAC is selected.
*Rx	Enter the receive frequency (e.g., 161.625) or leave blank as receive is optional (e.g., transmit only channel). If the Radio System was identified as “simplex”, the Rx will be automatically calculated to match the Tx entry you have made. If you enter a Tx frequency in the 800MHz range, the Rx frequency will be automatically calculated with the correct 45 MHz offset from the Tx frequency. If you enter a Tx frequency in the UHF range, the Rx frequency will be automatically calculated with the correct 5 MHz offset from the Tx frequency. If you enter a Tx frequency in the 700MHz range, the Rx frequency will be automatically calculated with the correct 30 MHz offset from the Tx frequency. You can override any auto-generated value by entering your own values.
Rx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the receive frequency. This list is fixed and allows selection of “other”. Optional.
*Rx NAC	Enter the three character hexadecimal code for the P25 Network Access Code (NAC). All NACs begin with a “$”. The default, $293, is the code for CSQ, or Carrier Squelch. Required if NAC is selected.
Channel Name	Enter common name for the channel. Optional.
Channel Description	Use this space to enter any other comments. Optional.

2.5.5 Channel Usage

Navigation Launched from the radio system menu

The Channel Usage page enables you to specify the channels that are programmed on radios used by the agencies that use this radio system.

It is important to identify the conventional channels that are used by each agency. This information is used to determine interoperability between agencies for this radio system.

Select at least one agency from the Select Agency(s) list, then select at least one channel from the Select Channel(s) list, then click Save. The summary table will list your selections.

This page is only accessible for radio systems that are conventional. If this menu option is not clickable, it means that at least one of the following conditions is true:

1. the radio system is not conventional
2. there are no channels entered for the radio system
3. there are no agencies using the system that you have authorization to enter data for

This step is not necessary for trunked systems.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the agencies and channels they use that are associated to the radio system that you have authorization to enter data for.

DELETE – Click Delete to indicate that the agency does not use a particular channel on the radio system.

Field-level detail:

Field	Notes
*Select Agency(s)	Select an individual agency or hold the CTRL Key and select multiple agencies. If you select multiple agencies, the other entries you make on the page will be applied to each agency you select. The list is populated with agencies you have authorization to enter data for and that have previously been identified as using this radio system. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
*Select Channel(s)	Select an individual channel or hold the CTRL Key and select multiple channels. The list is populated with all channels on the radio system. The channels will be applied to all agencies you select in the box above. Required.

2.5.6 Talk Groups

Navigation Launched from the radio system menu

The Talk Groups page enables you to enter the talk groups provided by a trunked radio system. Many trunked radio systems have hundreds of talk groups. All talk groups do not need to be entered. The most important thing to enter is the talk groups that are shared between agencies, such as regional talk groups or state-wide talk groups. If you desire, you may enter all the talk groups.

The next step is to click the Talk Group Usage menu option. For a list of steps on how to enter data for a radio system, click here.

If this menu option is not clickable, it means that the radio system you are defining is not trunked. This step is not necessary for non-trunked systems.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset button to clear the page.

Summary Table The summary table presents the talk groups that have been associated to the radio system.

EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes.

DELETE – Click Delete to indicate that the talk group is not part of the radio system.

Field-level detail:

Field	Notes
*Talk Group ID	Enter a value for the talk group ID. This might be an alphanumeric or decimal code for the talk group assigned by the radio system software. If you are not interested in providing the actual talk group ID, abbreviate or obscure the ID. For example, if the actual ID is something like 80000529, abbreviate it to xx529 or use any consistent identifying method that you come up with. Required.
Talk Groups Name	Enter the common name of the talk group that other users will recognize. Optional.
Talk Group used by all?	If the talk group you are entering is used by all the agencies that have been associated to the radio system in general, then click “Yes”. If not, click “No”. By clicking “Yes”, CASM will automatically apply that talk group to the set of agencies using the radio system and you do not have to manually link every user to the talk group.
Talk Group Description	Use this space to enter any other comments. Optional.

2.5.7 Talk Group Usage

Navigation Launched from the radio system menu

The Talk Group Usage page enables you to specify the talk groups that are programmed on radios used by the agencies that use this radio system.

It is important to identify the talk groups that are used by each agency. This information is used to determine interoperability between agencies for this radio system.

Select at least one agency from the Select Agency(s) list, then select at least one talk group from the Select Talk Group(s) list, then click Save. The summary table will list your selections.

This page is only accessible for radio systems that are trunked. If this menu option is not clickable, it means that at least one of the following conditions is true:

1. the radio system is not trunked
2. there are no talk group entered for this radio system
3. all talk groups entered for this system are marked as "used by all"
4. there are no agencies using the system that you have authorization to enter data for

This step is not necessary for non-trunked systems.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the agencies and talk groups they use that are associated to the radio system.

DELETE – Click Delete to indicate that the agency does not use a particular talk group on the radio system.

Field-level detail:

Field	Notes
*Select Agency(s)	Select an individual agency or hold the CTRL Key and select multiple agencies. If you select multiple agencies, the other entries you make on the page will be applied to each agency you select. The list is populated with agencies you have authorization to enter data for and that have previously been identified as using this radio system. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
*Select Talk Group(s)	Select an individual talk group or hold the CTRL Key and select multiple talk groups. The talk groups will be applied to all agencies you select in the box above. The list is populated with all the talk groups that you previously associated to the radio system and that are not marked as "used by all". Those that are marked as "used by all" are automatically applied to all agencies that use the radio system and do not require additional linking. You will be able to sort the list and summary table by talk group ID or talk group name. Click for more info Required.

2.5.8 Structures

Navigation Launched from the radio system menu
Launched from the mutual aid menu

Part 1: The first section of the Structures page presents you with a list of all of the structures (towers) that have been entered in your state/urban area. Review the list to see if the structures that support your radio system are already in it.
Many structures house equipment that serves multiple radio systems, so you may find that the structure(s) used by your radio system have already been entered. This is good news! You do not have to enter this data. All you have to do is indicate that your radio system uses these structure(s). If your structures do not appear in the summary table at the top of the page, you may enter them by clicking the Add New Structure button.

Note: Structures will be deleted when the only radio system that uses the structure, deletes it from their list. Click the View button in the summary table to see which radio systems use the structure. If no radio systems are configured on a structure (this situation should be rare) and you wish to delete the data record, temporarily associate it to a radio

system on Part 2 of this page.
Once it is associated, you will see it appear in the summary table for the selected radio system. You may then click the delete button and it will remove it permanently from the list. If other radio system(s) are configured on the structure, you may not delete the structure totally from the database.

ADD You may click the Add New Structure button in order to enter a new structure and simultaneously associate it to your radio system.

VIEW Click View to open a small window to show you the details about the structure in a read-only format.

Part 2: The second section of the page enables you to identify the structures(s) used by your radio system(s).

Once you associate structures to your radio system, you may go to the Repeater/ Base Station page and identify which channels are on which structures. For a list of steps on how to enter data for a radio system, click here.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset button to clear the page.

Summary Table The summary table presents the structures that support the selected radio system.

VIEW – Click View to open a small window to show you the details about the structure in read-only format.

EDIT – Click Edit to open the Add/Edit Structure page in order to edit the details of the structure.

DELETE – Click Delete to indicate that a structure should not be associated to the selected radio system.

Field-level details:

Field	Notes
*Select Structures(s)	Select an individual structure or hold the CTRL Key and select multiple structures. The list is populated with all structures in the state/urban area. Required.

2.5.8.1 Add / Edit Structure

Navigation Launched from Structures page

The Add/Edit Structure page enables you to enter general characteristics of a structure (tower, building, pole, etc.) for a radio system. After you enter information and click the save button the page remains open. At this time you may edit your entries and click save again, or click New to clear the page for a new structure entry.

The structure's geographic location (latitude/longitude) must be entered for mapping in CAM. If you enter a street address, you can click the Look Up button which will attempt to look up the latitude/longitude coordinates based on the address you provided.
Not every address will be found by this feature. Alternatively, you may simply enter the latitude/longitude. The FCC License will list the latitude/longitude coordinates for structures associated to the license.

If the structure's location is within ½ mile radius of another structure already in the database, you will be alerted so that you can determine if the structure you are entering is a duplicate of one already in the database. You will have the opportunity to override this alert and save your structure entry.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

NEW If you are entering multiple structures, click New to clear the page for a new entry.

LOOK UP If you enter an address in the address field, you can click the LOOK UP button to generate the latitude/longitude coordinates from the address.

Field-level detail:

Field	Notes
* Structure Name	Enter a unique name for a structure. Select a name that is descriptive of the location and one that other people will recognize. Required.
Structure Owner	Enter the name of the entity that owns the structure. Optional.
Structure Address	Enter the street address for the location of the structure. Optional.
*Latitude	Enter the latitude coordinate for the structure. This location will be used for plotting the data in CAM. Click for more info. Required.
*Longitude	Enter the longitude coordinate for the structure. This location will be used for plotting the data in CAM. Click for more info. Required.
Structure Type	Select the type of structure or the closest type that represents the structure and use the Notes to describe any specifics. The options offered on this page match the categories in the FCC License database. Optional.
Ground Elevation	Enter the base elevation or altitude of the structure site in meters. Optional.
Structure Height	Enter the height of the structure in meters. Optional.
Receive Only	Enter "Yes" if this structure is used for receive only purposes. For example, in a voted system some sites are used to receive signals only. Enter "No" if you are not sure.
Room for more Antennas	Enter "Yes" if there is room on the structure for more antennas to be installed.
Notes	Use this space to enter any other comments. Optional.

2.5.9 Repeaters/Base Stations

Navigation Launched from the radio system menu
Launched from the mutual aid menu

The Repeater / Base Station page enables you to identify the channels that are transmitted from each structure in a radio system.
In order to use this page, you must have first entered at least one channel on the Channels page and associated at least one structure on the Structure page to the selected radio system.

Select a structure from the list of structures. Now you may select the channels that are transmitted from that structure. Also, the summary table will be populated with all channels per structure that have previously been entered for the radio system. For a list of steps on how to enter data for a radio system, click here.

Note: Repeater/Base Station definitions are for inventory purposes and are not included in the interoperability analysis provided by CAM.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the repeater base station data per structure that has been entered for the selected radio system.

EDIT – Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes.

DELETE – Click Delete to remove repeater / base station data from a structure on the selected radio system.

Field-level detail:

Field	Notes
*Select Structure	Select the structure on this system for which you wish to enter repeater / base station information. Once you select a structure the summary table at the bottom of the page will be populated with repeater/base station information for that structure that had been previously entered. The list is populated with all structures that are associated to the selected radio system. Required.

*Select Channel(s)	Select an individual channel or hold the CTRL Key and select multiple channels. The list is populated with all channels on the radio system. The channels will be applied to the structure you selected above. The details you enter in the following options shall be applied to all channels you select on the selected structure. Required.
Call Sign	Enter the FCC Call Sign that licenses the transmission of this channel on this structure. Optional.
Manufacturer	Select the name of the manufacturer of the repeater/ base station equipment. If none of the choices are appropriate, select “Other” and you will be provided the ability to type in your own wording. Optional.
Model	Enter the model name of the repeater / base station equipment. Optional.
Repeater / Base Station Type	Select the type of equipment. Optional.
Repeater/ Base Station Name	Enter a name for the particular repeater / base station. Optional.
Antenna Height	Enter the height of the antenna (in meters). Optional.
Antenna Type	Select the type of antenna. Optional.
RBS - Power	Enter the transmitter’s output power in Watts. Optional.
RBS - ERP	Enter the transmitter’s ERP in Watts. Optional.
Notes	Use this space to enter any other comments. Optional.

2.6 Mutual Aid Channels/Systems

Navigation Left Menu, Mutual Aid

The Mutual Aid page presents you with a list of all of the Mutual Aid Channels/Systems that have been entered in your state/urban area.
This page is the launching pad from which to add new mutual aid records and view or edit existing mutual aid data. This communications method can be provided by a single mutual aid channel or by a “system” of multiple channels (e.g., the set of NPSPAC interoperability channels).

Note: Mutual aid channels/systems may only be deleted by an Administrative Manager (AM).

What is a mutual aid channel/system?
In CASM, a mutual aid channel/system is defined as
a radio channel or set of channels (system) that has a name and is recognized or known to be used for interoperability purposes on a national, state, regional or community basis. An example is the NPSPAC set of mutual aid channels.

Steps for entering data for a mutual aid channel/system:

1. Review the list in the table to determine if your mutual aid channel/system has already been entered by another user. There are two possibilities:
   a. If you see your mutual aid channel/system and the edit button is enabled, you can edit the data.
   b. If the mutual aid channel/system is not in the list, it is your job to add it; proceed to step 2.
2. Click the Add New Mutual Aid button. Enter mutual aid channel/system general characteristics. Click Save.
3. Click the MA Usage menu option.
   Identify the agencies that use the set of channels represented by the mutual aid channel/system.
4. If the mutual aid channel/system is conventional (non-trunked), click the Channels menu option. Enter specific channels (transmit and receive frequencies) that make up the details of a conventional (non-trunked) mutual aid channel/system.
5. Click the Channel Usage menu option.
   Identify the agencies that have these channels programmed on their radios.
6. If the mutual aid channel/system is trunked, click the Talk Groups menu option. Enter talk groups that are part of the mutual aid system.
7. Click the Talk Group Usage menu option.
   Identify the agencies that have these talk groups programmed on their radios.
8. Click the Structures menu option.
   Review the summary table at the top of the page to identify the structure(s) (towers/sites) that support the mutual aid system. Go down to the second section of the page to select the structures your system uses. You can also enter new structure data here.
   a. Click the Add New Structure button to add a new structure record, if necessary.
9. Click the Repeaters / Base Station
   menu option. Select a structure and identify the channels that are broadcast on each structure that supports the system.

ADD	The Add New Mutual Aid button is located above the table. This will open a new window that enables you to add a new mutual aid record.
VIEW	Click View to open a small window to show you the details about the mutual aid system/channel in a read-only format.
EDIT	Click Edit to open a window that enables you to edit the details about the mutual aid system/channel. The Edit button will be enabled for all mutual aid system/channels.
DELETE	Click Delete to completely remove the mutual aid system from the database. You will be asked to confirm that you really want to delete the mutual aid system before the delete occurs, but once the delete is processed there is no "undo" button. The Delete button will be enabled for all users who have state/urban area privilege and administrative rights of 'All Rights'.

2.6.1 Add / Edit Mutual Aid Channel/System

Navigation Launched from Mutual Aid page.

The Add/Edit Mutual Aid Channel/System page enables you to enter general characteristics of a mutual aid channel or system. After you enter information and click the save button the page remains open. At this time you may edit your entries and click save again, or move on to the next step. The next step is to click the MA Usage menu option.

Click here for more information about the sub-menu.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

Field-level detail:

Field	Action
*Mutual Aid Name	Enter a unique, overarching name for the Mutual Aid Channel/System. For example, NPSPAC or Fire Mutual Aid. Required.
Frequency Band	Select the frequency band of this Mutual Aid Channel/System. If the frequency band is "other" than these defaults, add a comment in the primary use field to describe the frequency band information. Optional.
*P25 Compliant	Identify whether the mutual aid channel/system is P25 compliant by indicating P25 Phase 1 or P25 Phase 2. If not, choose None. Required.
Repeated or Simplex	Identify whether the channel or set of channels operates in simplex mode, is repeated or whether both operations are supported by the channels. A simplex channel can be identified by whether the transmit frequency is the same as the receive frequency. A repeated channel can be identified by whether the transmit frequency is different from the receive frequency.
Conventional or Trunked	Identify whether the mutual aid channel/system operates as a conventional (non-trunked) channel system or a trunked system or both. A trunked system has communication over talk groups rather than over dedicated frequency pairs.
Analog or Digital	Identify whether the mutual aid channel/system transmits communications via analog or digital transmissions. Typically, digital systems are P25 compliant.
Service Area	Enter some detailed text about the coverage area of the mutual aid channel/system and where it may be used. Optional.
Primary Use	Use this space to enter information about the primary use of the mutual aid channel/system. Optional.

2.6.2 Mutual Aid (MA) Usage

Navigation Launched from mutual aid menu

The Mutual Aid (MA) Usage page enables you to identify the agencies that use the mutual aid channel/system and to indicate how the agency uses the system.
Select at least one agency from the Select Agency(s) list, enter in any notes you may have in the Notes field, then click

Save. The summary table will list your selections.

It is important to identify the agencies that use the mutual aid channel/system. This information is used to determine interoperability between agencies for this mutual aid channel/system.

If the mutual aid channel/system is conventional, the next step is to click Channels menu option, if it is trunked, the next step is to click the Talk Groups menu item.

If there are no agencies in the Select Agency(s) list it means that all the agencies that you have authorization to enter data for are already associated to this mutual aid channel/system. You should see them listed in the summary table at the bottom of the page.

The summary table at the bottom of the page will be empty if there are no agencies associated to the mutual aid channel/system.
You may see entries in the summary table for other agencies that you do not have the ability to enter data for.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.
Summary Table	The summary table presents the agencies that have been associated to the mutual aid. Edit and Delete buttons will be enabled for agencies you have authorization to enter data for. EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes. DELETE – Click Delete to indicate that an agency does not use the mutual aid channel/system.

Field-level detail:

Field	Notes
*Select Agency	Select an individual agency or hold the CTRL Key and select multiple agencies. If you select multiple agencies, the other entries you make on the page will be applied to each agency you select. The list is populated with agencies you have authorization to enter data for except for those that are already associated to the mutual aid channel/system. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
Notes on agency use	Use this space to enter any other comments. Optional.

2.6.3 Channels

Navigation Launched from the mutual aid menu

The Channels page enables you to define the channels (i.e., Tx/Rx pairs) provided by a Mutual Aid Channel/System. You should enter the frequency detail, even if it only consists of one channel.

After you enter information and click the save button the page remains open. You will see your entry in the summary table at the bottom of the page.
If there are multiple channels associated with the mutual aid system, you may repeat the process to develop the list of channels.

If this is a conventional mutual aid channel/system, the next step is to click the Channels Usage menu option. If you cannot click the Channel Usage menu option, it is because there are either no channels or none of your agencies are associated to the mutual aid channel/system.
Assuming you added channel detail, click the MA Usage menu option to identify the agencies that use the mutual aid system.

The information specified on this page is available from the FCC License information held by the system owner, specifically the transmit (Tx) frequencies. The channel name is important as most users of the mutual aid channel/system will know the common name rather than the frequency.

For a trunked Mutual Aid Channel/System, the channel information is not as important as the talk groups. Therefore, channel data entry is optional for a trunked Mutual Aid Channel/System and may be used for inventory completeness only.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the channel detail that has been associated to the mutual aid channel/system.

EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes.

DELETE – Click Delete to remove the channel from the list.

Field-level detail:

Field	Notes
Tone Type	Select the type of tones that you will be entering for your new channel record. CTCSS are analog tones, CDCSS are digital tones, NAC is for P25 network access and mixed mode enables you to select a mixture of tones on the transmit and receive frequencies. You will be offered options appropriate to the general characteristics of Mutual Aid Channel/System.
Channel Frequencies	Select whether you will be entering a transmit-only (Tx Only) channel, receive-only (Rx Only) channel or Both (either a simplex or repeated channel).
*Tx	Enter the transmit (Tx) frequency (e.g., 161.625) or leave blank as transmit may be optional (e.g., in the case of a receive-only channel).
Tx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the transmit frequency. This list is fixed and allows selection of “other”. Optional.
*Tx NAC	Enter the three character hexadecimal code for the P25 Network Access Code (NAC). All NACs begin with a “$”. The default, $293, is the code for CSQ, or Carrier Squelch. Required if NAC is selected.
*Rx	Enter the receive frequency (e.g., 161.625) or leave blank as receive is optional (e.g., transmit only channel). If the Mutual Aid Channel/System was identified as “simplex”, the Rx will be automatically calculated to match the Tx entry you have made. If you enter a Tx frequency in the 800MHz range, the Rx frequency will be automatically calculated with the correct 45 MHz offset from the Tx frequency. If you enter a Tx frequency in the UHF range, the Rx frequency will be automatically calculated with the correct 5 MHz offset from the Tx frequency. If you enter a Tx frequency in the 700MHz range, the Rx frequency will be automatically calculated with the correct 30 MHz offset from the Tx frequency. You can override any auto-generated value by entering your own values.
Rx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the receive frequency. This list is fixed and allows selection of “other”. Optional.
*Rx NAC	Enter the three character hexadecimal code for the P25 Network Access Code (NAC). All NACs begin with a “$”. The default, $293, is the code for CSQ, or Carrier Squelch. Required if NAC is selected.
Channel Name	Enter common name for the channel. Optional.
Channel Description	Use this space to enter any other comments. Optional.

2.6.4 Channel Usage

Navigation Launched from the mutual aid menu

The Channel Usage page enables you to specify the mutual aid channels that are actually programmed on radios used by the agencies that use this mutual aid channel/system.

It is important to identify the conventional channels that are used by each agency. This information is used to determine interoperability between agencies for this mutual aid channel/system.

Select at least one agency from the Select Agency(s) list, then select at least one channel from the Select Channel(s) list, then click Save. The summary table will list your selections.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.
Summary Table	The summary table presents the agencies that you have authority to enter data for and channels they use that are associated to the mutual aid. DELETE – Click Delete to indicate that the agency does not use a particular channel on the mutual aid channel/system.

Field-level detail:

Field	Notes
*Select Agency(s)	Select an individual agency or hold the CTRL Key and select multiple agencies. If you select multiple agencies, the other entries you make on the page will be applied to each agency you select. The list is populated with agencies you have authorization to enter data for and that have been previously identified as using this mutual aid channel/system. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
*Select Channel(s)	Select an individual channel or hold the CTRL Key and select multiple channels. The list is populated with all channels associated to the mutual aid channel/system. The channels will be applied to all agencies you select in the box above. Required.

2.6.5 Talk Groups

Navigation Launched from the mutual aid menu

The Talk Groups page enables you to define the talk groups provided by a trunked mutual aid channel/system.

After you enter information and click the save button the page remains open. You will see your entry in the summary table at the bottom of the page.
If there are multiple talk groups associated with the mutual aid system, you may repeat the process to develop the list of talk groups.

The next step is to click the Talk Group Usage menu option. If you cannot click the menu option, it is because there are either no talk groups where "used by all" is set to "No" or none of your agencies are associated to the mutual aid channel/system.
Assuming you added talk groups that are not "used by all", click the MA Usage menu option to associate agencies.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.
Summary Table	The summary table presents the talk groups that have been associated to the mutual aid. EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes. DELETE – Click Delete to indicate that the talk group is not part of the mutual aid channel/system.

Field-level detail:

Field	Notes

*Talk Group ID	Enter a value for the talk group ID. This might be an alphanumeric or decimal code for the talk group assigned by the radio system software. If you are not interested in providing the actual talk group ID, abbreviate or obscure the ID. For example, if your actual ID is something like 80000529, abbreviate it to xx529 or use any consistent identifying method that you come up with. Required.
Talk Groups Name	Enter the common name of the talk group that other users will recognize. Optional.
Talk Group used by all?	If the talk group you are entering is used by all the agencies that have been associated to the mutual aid channel/system in general, then click "Yes". If not, click "No". By clicking "Yes", CASM will automatically apply that talk group to the set of agencies using the mutual aid system/channel and you do not have to manually link every user to the talk group.
Talk Group Description	Use this space to enter any other comments. Optional.

2.6.6 Talk Group Usage

Navigation Launched from the mutual aid menu

The Talk Group Usage page enables you to specify the talk groups that are programmed on radios used by the agencies that use this mutual aid channel/system.

It is important to identify the talk groups that are used by each agency. This information is used to determine interoperability between agencies for this mutual aid channel/system.

Select at least one agency from the Select Agency(s) list, then select at least one talk group from the Select Talk Group(s) list, then click Save. The summary table will list your selections.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the agencies and talk groups they use that are associated to the mutual aid.

DELETE – Click Delete to indicate that the agency does not use a particular talk group on the mutual aid channel/system.

Field-level detail:

Field	Notes
*Select Agency(s)	Select an individual agency or hold the CTRL Key and select multiple agencies. If you select multiple agencies, the other entries you make on the page will be applied to each agency you select. The list is populated with agencies you have authorization to enter data for and that you have previously identified as using this mutual aid channel/system. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
*Select Talk Group(s)	Select an individual talk group or hold the CTRL Key and select multiple talk groups. The talk groups will be applied to all agencies you select in the box above. The list is populated with all the talk groups that you previously associated to the mutual aid channel/system and that are not marked as "used by all". Those that are marked as "used by all" are automatically applied to all agencies that use the mutual aid channel/system and do not require additional linking. You will be able to sort the list and summary table by talk group ID or talk group name. Click for more info Required.

2.7 Gateway

Navigation Left Menu, Gateway

The Gateway page presents you with a list of all of the gateways that have been entered in your state/urban area. This page is the launching pad from which to add new gateway records and view, edit or delete existing gateway records.

What is a gateway?

In CASM, a gateway is defined as

an audio bridge device used by multiple agencies to provide interoperability between dissimilar radio systems. A gateway is not a console patch via a dispatch center. A gateway connects multiple agencies (i.e., more than one) in a network configuration using the channels/talk groups that the agencies use. An example of a gateway is an ACU-1000 or Motorola MotoBridge.

Steps for entering data for a gateway:

1. Review the list in the table to determine if your gateway has already been entered by another user. You may need to click the "Clear Filter" button to see all gateways in your state/urban area. There are three possibilities:
    a. If you see your gateway and the edit button is enabled, you can edit the data.
    b. If you see your gateway and the edit button is not enabled, someone else has already entered the gateway data. To review the data, go to the Reports section to generate a report on that gateway.
    c. If the gateway is not in the list, it is your job to add it; proceed to step 2.
2. Click the Add New Gateway link. Enter gateway general characteristics. Click Save.
3. Click the POC Information menu option. Enter point of contact information for the gateway.
4. Click the Channel/Talk Group Configuration menu option. Identify the channels and talk groups that are configured on radios associated with the gateway, if any. This completes the gateway data entry.
5. For data entered prior to CASM Release 1.3, you may have the option to directly identify the agencies that may be linked via this gateway, using the Associate Agencies menu option.

ADD The Add New Gateway button is located above the table. This will open a new window that enables you to add a new gateway record.

VIEW Click View to open a small window to show you the details about the gateway in a read-only format.

EDIT Click Edit to open a window that enables you to edit the details about the gateway. The Edit button will be enabled for all gateways where the owning/responsible agency is an agency that you have authorization to enter data for.

DELETE Click Delete to completely remove the gateway from the database. You will be asked to confirm that you really want to delete the gateway before the delete occurs, but once the delete is processed there is no "undo" button. The Delete button will be enabled for all gateways where the owning/responsible agency is an agency that you have authorization to enter data for.

2.7.1 Add / Edit Gateway

Navigation Launched from Gateway Information page.

The Add/Edit Gateway Information page enables you to enter general characteristics of a gateway. After you enter information and click the save button, the page remains open. At this time you may edit your entries and click save again, or move on to the next step. The next step is to click the POC Information menu option. Once you complete this step, click the Gateway Channels/Talk Groups Configuration menu option.

Click here for more information about the sub-menu.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

SHOW DATA FIELDS Optionally, you may wish to enter latitude/longitude coordinates so that your gateway plots at a particular location in CAM. If so, click this link to display the form fields for entering this data.

LOOK UP If you enter an address in the address field, you can click the LOOK UP button to generate the latitude/longitude coordinates from the address.

Field-level detail:

Field	Notes
*Gateway Name	Enter a unique name for the gateway. Use a name that other people will recognize. Required.

*Gateway Owner/ Responsible Agency	Select the agency that is the owner or has primary responsibility for the gateway. The list of agencies is populated with the agencies you have authorization to enter data for. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
*Gateway Usage	Identify whether the gateway is operated on a "day-to-day" basis or for "incident/event use" only. For day-to-day, it is assumed that the gateway is a part of the everyday communications, providing daily interoperability and is managed by trained dispatch or EOC staff. For incident/event use, the gateway is only used to support an incident/event (i.e., an emergency situation). If you are not sure how the gateway is used, mark it as Incident/event. Required.
Gateway Mfg/ Model	Select the manufacturer of the gateway equipment. If none of the choices are appropriate, select "Other" and you will be provided the ability to type in your own wording. Optional.
Gateway Type	Select whether the gateway is a fixed or mobile device. A fixed device is usually located in a dispatch center or EOC and is installed there on a permanent basis. A mobile device may be installed in a communications vehicle or may be a portable device.
Number of simultaneous nets	Enter the number of networks that can be established simultaneously on the gateway. Optional
Number of active ports	Enter the number of ports provided by the gateway. For example, this may be the number of radios that can be connected to the gateway device.
Location of gateway	Enter the street address where the gateway is housed or stored. Optional.
Mobile Service Area	If the gateway is portable, enter some detailed text about where the gateway may be used. Optional.
Notes	Use this space to enter any other comments. Optional.
Latitude	If you would like to control where the gateway icon plots on the map in CAM, you may enter a latitude location. If you do not specify a location (lat and lon), the icon will plot at the owning agency's primary jurisdiction. Click for more info. Optional.
Longitude	If you enter a latitude coordinate, you must also enter a longitude coordinate. Click for more info. Optional.

2.7.2 Channel/Talk Group Configuration

Navigation Launched from the gateway menu

The Channel / Talk Group Configuration page enables you to identify the channels and talk groups that are programmed on radios that are configured on a gateway.

It is important to identify the channels and talk groups that are connectable via the gateway since interoperability via gateways is computed based on the agencies that utilize the channels and talk groups that are configured on a gateway.

Select a radio system or mutual aid channel/system from the Select Radio System list. The channels and/or talk groups that are associated to that system will appear in the boxes below. Select the channel(s) and/or talk groups(s) that are configured on radios on the gateway, then click Save. The summary table will list your selections.

You may select another radio system and repeat the process until all the channels and/or talk groups that may be connected via the gateway are identified.

If there are no radio systems in the Select Radio Systems list it means that there are no radio systems or mutual aid channels/systems setup in the state/urban area dataset. This data needs to be entered before you may fully define your gateway.

If there are no channels or talk groups that appear in the lists when you select a radio system it means that either all the channels and/or talk groups for that system are already associated to the gateway, or that the system does not have any channels or talk groups.

The summary table at the bottom of the page will be empty if there are no channels or talk groups associated to the gateway.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the channels and talk groups that are configured on the gateway.

DELETE – Click Delete to remove a channel or talk group from the gateway.

Field-level details:

Field	Notes
*Select Radio System	Select a radio system. Once you select a radio system or mutual aid channel/system you will be able to select the channels and talk groups on that system in the next fields, except for those already associated to the gateway. The list is populated with all radio systems and mutual aid channels/systems that exist in the state/urban area. If you select a conventional (non-trunked) system, channels will appear in the channels select list. If you select a trunked radio system, talk groups will appear in the talk group select list. Required.
*Select Channel(s)	Select an individual channel or hold the CTRL Key and select multiple channels. Required, if talk groups are not selectable.
*Select Talk Group(s)	Select an individual talk group or hold the CTRL Key and select multiple talk groups. You will be able to sort the list by talk group ID or talk group name. Click for more info Required, if channels are not selectable.

2.7.3 Associated Agencies (Agencies Connected to Gateway)

Navigation Launched from the gateway menu

The Associated Agencies page enables you to identify the agencies that may be connected via a gateway for interoperability. Note: This page is only available to users who have entered data prior to CASM Release 1.3. This section will eventually be retired in favor of associating channels and talk groups to a gateway.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the agencies that may be interconnected via the gateway.

EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes.

DELETE – Click Delete to indicate that an agency may not be connected via the gateway.

Field-level detail:

Field	Notes
*Select Agency(s)	Select an individual agency or hold the CTRL Key and select multiple agencies. If you select multiple agencies, the other entries you make on the page will be applied to each agency you select. The list is populated with all agencies in the state/urban area except for those that are already associated to the gateway. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
Notes	Use this space to enter any other comments. Optional.

2.8 Radio Cache

Navigation Left Menu, Radio Cache

The Radio Cache page presents you with a list of all of the radio caches that have been entered in your state/urban area.
This page is the launching pad from which to add new radio caches records and view, edit or delete existing radio caches records.

What is a radio cache?
In CASM, a radio cache is defined as a
set of radios that is configured, stored, and available to support a response to an incident. Each cache is similarly configured with channels and talk groups.

Steps for entering data for a radio cache:

1. Review the list in the table to determine if your cache has already been entered by another user. You may need to click the “Clear Filter” button to see all caches in your state/urban area. There are three possibilities:
   a. If you see your cache and the edit button is enabled, you can edit the data.
   b. If you see your cache and the edit button is not enabled, someone else has already entered the cache data. To review the data, go to the Reports section to generate a report on that cache.
   c. If the cache is not in the list, it is your job to add it; proceed to step 2.
2. Click the Add New Radio Cache button. Enter radio cache general characteristics. Click Save.
3. Click the POC Information menu option. Enter point of contact information for the radio cache.
4. Click the Radio Equipment menu option. Identify the manufacturer and model of the radios that compose the cache.
5. Click the Deploying Agencies menu option.
   Identify the agencies that may deploy the cache, if there are multiple agencies that may do so.
6. Click the Cache Channels
   menu option. Identify the channels that are programmed on these radios, if any are preprogrammed.
   a. If there are channels programmed on the cache that are not part of a radio system, you may enter these separately by clicking the Add New Cache Channel link.
7. Click the Cache Talk Groups
   menu option. Identify the talk groups that are programmed on these radios, if any are preprogrammed.

ADD	The Add New Radio Cache button is located above the table. This will open a new window that enables you to add a new radio cache record.
VIEW	Click View to open a small window to show you the details about the radio cache in a read-only format.
EDIT	Click Edit to open a window that enables you to edit the details about the radio cache. The Edit button will be enabled for all radio caches where the owning/responsible agency is an agency that you have authorization to enter data for.
DELETE	Click Delete to completely remove the radio cache from the database. You will be asked to confirm that you really want to delete the radio cache before the delete occurs, but once the delete is processed there is no “undo” button. The Delete button will be enabled for all radio caches where the owning/responsible agency is an agency that you have authorization to enter data for.

2.8.1 Add / Edit Radio Cache

Navigation Launched from Radio Cache Information page.

The Add / Edit Radio Cache Information page enables you to enter general characteristics of a radio cache. After you enter information and click the save button, the page remains open. At this time you may edit your entries and click save again, or move on to the next step. The next step is to click the POC Information menu option. Once you complete this step, then click the Radio Equipment menu option.

Click here for more information about the sub-menu.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.
SHOW DATA FIELDS	Optionally, you may wish to enter latitude/longitude coordinates so that your radio cache plots at a particular location in CAM. If so, click this link to display the form fields for entering this data.
LOOK UP	If you enter an address in the address field, you can click the LOOK UP button to generate the latitude/longitude coordinates from the address.

Field-level detail:

Field	Notes
*Radio Cache Name	Enter a unique name for the radio cache. Use a name that other people will recognize. Required.

*Cache Owner/ Responsible Agency	Select the agency that is the owner or has primary responsibility for the radio cache. The list of agencies is populated with the agencies you have authorization to enter data for. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
Cache Radio Frequency Band	Select the frequency band of the radio(s) in this cache. If there are multiple types of radios, select one. Optional.
Address	Enter the street address where the cache is stored. Optional
Cache Service Area	Enter some detailed text about where the cache may be used. Optional.
Notes	Use this space to enter any other comments. Optional.
Latitude	If you would like to control where the radio cache icon plots on the map in CAM, you may enter a latitude location. If you do not specify a location (lat and lon), the icon will plot at the owning agency's primary jurisdiction. Click for more info. Optional.
Longitude	If you enter a latitude coordinate, you must also enter a longitude coordinate. Click for more info. Optional.

2.8.2 Cache Radio Equipment

Navigation Launched from the cache menu

The Cache Radio Equipment page enables you to enter information about the actual radio equipment inventory that comprises the radio cache.

Select a radio manufacturer name from the Select Radio Make list. The radio models that are associated to that manufacturer will appear in the box below. Select the model of your radios. Enter the other information, then click Save. The summary table will list your selections.

You may select another radio make/model and repeat the process until all the radio equipment that comprises the cache is identified.

If you cannot find your radio make/model combination in the list you may add a new one by clicking the New Radio Make/Model link.

The summary table at the bottom of the page will be empty if there is no radio equipment identified for this radio cache.

ADD Click the Add New Radio Make/Model link to enter a new radio make/model combination.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents radio equipment inventory in the radio cache.

EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes.

DELETE – Click Delete to indicate that radio make/model is not part of the cache.

Field-level detail:

Field	Notes
*Radio Make (Mfg.)	Select the radio manufacturer name. If the mfg. name for your radios is not in the list, click the link below to Add New Radio Make/Model. Then return to this page to continue entering the data. Required.
*Radio Model	Select the model name. If the model name for your radios is not in the list, click the link below to add New Radio Make/Model. Then return to this page to continue entering the data. Required.
Number of programmable channels	Enter the number of channels that may be programmed on this radio. Optional.
Quantity of radios in cache	Enter the number of radios of this make/model that are in the cache inventory. Optional.
Quantity of spare batteries	Enter the number of spare batteries for this make/model that are in the cache inventory. Optional.

2.8.3 Deploying Agencies

Navigation Launched from the cache menu

The Deploying Agencies page enables you to identify a group of agencies that may deploy the radio cache. These agencies may be co-owners of the cache or for any other reason may call upon the cache in the event of an emergency.

Select at least one agency name from the Select Agency(s) list, then click Save. The summary table will list your selections.

The summary table at the bottom of the page will be empty if there are no agencies identified for this radio cache.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents agencies that may deploy the radio cache.

DELETE - Click Delete to indicate that an agency may not deploy this cache.

Field-level detail:

Field	Notes
*Select Agency(s)	Select an individual agency or hold the CTRL Key and select multiple agencies. The list is populated with agencies in the state/urban area except those that have already been associated to this radio cache. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.

2.8.4 Cache Channels

Navigation Launched from the cache menu

The Cache Channels page enables you to enter information about the channels that are programmed on the radios in the cache.

Select a radio system from the Select Radio System list. The channels that are associated to that radio system will appear in the box below. Select the channel(s) that are programmed on the cache radios, then click Save. The summary table will list your selections.

You may select another radio system and repeat the process until all the channels that are programmed on the cache radios are identified.

If channels programmed on the cache are not included on any radio system, you may add the channel to the cache by clicking the link: Add New Cache Channel.

If there are no radio systems in the Select Radio Systems list it means that there are no radio systems or mutual aid channels/systems setup in the state/urban area dataset. This data should be entered before you fully define your radio cache.

The summary table at the bottom of the page will be empty if there are no channels identified for this radio cache.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the channels that have been associated to the radio cache.

EDIT - Click Edit to open the New Cache Channel page to re-populate the form fields, make changes and click Save to save your changes. The Edit button is only enabled for channels that were created just for the cache via the New Cache Channel page. If the Edit button is disabled, your only option is to delete it from the cache.

DELETE – Click Delete to indicate that channel is not programmed on the cache.

Links Be sure to note the link on the page.

Click the Add New Cache Channel if channels are configured on the cache that are not included on any radio system.

Field-level details:

Field	Notes
*Select Radio System	Select a radio system. Once you select a radio system or mutual aid channel/system you will be able to select the channels on that system in the next field. The list is populated with all radio systems and mutual aid channels/systems that exist in the state/urban area. It is expected that only conventional (non-trunked) channels should be associated to the cache. If you select a trunked radio system, an alert will appear to notify you. Talk groups may be associated to the cache on another page. Required.
*Select Channel(s)	Select individual channel or hold the CTRL Key and select multiple channels. The list is populated with all channels from the selected radio system that are not already associated to the cache. Required.

2.8.4.1 Add New Cache Channel

Navigation Launched from Radio Cache Channel page

The Add New Cache Channel page enables you to enter channels (i.e., Tx/Rx pairs) programmed on the cache that are not part of a radio system. You may use this page to enter talk-around channels, for example.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Upon clicking save, data will be written to the database, and the form will be cleared for you to enter another channel, if you wish. Required fields are marked with an asterisk.

RESET If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

Field-level detail:

Field	Notes
Tone Type	Select the type of tones that you will be entering for your new channel record. CTCSS are analog tones, CDCSS are digital tones, NAC is for P25 network access and mixed mode enables you to select a mixture of tones on the transmit and receive frequencies.
Channel Frequencies	Select whether you will be entering a transmit-only (Tx Only) channel, receive-only (Rx Only) channel or Both (either a simplex or repeated channel).
*Tx	Enter the transmit (Tx) frequency (e.g., 161.625) or leave blank as transmit is optional (e.g., in the case of a receive-only channel).
Tx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the transmit frequency. This list is fixed and allows selection of "other". Optional.
*Tx NAC	Enter the three character hexadecimal code for the P25 Network Access Code (NAC). All NACs begin with a "$". The default, $293, is the code for CSQ, or Carrier Squelch. Required if NAC is selected.
*Rx	Enter the receive frequency (e.g., 161.625) or leave blank as receive is optional (e.g., transmit only channel). If you enter a Tx frequency in the 800MHz range, the Rx frequency will be automatically calculated with the correct 45 MHz offset from the Tx frequency. If you enter a Tx frequency in the UHF range, the Rx frequency will be automatically calculated with the correct 5 MHz offset from the Tx frequency. If you enter a Tx frequency in the 700Mhz range, the Rx frequency will be automatically calculated with the correct 30 MHz offset from the Tx frequency.

	You can override any auto-generated value by entering your own values.
Rx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the receive frequency. This list is fixed and allows selection of "other". Optional
*Rx NAC	Enter the three character hexadecimal code for the P25 Network Access Code (NAC). All NACs begin with a "$". The default, $293, is the code for CSQ, or Carrier Squelch. Required if NAC is selected.
Channel Name	Enter common name for the channel. Optional.

2.8.5 Cache Talk Groups

Navigation Launched from the cache menu

The Cache Talk Groups page enables you to enter information about the talk groups that are programmed on the radios in the cache.

Select a radio system from the Select Radio System list. The talk groups that are associated to that radio system will appear in the box below. Select the talk group(s) that are programmed on the cache radios, then click Save. The summary table will list your selections.

You may select another radio system and repeat the process until all the talk groups that are programmed on the cache radios are identified.

If there are no radio systems in the Select Radio Systems list it means that there are no trunked radio systems or mutual aid channels/systems setup in the state/urban area dataset. This data must be entered before you may fully define your radio cache.

The summary table at the bottom of the page will be empty if there are no talk groups identified for this radio cache.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the talk groups that have been associated to the radio cache.
DELETE – Click Delete to indicate that talk group is not programmed on the cache.

Field-level details:

Field	Notes
*Select Radio System	Select a radio system. Once you select a radio system you will be able to select the talk groups on that system in the next field. The list is populated with all *trunked* radio systems and mutual aid channels/systems that exist in the state/urban area. Required.
*Select Talk Group(s)	Select individual talk groups or hold the CTRL Key and select multiple talk groups. The list is populated with all talk groups from the selected radio system except for those that are already associated to the cache. You will be able to sort the list and summary table by talk group ID or talk group name. Click for more info Required.

2.9 Dispatch Center

Navigation Left Menu, Dispatch Center

The Dispatch Center
page presents you with a list of all of the dispatch centers that have been entered in your state/urban area. This page is the launching pad from which to add new dispatch center records and view, edit or delete existing dispatch center records.

What is a dispatch center?
In CASM, a dispatch center is defined as a
center that provides dispatch service for one or more first responder / public safety agencies. It may or may not also perform as a PSAP.
The dispatch center may contain console equipment that supports "patching" between radio system channels or talk groups or may not provide console patches.

Steps for entering data for a dispatch center:

1. Review the list in the table to determine if your dispatch center has already been entered by another user. You may need to click the "Clear Filter" button to see all dispatch centers in your state/urban area. There are three possibilities:
   a. If you see your dispatch center, and if the edit button is enabled you can edit the data.
   b. If you see your dispatch center and the edit button is not enabled, someone else has already entered the dispatch center data. To review the data, go to the Reports section to generate a report on that dispatch center.
   c. If the dispatch center is not in the list, it is your job to add it; proceed to step 2.
2. Click the Add New Dispatch Center button. Enter dispatch center general characteristics. Click Save.
3. Click the POC Information menu option. Enter point of contact information for the dispatch center.
4. Click the Associate Agencies menu option.
   Identify the agencies that the dispatch center serves (i.e. who is dispatched out of the center).
5. Click the Connected Dispatch Centers menu option. Identify any dispatch centers that are linked to your dispatch center. The dispatch center data entry is complete.

ADD The Add New Dispatch Center button is located above the table. This will open a new window that enables you to add a new dispatch center record.

VIEW Click View to open a small window to show you the details about the dispatch center in a read-only format.

EDIT Click Edit to open a window that enables you to edit the details about the dispatch center. The Edit button will be enabled for all dispatch centers where the owning/responsible agency is an agency that you have authorization to enter data for.

DELETE Click Delete to completely remove the dispatch center from the database. You will be asked to confirm that you really want to delete the dispatch center before the delete occurs, but once the delete is processed there is no "undo" button. The Delete button will be enabled for all dispatch centers where the owning/responsible agency is an agency that you have authorization to enter data for.

2.9.1 Add / Edit Dispatch Center

Navigation Launched from Dispatch Center page.

The Add/Edit Dispatch Center page enables you to enter general characteristics of a dispatch center. After you enter information and click the save button, the page remains open. At this time you may edit your entries and click save again, or move on to the next step. The next step is to click the POC Information menu option. Then click the Associate Agencies menu option.

Click here for more information about the sub-menu.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

SHOW DATA FIELDS Optionally, you may wish to enter latitude/longitude coordinates so that your dispatch center plots at a particular location in CAM. If so, click this link to display the form fields for entering this data.

LOOK UP If you enter an address in the address field, you can click the LOOK UP button to generate the latitude/longitude coordinates from the address.

Field-level detail:

Field	Notes
*Dispatch Center Name	Enter a unique name for the dispatch center. Use a name that other people will recognize. Required.
*Dispatch Center Owner / Responsible Agency	Select the agency that is the owner or has primary responsibility for the dispatch center. The list of agencies is populated with the agencies you have authorization to enter data for. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.

Address	Enter the street address. Optional.
PSAP?	Click “Yes” if the dispatch center acts as a Public Service Answering Point (PSAP) Optional.
Dispatch Center Equipment Make/Model	Select the manufacturer/model of the console equipment. If none of the choices are appropriate, select “Other” and you will be provided the ability to type in your own wording. Optional.
*Simultaneous console patches	Enter the number of simultaneous console patches that can be made at this dispatch center. This is not the number of Agencies served by this Dispatch Center. If console patches can be made, but you don’t know how many, estimate the number or enter the number 1. If console patches cannot be made, enter a zero. Required.
Notes	Use this space to enter any other comments. Optional.
Latitude	If you would like to control where the dispatch center icon plots on the map in CAM, you may enter a latitude location. If you do not specify a location (lat and lon), the icon will plot at the owning agency’s primary jurisdiction. Click for more info. Optional.
Longitude	If you enter a latitude coordinate, you must also enter a longitude coordinate. Click for more info. Optional.

2.9.2 Associated Agencies (Agencies Served)

Navigation Launched from the dispatch center menu

The Associated Agencies (Agencies Served by this Dispatch Center) page enables you to identify the agencies that are dispatched out of this dispatch center.

It is important to identify the agencies that are served by your dispatch center. This information is used to determine interoperability.

Select at least one agency from the Select Agency(s) list, enter in any notes you may have in the Notes field, then click Save. The summary table will list your selections.

If there are no agencies in the Select Agency(s) list it means that all the agencies in the state/urban area are already associated to this dispatch center. You should see them listed in the summary table at the bottom of the page.

The summary table at the bottom of the page will be empty if there are no agencies associated to the dispatch center.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the agencies that have been associated to the dispatch center.
EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes.

DELETE – Click Delete to indicate that the agency is not served by the dispatch center.

Field-level detail:

Field	Notes
*Select Agency(s)	Select an individual agency or hold the CTRL Key and select multiple agencies. If you select multiple agencies, the other entries you make on the page will be applied to each agency you select. The list is populated with all agencies in the state/urban area that are not already associated to this dispatch center. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
Primary Dispatch?	Identify whether the dispatch center is the primary or secondary dispatch center for the selected agency. If you are not sure, make your best estimate.
Notes	Use this space to enter any other comments about how the agency uses the dispatch center. Optional.

2.9.3 Connected Dispatch Centers

Navigation Launched from the dispatch center menu

The Connected Dispatch Centers page enables you to identify other dispatch centers that are linked to your center, possibly via microwave or T1 lines. In CASM, this will be interpreted as any agency served by your dispatch center can be interconnected (via an extended console patch) to any agency served by the connected dispatch center, so long as you also indicated that your dispatch center can create at least one console patch.

Select at least one dispatch center from the Select Dispatch Center(s) list, then click Save. The summary table will list your selections.
Please note: another user who has the ability to edit data for the connected dispatch center will also see an entry on their pages.

If there are no dispatch centers in the list it means that all the dispatch centers in the state/urban area are already associated to this dispatch center or there are no other dispatch centers. You should see them listed in the summary table at the bottom of the page.

The summary table at the bottom of the page will be empty if there are no dispatch centers associated to your dispatch center.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the other dispatch centers that have been associated to this dispatch center.

DELETE – Click Delete to indicate that the dispatch centers are not connected.

Field-level detail:

Field	Notes
*Select Dispatch Center(s)	Select an individual dispatch center or hold the CTRL Key and select multiple dispatch centers. The connection will apply to all selected. Owners of the other dispatch centers will see this connection and will be able to edit it in the same way you are.

2.10 Agency Usage

The Agency Usage page presents you with a list of all the agencies that you may add and edit data for. This page enables you to identify how each agency uses radio systems, channels, talk groups and radio equipment, from an agency perspective.
You are also able to identify the other agencies that each agency most needs to talk to on the Talk Partners page.

The information about agency use of radio systems, channels and talk groups may also be entered from a radio system or mutual aid channel/system perspective, but these pages provide another view into the data and enable you to review and modify this data from an agency perspective.

If there are no agencies showing in the table, go to the State/Urban Area homepage and click the Add New Agency button to initiate a new agency record.

EDIT Click Edit to open a window that enables you to edit the details about that area. Once you are in the edit area, you may navigate to other pages.

2.10.1 Agency Radio Systems

Navigation Launched from the Agency Usage page
Launched from the agency usage menu

The Agency Radio Systems page enables you to specify the radio systems that are used by the selected agency. Select a radio system from the Select Radio System list, answer the other questions, then click Save. The summary table will list your selections.

Note: Mutual Aid channels/systems do not appear in the select list and may not be associated to your agency on this page. In order to identify the mutual aid channels/systems that an agency uses, please visit the Mutual Aid page. Find the mutual aid channel/system that your agency uses, click edit and select the MA Usage menu option. Select your agency from the list and click Save.

It is important to identify the radio systems that are used by the agency. This information is used to determine interoperability between agencies for this radio system.

If there are no radio systems in the Select Radio System list it means that all the radio systems in the state/urban area are already associated to the agency. You should see them listed in the summary table at the bottom of the page.

The summary table at the bottom of the page will be empty if there are no radio systems associated to the agency.

A note about the Owner column: You may see that the agency is an "owner" for a radio system. This cannot be changed on this page. The "ownership" designation was made in the radio system section. All new entries from this page are automatically designated as "not an owner" (but a "user") of the selected radio system. If you edit a record where the agency is a radio system owner, that designation will not be lost.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.
Summary Table	The summary table presents the radio systems that have been associated to agency. EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes. DELETE – Click Delete to indicate that the agency is not using the radio system.

Field-level detail:

Field	Notes
*Select Radio System	Select a radio system that the agency uses The list is populated with all radio systems that are in the state/urban area except for those that are already associated to the agency. Visit the Mutual Aid section to associate your agency to a mutual aid. Required.
System Usage	Identify whether the agency uses the radio system as the primary system for communications or a secondary/backup system. A primary system is used daily by the majority of subscribers. A secondary/backup system is used in addition to a primary system, but is not the first choice for communications. The default is Primary.
Number of Mobile Radios	Enter the number of mobile radios (mobile radios are installed in vehicles) used by the selected agency on this radio system. Optional.
Number of Portable Radios	Enter the number of portable radios (handheld radios) used by the selected agency on this radio system. Optional.
Notes on agency use	Use this space to enter any other comments. Optional.

2.10.2 Agency Channels

Navigation Launched from the agency usage menu

The Agency Channels page enables you to create a list of the channels (i.e., Tx/Rx pairs) that are programmed on agency radios and that are used for communication by your selected agency. These channels should be the conventional (non-trunked) channels that the agency uses for communication, rather than frequency pairs from a trunked radio system.
If your agency uses a trunked system, proceed to the Agency Talk Groups page to select the talk groups that your agency uses.

It is important to identify the channels that are used in a conventional manner (non-trunked) by each agency. This information is used to determine interoperability between agencies.

To begin, select a radio system from the list. Once you select a radio system you may proceed by selecting the

channels on that system that the agency uses.
Also, the summary table will be populated with all channels that have previously been associated to the agency, if there are any.

If there are no radio systems in the Select Radio System/Mutual Aid list it means that there are no radio systems or mutual aid channels/systems "owned or used" by the selected agency. You must ask yourself: "What radio systems or mutual aid channels/systems does this agency use?" Here are several ways to correct this problem:

1. If the agency uses a radio system, but it is not in the list, click the Agency Radio System menu option and select from the existing radio systems.
   Otherwise, you may need to create a new radio system in the Radio System section.
2. Go to the Mutual Aid section. Review the list of mutual aid channels/systems in the list. Click Edit next to one that your agency uses.
   A new window will open; click the MA Usage menu option. Select your agency from the list and click Save.
   Close the window and return to Agency Channels.
   You will see the mutual aid channel/system in the Select Radio System/Mutual Aid list.

If channels that are programmed on your radios are do not appear in the list of channels for the system you use, you may enter a new channel directly from this page.
The new channel will not be associated to the radio system, but will be associated to your agency. This is where you should enter talk-around channels or car-to-car channels.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.
Summary Table	The summary table presents the channels that have been associated to the agency. EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes. If a channel is not part of a radio system, clicking Edit will open the Add/Edit Agency Channel page so you may edit the data. DELETE – Click Delete to indicate that the channel is not used by your agency.
Links	Be sure to note the link on the page Click the Add New Agency Channels link to add additional channels to the agency that do not appear in the radio system lists.

Field-level detail:

Field	Notes
*Select Radio System / Mutual Aid System	Select the radio system from which you wish to select channel data. The list is populated with all radio systems or mutual aid channels/systems that are used by the agency selected above. Once you select a system, the channels will appear in the next box. If you select a radio system that is trunked, you will receive an alert letting you know this is a trunked system and you should not link the trunked frequency pairs to the agency. Go to the Agency Talk Group page to identify the talk groups that your agency uses on this system. If you select a radio system for which you have already associated all the channels to the selected agency, you will be alerted to this fact. Required.
*Select Channel(s)	Select an individual channel or hold the CTRL Key and select multiple channels. The list is populated with all channels on the radio system you selected and that have not already been linked to the selected agency. The channels will be applied to the agency you selected above. The details you enter in the following options shall be applied to all channels you select. Required.
Primary Channel	Select whether the channel is used as a primary channel for the agency. If you are not sure, simply use your best judgment.
Channel Sharing	Identify how the channel can be shared for communications. If you are not sure, you can refrain from making a selection by leaving "Select Availability…" showing. Optional.
Channel Usage	Use this space to enter any other comments. Optional.

2.10.2.1 Add/Edit Agency Channels

Navigation Launched from Agency Channels page.

The Add/Edit Agency Channels page enables you to enter the channels (i.e., Tx/Rx pairs) that are used by the agency and are not in the list on the Agency Channels page. This page should primarily be used for entering your talk-around channels.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

RETURN Click Return to close the page.

Field-level detail:

Field	Notes
Tone Type	Select the type of tones that you will be entering for your new channel record. CTCSS are analog tones, CDCSS are digital tones, NAC is for P25 network access and mixed mode enables you to select a mixture of tones on the transmit and receive frequencies.
Channel Frequencies	Select whether you will be entering a transmit-only (Tx Only) channel, receive-only (Rx Only) channel or Both (either a simplex or repeated channel).
*Tx	Enter the transmit (Tx) frequency (e.g., 161.625) or leave blank as transmit is optional (e.g., in the case of a receive-only channel).
Tx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the transmit frequency. This list is fixed and allows selection of “other”. Optional.
*Tx NAC	Enter the three character hexadecimal access code for the P25 Network Access Code (NAC). The “$” is defaulted and must be retained. Required if NAC is selected.
*Rx	Enter the receive frequency (e.g., 161.625) or leave blank as receive is optional (e.g., transmit only channel). If you enter a Tx frequency in the 800MHz range, the Rx frequency will be automatically calculated with the correct 45 MHz offset from the Tx frequency – this value can be changed. If you enter a Tx frequency in the UHF range, the Rx frequency will be automatically calculated with the correct 5 MHz offset from the Tx frequency – this value can be changed. Similarly, if you enter a Tx frequency in the 700MHz range, the Rx frequency will be automatically calculated with the correct 30 MHz offset from the Tx frequency – this value can be changed.
Rx Tone, either CTCSS or CDCSS	Select one coded squelch frequency for the receive frequency. This list is fixed and allows selection of “other”. Optional.
*Rx NAC	Enter the three character hexadecimal access code for the P25 Network Access Code (NAC). The “$” is defaulted and must be retained. Required if NAC is selected.
Channel Name	Enter common name for the channel. Optional.
Primary Channel	Select whether the channel is a primary channel for the agency.
Channel Sharing	Select if or how the channel can be shared for communications. Optional.
Channel Usage	Use this space to enter any other comments. Optional.

2.10.3 Agency Talk Groups

Navigation Launched from the agency usage menu

The Agency Talk Groups page enables you to create a list of the talk groups that are programmed on agency radios and used for communication by your selected agency. This page is only applicable to agencies that use trunked radio systems. If your agency does not use a trunked system, you may skip this page.

If a trunked radio system is used, it is important to identify the talk groups that are used by each agency. This information is used to determine interoperability between agencies.

To begin, select a radio system from the list. Once you select a radio system you may proceed by selecting the talk groups on that system that the agency uses.
Also, the summary table will be populated with all talk groups that have previously been associated to the agency.

Some talk groups may be marked as "used by all" by the person who enters the radio system talk groups. Any talk group, such as a state-wide mutual aid talk group, that is routinely programmed on every radio on a trunked system should be marked as "used by all".
These talk groups are automatically linked to your agency when your agency is linked to the radio system. They are listed in a second summary table.
You cannot remove these talk groups from your list without removing the use of the radio system completely. If the information is not correct, please check with the POC for the radio system. You can find the POC for the radio system by going to the Radio System page, finding the radio system in the table and clicking the View button.

If there are no radio systems in the Select Radio System/Mutual Aid list it means that there are no radio systems or mutual aid channels/systems "owned or used" by the selected agency. You must ask yourself: "What radio systems or mutual aid channels/systems does this agency use?" Here are several ways to correct this problem:

1. If the agency uses a radio system, but it is not in the list, click the Agency Radio System menu option and select from the existing radio systems.
   Otherwise, you may need to create a new radio system in the Radio System section.
2. Go to the Mutual Aid section. Review the list of mutual aid channels/systems in the list. Click Edit next to one that your agency uses. A new window will open; click the MA Usage menu option. Select your agency from the list and click Save. Close the window and return to Agency Channels. You will see the mutual aid channel/system in the Select Radio System/Mutual Aid list.

If talk groups that are programmed on your radios are do not appear in the list for the system you use, the person responsible for entering the radio system data will need to enter the talk groups for you by editing the radio system from the Radio System page. It is not necessary to enter all talk groups into the database. It is only important to enter the talk groups that are shared between agencies using the system.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.
First Summary Table	The summary table presents the talk groups that have been associated to your agency. EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes. DELETE – Click Delete to indicate that the talk group is not used by your agency.
Second Summary Table	This summary table presents all the talk groups that are marked "used by all" when the talk groups were entered for the radio system. These talk groups are automatically linked to your agency when the radio system was selected as "used or owned" by your agency.

Field-level detail:

Field	Notes
*Select Radio System/Mutual Aid	Select the radio system from which you wish to select talk groups. The list is populated with all trunked radio systems that are used by the agency selected above. Once you select a radio system, the talk groups will appear in the next box. Required.
*Select Talk Group(s)	Select an individual talk group or hold the CTRL Key and select multiple talk groups. The list is populated with all talk groups on the radio system you selected and that have not already been linked to the selected agency. The talk groups will be applied to the selected agency you selected above. The details you enter in the following options shall be applied to all talk groups you select. You will be able to sort the talk group list by talk group ID or by talk group name. Click for more info. Required.
Primary Talk Group	Select whether the talk group is a primary channel for the agency. If you are not sure, simply use your best judgment.

Talk Group Sharing	Select if or how the talk group can be shared for communications. If you are not sure, you can refrain from making a selection by leaving "Select Availability…" showing. Optional.
Talk Group Usage	Use this space to enter any other comments. Optional.

2.10.4 Agency Radio Equipment

Navigation   Launched from the agency usage menu

The Agency Radio Equipment page enables you to enter the information about the mobile and portable radios that your agency uses regularly.

If your agency has spare radios that are used as a "cache" for passing out to other agency first responders at the scene of an incident, enter these in the Radio Cache section.

Part 1: This section enables you to select the radios, by make/model, and to identify the quantity of radios that are out in the field.

To begin, select a radio make from the list. Once you select a radio make, the model list will be generated. If you do not see a make/model combination you need, you may enter it by clicking the Add New Radio link.

ADD Click the Add New Radio link to enter a new radio make/model combination.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the radios that have been entered for your agency.

EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes.

DELETE – Click Delete to indicate that the radio is not used by your agency.

Field-level detail:

Field	Notes
*Select Radio Make (Mfg.)	Select the radio manufacturer. The list is populated with all radio manufacturers that have been entered by the user community. Required.
*Select Radio Model	Select the radio model. The list is populated with all models based on the make you selected above. If you do not see the radio make/model in the list you may add it by clicking the Add New Radio link. Required.
Quantity Fielded	Enter the number of radios of this make/model that are used by the selected agency. Optional
Notes	Use this space to enter any other comments. Optional.

Part 2: This section enables you to enter data about when the radios you entered in Part 1 were purchased.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Summary Table The summary table presents the radios that have been entered for your agency and when they were purchased.

EDIT - Click Edit to re-populate the data into the form fields, make changes and click Save to save your changes.

DELETE – Click Delete to remove data.

Field-level detail:

Field	Notes
*Select Radio Equipment	Select the radio make/model combination. The list is populated with all radios you entered in Part 1 of this form. Required.
*Year radios were purchased	Select the year the radios were purchased. Approximates are okay. Required.

Quantity purchased	Enter the number of radios of this make/model that were purchased in the selected year. Optional

2.10.4.1 Add New Radio

Navigation (1) Launched from Agency Radio Equipment page.
(2) Launched from the Radio Cache Equipment page.

The Add New Radio page enables you to enter a new radio make / model combination to the database. There is no way to edit this data once you click Save. If you make a mistake, simply add a new record.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET Click Reset to clear the page.

Field-level detail:

Field	Notes
*Radio Make (Mfg)	Select the radio manufacturer. The list is populated with all radio manufacturers that exist in the database. If none are appropriate, select “Other” and you will be provided the ability to enter wording of your own. Required.
*Radio Model	Select the radio model. The list is populated with all radio models that exist in the database. If none are appropriate, select “Other” and you will be provided the ability to enter wording of your own. Required.

2.10.5 Talk Partners

Navigation Launched from the agency usage menu

Part 1:
The first section of the Talk Partners page enables you to indicate the need your agency has to talk to other agencies in the state/urban area on a day-to-day basis.
The data collected on the Talk Partners page shall be utilized in the future analysis feature called Need vs. Ability Analysis. For more information about the Need vs. Ability Analysis click here.

This is your opportunity to identify those agencies that your agency most needs to talk to. The Need vs. Ability Analysis compares the stated *need to talk* to the *ability to talk* and will highlight those agency pairs that most need to talk, but have the least ability.
The intent of this analysis is to assist interoperability planners to focus attention on those agencies with the greatest need for interoperability solutions.

To begin, select a jurisdiction from the list, such as a county. The agencies that exist in the selected jurisdiction will populate the table below. Using the radio buttons in the list, identify the relative need to talk with each of the agencies that appear in the table to the one you selected at the top of the page. Click Save to save your selections. You may then select another jurisdiction and repeat the process, if appropriate.

The designations of Daily/Often, Sometimes and Rarely/Never are subjective, but may be interpreted loosely in the following way:

- Daily/Often – daily, once per week, or a couple times a month
- Sometimes – once per month or a couple times a year
- Rarely/Never – once per year or only in unusual circumstances

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET If you are entering new data, the Reset button will clear the radio button selections. If you are editing an existing data and have not clicked Save yet, the Reset button will return the original data to the form.

Field-level detail:

Field	Notes

*Select Jurisdiction	Select the jurisdiction from which you wish to view agencies to indicate your need to talk with them. Start by selecting the jurisdiction in which your agency operates. Once you select a jurisdiction, the other agencies that operate in the jurisdiction will appear in the table. Required.
Radio buttons to indicate need to talk	For each agency in the table, click the radio button in the column that best describes the need to talk from the perspective of the agency selected at the top of the page. Be sure to click Save before changing to another jurisdiction.

Part 2:
The second section of the Talk Partners page enables you view or print the data you have entered in a report format. Via the reports, you may compare your assessment of need to talk to other users who enter data for their agencies. There are four different reports that you may choose from.

1. My Talk Partners.
   This report gives you an output of the data you have saved to the database for the selected agency. It does not report on entries where the default entry of Undecided/Unknown selection was not changed.
2. Agencies that need to talk to my agency.
   This report provides data about what other users have indicated about their agency's need to talk to the selected agency.
3. Combined List.
   This report combines the information entered by you with the information entered by other users about the selected agency.
4. Discrepancies Only.
   This report is the same as the Combined list, except it limits the listing to just those rows where your assessment of need to talk differs from the other user's assessment of need to talk for the selected agency.

2.11 Reports

Navigation Left Menu, Reports

The Reports page enables you to generate a report for the data that has been entered into your state/urban area dataset. These reports are comprehensive for the specific item you choose.

In order to view or print a report, you must select the report type and one or more data items of that type. If more than one item is selected, a single report is generated that contains all items in alphabetic order. Then click "Generate Report". The report will appear in a new window where you may view or print it. You can also cut and paste the text from the report window into a Microsoft Word or Excel document.

The same reports are generated using CAM's Basic Report function and can be saved as HTML files for later use.

GENERATE REPORT	Click Generate Report once you have selected the required items on the page. Required fields are marked with an asterisk.
RESET	Click Reset to clear your selections.

Field-level detail:

Field	Notes
*Select Report	Select a report type. The list includes all report types that are available. A set of filtering mechanisms will be presented. For example, if you select "Agency Report", you will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info
*Select Name	Select the specific data object for which to create the report. The resulting report will be presented in a separate report window from which the report can be viewed or printed.

2.12 Data Export

Navigation Left Menu, Data Export

The Data Export page enables you to generate a tab-separated file (.xls format) for data that has been entered into your state/urban area dataset.

In order to generate a file, you must select the data type and one or more data items of that type. Then click "Export Data". The file will appear as a link that you will be able to view in your browser or download to your computer. The files are optimized for use in Microsoft Excel.

For more information about the content of the data, click: Data Export Details.

EXPORT DATA	Click Export Data once you have selected the required items on the page.
HIDE DATA FIELDS	Click the Hide Data Fields button to hide the selection form fields and reveal any previously created data file links.
CREATE EXPORT FILE	Click the Create Export File button to reveal the selection form fields. Any previously created data file links will appear at the bottom of the page. You may need to scroll you page down to see them.

Field-level detail:

Field	Notes
Select Data Content	Select a type of data you would like to export. The list includes all export types that are available. Some selections will enable you to refine your selections to a particular agency, radio system, gateway or radio cache.
Select Name	Select the specific data object(s) for which to create the export file. The resulting file links will be presented in a refreshed window and at the bottom of the Data Export page.

2.13 State/Urban Area Profile

Navigation Top menu, State/Urban Area, State/Urban Area Profile

Part 1: The first section of the State/Urban Area Profile page displays the state/urban area point of contact. Users that have state/urban area privilege may add to the POC list.

Links	Click the Add POC link to add information about the POCs for this state/urban area. The link is visible to users that have state/urban area privilege.

Part 2: The second section of the page enables you to review the jurisdictions that make up the state/urban area. Any user can view any jurisdiction detail in the state/urban area.
The Add, Edit and Delete buttons shall be enabled for users with Jurisdiction or State/Urban Area privilege; a user with Agency privilege cannot create new jurisdictions.

What is a jurisdiction?
In CASM, a jurisdiction is defined as a geographic area in which an agency has authority to exercise power. Currently, CASM supports jurisdictions of type: state, county and city. In the future, more jurisdiction types will be supported, such as districts and military bases.

Steps for entering data for a jurisdiction:

1. Review the list in the table to determine if the jurisdiction you are interested in has already been entered by another user. If not, proceed to step 2.
2. Click the Add New Jurisdiction button. Enter jurisdiction general characteristics. Click Save.

ADD	The Add New Jurisdiction button is located above the table. This will open a new window that enables you to add a new jurisdiction record.
VIEW	Click View to open a small window to show you the details about the jurisdiction in a read-only format.
EDIT	Click Edit to open a window that enables you to edit the details about the jurisdiction. The Edit button will be enabled for all jurisdictions you have authorization to enter data for.
DELETE	Click Delete to completely remove the jurisdiction from the database. You will be asked to confirm that you really want to delete the jurisdiction before the delete occurs, but once the delete is processed there is no “undo” button. The Delete button will be enabled only for jurisdictions that are not primary jurisdictions for agencies in the state/urban area.

2.13.1 Add / Edit Jurisdiction

Navigation	Launched from the State/Urban Area Profile Page.

The Add/Edit Jurisdiction page enables you to enter general characteristics of a jurisdiction.

Only jurisdictions below the county level may be added (e.g., cities, towns, townships) for inclusion in the state/urban area. New states or counties must be added by the CASM Support Team.

Select the name of the county in which your new jurisdiction exists. Select the new jurisdiction from the list provided, or, if the city/town that you which to enter is not in the list, you may select “Other…” and you will be able to enter a new name.
If you select a city from the pre-populated list, the latitude and longitude coordinates will be automatically entered. If you use “Other…” you will need to supply the latitude and longitude. Click the save button. Your record is saved to the database and the page remains open.
At this time you may edit your entry and click save again, click New to enter a new jurisdiction entry.

This page requires knowledge of latitude/longitude coordinates in order to locate the jurisdiction on the map in CAM. If you do not know the latitude/longitude coordinates of the jurisdiction you wish to add, you might find resources on the internet to help.
The Getty Thesaurus of Geographic Names (http://www.getty.edu/research/conducting_research/vocabularies/tgn/) is a great resource.

This page is only accessible to users who have either jurisdiction or state/urban area privilege; users with agency privilege cannot create new jurisdictions.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.
NEW	If you are entering multiple jurisdictions, click New to clear the page for a new entry.

Field-level detail:

Field	Notes
*Select County Name	Select the county in which the jurisdiction is located. The list is populated with the counties that you have authorization to edit data for. Required.
*Select Jurisdiction Name	Select a city/town level jurisdiction from the list to include in the state/urban area. If none are appropriate, select “Other” and you will be able to type your own wording. The list is populated with all municipalities in the selected county (from USGS dataset). Required.
*Latitude	Enter the latitude coordinate for the jurisdiction. This location will be used for plotting the data in CAM. Click for more info. Required.
*Longitude	Enter the longitude coordinate for the jurisdiction. This location will be used for plotting the data in CAM. Click for more info. Required.
Notes	Use this space to enter any other comments. Optional.

2.14 Summary Information

The summary information section provides you a single place for viewing the level of completeness for each record in each main data entry area.

2.14.1 Radio System Summary

Navigation Launched from the Summary Information menu, Radio System

The Radio System Summary page enables you to see the overall level of completeness for all the radio systems in the state/urban area.
It provides quick access buttons to edit the data for systems that are owned by agencies you have the ability to add/edit data for.

If you are a user with jurisdiction or agency privilege, the list is automatically filtered to just show you your radio systems.
You may see all the radio systems in the state/urban area by un-checking the “Only My Radio Systems” checkbox in the red heading.

The table displays a row for each radio system. Each column represents a major area of data. There are color-coded buttons in each column that represent the level of completeness. You may click any of these buttons to go directly to this page and edit your data.

Column	Button Color	Button Explanation
Definition	EDIT (Green)	The radio system definition is completed; you may click this button to edit.
	EDIT (Grey)	This radio system is owned by an agency that you do not have the ability to add/edit data for. You may not click this button.
	ASSOCIATE (Orange)	The radio system lacks an owning agency, which is now a required field. If one of your agencies is an owning agency for this radio system, you may click the button to edit.
	ASSOCIATE (Grey)	The radio system lacks an owning agency, which is now a required field. There are no agencies you may add or edit data for. You may not edit this data.
Channels	EDIT (Green)	There is at least one channel entered for the radio system; you may click this button to edit.
	EDIT (Grey)	There is at least one channel entered for the radio system, but this system is owned by someone else's agency. You may not edit this data.
	INCOMPLETE (Red)	There are no channels entered for the radio system; you may click this button to edit.
	INCOMPLETE (Grey)	There are no channels entered for the radio system, but this system is owned by someone else's agency. You may not edit this data.
Talk Groups	EDIT (Green)	There is at least one talk group entered for the trunked radio system; you may click this button to edit.
	EDIT (Grey)	There is at least one talk group entered for the trunked radio system, but this system is owned by someone else's agency. You may not edit this data.
	INCOMPLETE (Red)	There are no talk groups entered for the radio system; you may click this button to edit.
	INCOMPLETE (Grey)	There are no talk groups entered for the radio system, but this system is owned by someone else's agency. You may not edit this data.
	NOT TRUNKED (Grey)	This radio system is not trunked, therefore talk groups may not be entered.
Structures	EDIT (Green)	There is at least one structure entered for the radio system; you may click this button to edit.
	EDIT (Grey)	There is at least one structure entered for the radio system, but this system is owned by someone else's agency. You may not edit this data.
	INCOMPLETE (Red)	There are no structures entered for the radio system; you may click this button to edit.
	INCOMPLETE (Grey)	There are no structures entered for the radio system, but this system is owned by someone else's agency. You may not edit this data.
Repeater / Base Stations	EDIT (Green)	All structures have at least one repeater/base station entry entered for it; you may click this button to edit.
	EDIT (Grey)	All structures have at least one repeater/base station entry entered for it, but this system is owned by someone else's agency. You may not edit this data.
	INCOMPLETE (Red)	At least one structure has no repeater/base station entries entered for it; you may click this button to edit.
	INCOMPLETE (Grey)	Four possible reasons: (1) There may be no structures associated, (2) there may be no channels associated, (3) at least one structure has no repeater/base station entries entered for it, or (4) the system is owned by someone else's agency. You may not edit this data.

2.14.2 Mutual Aid Summary

Navigation Launched from the Summary Information menu, Mutual Aid

The Mutual Aid Summary page enables you to see the overall level of completeness for all the mutual aid channels/systems that are used by agencies you have the ability to add/edit data for.

If you are a user with jurisdiction or agency privilege, the list is automatically filtered to just show you the mutual aid channels/systems used by your agencies.
You may see all the mutual aid channels/systems in the state/urban area by un-checking the “Only My Mutual Aids” checkbox in the red heading.

The table displays a row for each mutual aid channels/systems. Each column represents a major area of data entry. There are color-coded buttons in each column that represent the level of completeness. You may click any of these buttons to go directly to this page and edit your data.

Column	Button Color	Button Explanation
Definition	EDIT (Green)	The mutual aid definition is completed, you may click this button to edit.
	EDIT (Grey)	You do not have any agencies to add/edit data for. You may not edit this data.
Agencies	EDIT (Green)	There is at least one of your agencies associated to the mutual aid; you may click this button to edit.
	INCOMPLETE (Red)	None of your agencies are associated for the mutual aid; you may click this button to edit.
	INCOMPLETE (Grey)	You do not have any agencies to add/edit data for. You may not edit this data.
Channels	EDIT (Green)	There is at least one channel entered for the mutual aid, you may click this button to edit.
	EDIT (Grey)	There is at least one channel entered for the mutual aid, but you do not have any agencies to add/edit data for. You may not edit this data.
	INCOMPLETE (Red)	There are no channels entered for the mutual aid, you may click this button to edit.
	INCOMPLETE (Grey)	There are no channels entered for the mutual aid, but you do not have any agencies to add/edit data for. You may not edit this data.
Talk Groups	EDIT (Green)	There is at least one talk group entered for the trunked mutual aid, you may click this button to edit.
	EDIT (Grey)	There is at least one talk group entered for the mutual aid, but you do not have any agencies to add/edit data for. You may not edit this data.
	INCOMPLETE (Red)	There are no talk groups entered for the mutual aid, you may click this button to edit.
	INCOMPLETE (Grey)	There are no talk groups entered for the mutual aid, but you do not have any agencies to add/edit data for. You may not edit this data.
	NOT TRUNKED (Grey)	This mutual aid is not trunked, therefore talk groups may not be entered.
Structures	EDIT (Green)	There is at least one structure entered for the mutual aid, you may click this button to edit.
	EDIT (Grey)	There is at least one structure entered for the mutual aid, but you do not have any agencies to add/edit data for. You may not edit this data.
	INCOMPLETE (Red)	There are no structures entered for the mutual aid, you may click this button to edit.
	INCOMPLETE (Grey)	There are no structures entered for the mutual aid, but you do not have any agencies to add/edit data for. You may not edit this data.
Repeater / Base	EDIT (Green)	All structures have at least one repeater/base station entry entered for it, you may click this button to edit.
	EDIT (Grey)	All structures have at least one repeater/base station entry entered for it, but you do not have any agencies to add/edit data for. You may not edit this data.

Stations	INCOMPLETE (Red)	At least one structure has no repeater/base station entries entered for it, you may click this button to edit.
	INCOMPLETE (Grey)	Four possible reasons: (1) There may be no structures associated, (2) there may be no channels associated, (3) at least one structure has no repeater/base station entries entered for it, or (4) you do not have any agencies to add/edit data for. You may not edit this data.

2.14.3 Gateway Summary

Navigation Launched from the Summary Information menu, Gateway

The Gateway Summary page enables you to see the overall level of completeness for all the gateways in the state/urban area.
It provides quick access buttons to edit the data for gateways that are owned by agencies you have the ability to add/edit data for.

If you are a user with jurisdiction or agency privilege, the list is automatically filtered to just show you your gateways. You may see all the gateways in the state/urban area by un-checking the “Only My Gateways” checkbox in the red heading.

The table displays a row for each gateway. Each column represents a major area of data entry. There are color-coded buttons in each column that represent the level of completeness. You may click any of these buttons to go directly to this page and edit your data.

Column	Button Color	Button Explanation
Definition	EDIT (Green)	The gateway definition is completed; you may click this button to edit.
	EDIT (Grey)	This gateway is owned by an agency that you do not have the ability to add/edit data for. You may not click this button.
Channels	EDIT (Green)	There is at least one channel configured on the gateway; you may click this button to edit.
	EDIT (Grey)	There is at least one channel configured on the gateway, but this gateway is owned by someone else’s agency. You may not edit this data.
	INCOMPLETE (Red)	There are no channels configured on this gateway; you may click this button to edit.
	INCOMPLETE (Grey)	There are no channels configured on this gateway, but this gateway is owned by someone else’s agency. You may not edit this data.
Talk Groups	EDIT (Green)	There is at least one talk group configured on this gateway; you may click this button to edit.
	EDIT (Grey)	There is at least one talk configured on this gateway, but this gateway is owned by someone else’s agency. You may not edit this data.
	INCOMPLETE (Red)	There are no talk groups configured on this gateway; you may click this button to edit.
	INCOMPLETE (Grey)	There are no talk groups configured on this gateway, but this gateway is owned by someone else’s agency. You may not edit this data.

2.14.4 Radio Cache Summary

Navigation Launched from the Summary Information menu, Radio Cache

The Radio Cache Summary page enables you to see the overall level of completeness for all the caches in the state/urban area.
It provides quick access buttons to edit the data for caches that are owned by agencies you have the ability to add/edit data for.

If you are a user with jurisdiction or agency privilege, the list is automatically filtered to just show you your radio caches.

You may see all the radio caches in the state/urban area by un-checking the “Only My Radio Caches” checkbox in the red heading.

The table displays a row for each radio cache. Each column represents a major area of data entry for the radio cache. There are color-coded buttons in each column that represent the level of completeness. You may click any of these buttons to go directly to this page and edit your data.

Column	Button Color	Button Explanation
Definition	EDIT (Green)	The radio cache definition is completed; you may click this button to edit.
	EDIT (Grey)	This radio cache is owned by an agency that you do not have the ability to add/edit data for. You may not click this button.
Radio Equipment	EDIT (Green)	There is at least one radio make/model entered for the radio cache; you may click this button to edit.
	EDIT (Grey)	There is at least one radio make/model entered for the radio cache, but this cache is owned by someone else’s agency. You may not edit this data.
	INCOMPLETE (Red)	There are no radio make/models entered for the radio cache; you may click this button to edit.
	INCOMPLETE (Grey)	There are no radio make/models entered for the radio cache, but this cache is owned by someone else’s agency. You may not edit this data.
Deploying Agencies	EDIT (Green)	There is at least one deploying agency entered for the radio cache; you may click this button to edit.
	EDIT (Grey)	There is at least one deploying agency entered for the radio cache, but this cache is owned by someone else’s agency. You may not edit this data.
	INCOMPLETE (Red)	There are no deploying agencies entered for the radio cache; you may click this button to edit.
	INCOMPLETE (Grey)	There are no deploying agencies entered for the radio cache, but this cache is owned by someone else’s agency. You may not edit this data.
Channels	EDIT (Green)	There is at least one channel configured for the radio cache; you may click this button to edit.
	EDIT (Grey)	There is at least one channel configured for the radio cache, but this cache is owned by someone else’s agency. You may not edit this data.
	INCOMPLETE (Red)	There are no channels configured for the radio cache; you may click this button to edit.
	INCOMPLETE (Grey)	There are no channels configured for the radio cache, but this cache is owned by someone else’s agency. You may not edit this data.
Talk Groups	EDIT (Green)	There is at least one talk group configured for the radio cache; you may click this button to edit.
	EDIT (Grey)	There is at least one talk group configured for the radio cache, but this cache is owned by someone else’s agency. You may not edit this data.
	INCOMPLETE (Red)	There are no talk groups entered for the radio cache; you may click this button to edit.
	INCOMPLETE (Grey)	There are no talk groups entered for the radio cache, but this cache is owned by someone else’s agency. You may not edit this data.

2.14.5 Dispatch Center Summary

Navigation Launched from the Summary Information menu, Dispatch Center

The Dispatch Center Summary page enables you to see the overall level of completeness for all the dispatch centers in the state/urban area.

It provides quick access buttons to edit the data for dispatch centers that are owned by agencies you have the ability to add/edit data for.

If you are a user with jurisdiction or agency privilege, the list is automatically filtered to just show you your dispatch centers.
You may see all the dispatch centers in the state/urban area by un-checking the "Only My Dispatch Centers" checkbox in the red heading.

The table displays a row for each dispatch center. Each column represents a major area of data entry. There are color-coded buttons in each column that represent the level of completeness. You may click any of these buttons to go directly to this page and edit your data.

Column	Button Color	Button Explanation
Definition	EDIT (Green)	The dispatch center definition is completed; you may click this button to edit.
	EDIT (Grey)	This dispatch center is owned by an agency that you do not have the ability to add/edit data for. You may not click this button.
Agency Association	EDIT (Green)	There is at least one agency served by the dispatch center; you may click this button to edit.
	EDIT (Grey)	There is at least one agency served by the dispatch center, but this center is owned by someone else's agency. You may not edit this data.
	INCOMPLETE (Red)	There are no agencies served by the dispatch center; you may click this button to edit.
	INCOMPLETE (Grey)	There are no agencies served by the dispatch center, but this center is owned by someone else's agency. You may not edit this data.
Connected Centers	EDIT (Green)	There is at least one other center connected to this center; you may click this button to edit.
	EDIT (Grey)	There is at least one other center connected to this center, but this center is owned by someone else's agency. You may not edit this data.
	INCOMPLETE (Red)	There are no other centers connected to this center; you may click this button to edit.
	INCOMPLETE (Grey)	There are no other centers connected to this center, but this center is owned by someone else's agency. You may not edit this data.

2.14.6 Agency Usage Summary

Navigation Launched from the Summary Information menu, Agency Usage

The Agency Usage Summary page enables you to see the overall level of completeness for all the agency usage pages.

If you are a user with jurisdiction or agency privilege, the list is automatically filtered to just show your agencies. You may see all the agencies in the state/urban area by un-checking the "Only My Agencies" checkbox in the red heading.

The table displays a row for each agency name. Each column represents a major area of data entry. There are color-coded buttons in each column that represent the level of completeness. You may click any of these buttons to go directly to this page and edit your data.

Column	Button Color	Button Explanation
Radio System Usage	EDIT (Green)	There is at least one radio system associated to this agency; you may click this button to edit.
	EDIT (Grey)	There is at least one radio system associated to this agency. You may not edit this data.
	INCOMPLETE (Red)	There are no radio systems associated to this agency; you may click this button to edit.
	INCOMPLETE (Grey)	There are no radio systems associated to this agency. You may not edit this data.
Channels Usage	EDIT (Green)	There is at least one channel associated to this agency; you may click this button to edit.

	EDIT (Grey)	There is at least one channel associated to this agency. You may not edit this data.
	INCOMPLETE (Red)	There are no channels associated to this agency; you may click this button to edit.
	INCOMPLETE (Grey)	There are no channels associated to this agency. You may not edit this data.
Talk Groups	EDIT (Green)	There is at least one talk group associated to this agency; you may click this button to edit.
	EDIT (Grey)	There is at least one talk group associated to this agency. You may not edit this data.
	INCOMPLETE (Red)	There are no talk groups associated to this agency; you may click this button to edit.
	INCOMPLETE (Grey)	There are no talk groups associated to this agency. You may not edit this data.
Radio Equipment	EDIT (Green)	There is at least one radio equipment record associated to this agency; you may click this button to edit.
	EDIT (Grey)	There is at least one radio equipment record associated to this agency. You may not edit this data.
	INCOMPLETE (Red)	There are no radio equipment records for this agency; you may click this button to edit.
	INCOMPLETE (Grey)	There are no radio equipment records for this agency. You may not edit this data.
Talk Partners	EDIT (Green)	There is at least one talk partner associated to this agency; you may click this button to edit.
	EDIT (Grey)	There is at least one talk partner associated to this agency. You may not edit this data.
	INCOMPLETE (Red)	There are no talk partners associated to this agency; you may click this button to edit.
	INCOMPLETE (Grey)	There are no talk partners associated to this agency. You may not edit this data.

2.15 Points of Contact

Navigation Launched from Menu Bar, Points of Contact selection.

The Points of Contact page presents you a list of points of contact (POCs) that have been entered in your state/urban area.
This page acts as a directory and launching pad from which to add new POCs and view, edit or delete existing POC data. You may sort the list by Contact Last Name, Contact Company/Organization Name or by phone.

What is a Point of Contact?
In CASM, a point of contact is defined as a person that is a contact person for an agency/organization, radio system, structure, dispatch center, gateway, radio cache or for the state/urban area, in general. There may be more than one contact person for any one communication asset or agency. Similarly, there may be more than one communication asset or agency for any one contact person.

ADD The Add POC button is located above the table. This will open a new window that enables you to add a new person as a point of contact.

VIEW Click View to open a small window to show you the details about the contact in a read-only format

EDIT Click Edit to open a window that enables you to edit either the details about this point of contact or to identify other communication assets that this person is a point of contact for.

DELETE Click Delete to completely remove the point of contact from the database. You will be asked to confirm that you really want to delete the contact before the delete occurs, but once the delete is processed there is no “undo” button. Generally, the Delete button will only be enabled for contacts that are not related to any communication asset or agency. For State/Urban Area AMs, the Delete button is always enabled.

2.15.1 Add / Edit Point of Contact Information

Navigation (1) Launched from Points of Contact page.

(2) Launched from the Agency, Radio System, Structure, Dispatch, Gateway, Radio Cache or State/Urban Area Profile pages.

The Add/Edit Point of Contact Information page enables you to enter data for a new point of contact or to edit data on an existing point of contact.

Depending on how you accessed this page, you will see different information on the page.

1. If you accessed this page from the Point of Contact main page by clicking the Add POC link, you will see a search option at the top of the page.
   This enables you to search the POC database to see if the person you are about to enter data for is already in the POC dataset.
   If the data is already entered, select the person's name and you will be provided with the ability to add to or modify this data.

2. If you accessed this page from the Point of Contact main page by clicking an Edit button, you will not see the search option, but will see the data that has been entered for that person on the page. At the bottom of the page you will see a summary table of all the agencies or communication assets that this person is a contact for. You may add to or modify any data on the page. You may remove a person as a contact for a particular object by clicking the appropriate delete button in the table at the bottom of the page.

3. If you accessed this page from a menu option in another section, such as the Radio System Section or Dispatch Center
   section, you may see a table at the bottom of the page that lists all the POCs that are associated to the object you are editing.
   You may search the POC database to see if the person you want to add to this object is already in the database, you may add a new POC at this time without searching, or you may edit an existing POC for this object by clicking the edit button in the table at the top. If you don't see a table at the bottom of the page, it means that there are currently no POCs associated to this object. Go ahead and add your new POC. It will automatically link to the object from which you clicked the link.

SEARCH POCs A single POC record should be created for each person. Each contact can be identified as the point of contact for multiple agencies or communication assets, so you don't have to enter data about an individual person more than one time. By clicking the Search button or using the "Select existing POC…" selection list, you may check the database to see if the person you want to add as a POC is already in the database.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk. Note: You must enter either a person's last name or a Company/Organization Name, but both are not required.

RESET If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

NEW If you are entering multiple contacts from the Point of Contact main page, click New to clear the page for a new entry.

Summary Table Once a POC has been saved, a summary table will appear at the bottom of the page. It presents the agencies and/or communication assets that this person is the POC for.

DELETE – Click Delete to remove an object from the list. The Delete button will be enabled for all agencies and communication assets that you have authorization to modify.

Field-level detail:

Field	Notes
*Last Name	Enter the POC's last name. Required, if Company Name is not provided. If CASM recognizes that the last name you entered is the same as an existing POC, you will be supplied with information about the existing contact so that you may determine if the contact you are about to enter is the same as an existing record. If not, click Close and proceed to enter your contact data. If so, you may select the existing record and update it.
First Name	Enter the POC's first name. Optional.
Middle Initial (MI)	Enter the POC's middle name initial. Optional.

Suffix	Enter a suffix for the POC's name if applicable, (e.g. Jr., Sr., III). Optional.
Personal Title	Enter a personal title, if applicable, (e.g. Lt., Sgt., Chief, PhD). Optional.
*Company / Organization Name	Enter a company or organization name. This field may be used for different purposes: (1) it may be used to enter a company name when the company serves as a POC, such as a radio shop, and where there is no dedicated person to enter in the Name fields; (2) it may be used to enter the employer or organizational affiliation for the person that is entered above in the Name fields. The Company/Organization Name field will be auto-populated with the agency name when you are entering a POC for an agency. Also, it will be auto-populated with the owning agency name when you are entering a POC for a gateway, dispatch center or radio cache. The field may always be edited, even if it is auto-populated. Required, if Last Name is not provided.
Job Title	Enter a job title if applicable, (e.g., Technician). Optional.
Office Phone	Enter phone number. Optional.
Cell Phone	Enter cell phone number. Optional.
Fax Number	Enter FAX number. Optional.
Pager Number	Enter pager phone number. Optional.
Email Address	Enter email address. Optional.
Address	Enter the street address. Optional.
*Select Category	If you accessed this page from an asset definition page such as the Add/Edit Dispatch Center page, you will not see this option. Otherwise, select the type of communication asset that this POC is supporting. (e.g. Agency, Radio System, etc.) If you select "Agency", you will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Click for more info. Required.
*Select Specific Record	If you accessed this page from an asset definition page such as the Add/Edit Dispatch Center page, you will not see this option. Otherwise, select an individual asset or hold the CTRL Key and select multiple assets that this person is the POC for. Required.
*Type of POC	Select the role that this person assumes as the POC for the previously selected object. If none of the choices are appropriate, select "Other" and you will be provided the ability to type in your own wording. Required.
Primary Contact?	You may identify whether the POC is a primary or secondary contact for the previously selected object. Optional

2.15.2 Points of Contact Search

Navigation Launched from Add/Edit Point of Contact Information page.

The Points of Contact Search page enables you to search existing (previously entered) POCs to determine if the person/company is already entered into the database.

By checking to see if a person has already been entered as a POC you can save yourself the trouble of entering the data and creating a duplicate record.
If you find that there is a POC record for a particular person you may edit it and associate it to an additional communication asset.

SEARCH POC To use the page, enter the name or part of a name into the form field to search for a person's name or company name. Click Search.

If no records match your search, you will be notified. You may then click the Back button and return to the Add/Edit Point of Contact window and proceed with entering the POC data.

If matches are found, they will be presented in a summary table.

VIEW – Click View to open a read-only window so that you can confirm whether the POC is the one you are interested in.

EDIT – Click Edit to open the Add/Edit Points of Contact page to proceed with entering additional information.

BACK Click the Back button to return to the Add/Edit Point of Contact window.

2.16 User Account

The user account section provides information about your own user account. For those users who are Administrative Managers (AMs), it provides access to the Account Administration page for creating new user accounts.

Briefly, each user must have a user account that specifies:

1. Privilege level (State/Urban Area, Jurisdiction, Agency, or CAM Only)
2. Assignment to specific state/urban area(s) that can be accessed. A user, assigned to one state/urban area, can have their permissions to add/edit data further restricted to one or more counties within the state/urban area or to one or more specific agency(s) in the state/urban area.

An Administrative Manager (AM) is a user with specific Admin Rights. This user is responsible for creating and managing other user accounts. There must be a minimum of one AM per state/urban area. An AM can delegate the responsibility and authority to create user accounts to other AMs, thereby creating a hierarchy of AMs for the state/urban area (e.g., there may be one state/urban area AM and multiple county AMs in a multi-county state/urban area).

An AM with state/urban area privilege or jurisdiction privilege also has the ability to delete regional assets, specifically radio systems, mutual aid channels/systems. A user with state/urban area privilege or jurisdiction privilege (AM or not) is the only type of user than can create new jurisdictions and agencies.

A user account itself cannot be deleted from the CASM system; its status can be set to “Closed” to prevent further access by the particular user. In addition, a user account can be suspended by setting its status to “Contact Administrator”.

2.16.1 Personal Profile

Navigation Launched from Menu Bar, Accounts/ Personal Profile.

The Personal Profile page provides information to you about your own user account. This page enables you to change your password and personal contact information (e.g., email address).

Links Be sure to note the links on the page.

Click the Change My Password link to change your CASM password.

Click the Update Contact Info link to update your user account contact information.

2.16.1.1 Change User Account Password

Navigation Launched from User Profile page.

The Change User Account Password page enables you to change your user account personal password. A “strong” password is required consisting of a minimum of 8 characters including letters, numbers and special characters. You will be notified with a confirmation message if the new password is accepted and the change is successfully completed.

Please note: your user account password is the same for access to CAS and CAM. If you change your password here, your new password will work in both places.

SUBMIT Click Submit once you have entered data on the page that you wish to save to the database. The Submit button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

CANCEL Click Cancel to cancel this operation.

Field-level detail:

Field	Notes
*Old Password	Enter your current password. Required.
*New Password	Enter a new password. Required.
*New Password Again	Enter the new password again to confirm your password change. Required.

2.16.1.2 User Contact Information

Navigation Launched from the Add/Edit user Account Information page or Personal Profile Page.

The User Contact Information page enables you to specify detailed contact information for your user account. The Administrative Manager can specify the information during the account creation or the user can update his/her own information as necessary.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

Field-level detail:

Field	Notes
*Type	No Action. The field is pre-selected.
*Contact Name	No Action. The contact name cannot be changed here.
Role	Enter descriptive information about the user's role. Optional.
Address	Enter address information. Optional.
Phone	Enter phone number. Optional.
Cell	Enter cell phone number. Optional.
Fax	Enter FAX number. Optional.
Pager	Enter pager phone number. Optional.
*Email	Modify email address. Required.

2.16.2 Account Administration

Navigation Launched from Menu Bar, Accounts/Account Administration.

The Account Administration page is only available to users who act as an Administrative Manager (AM). In other words, only users who have been given Admin Rights equal to "All Rights" or "View & Create" may access this page. A user with Admin Rights of "None" may not access this page or create new user accounts.

The Account Administration page presents you with a list of all of the user accounts that you have created or that have been created by one of your subordinate AMs.

This page is the launching pad from which to add new user accounts and view or edit existing user accounts.

What is a user account?
In CASM, a user account is defined as the
username and password that represents a person and enables that person to access the CASM tool.

Steps for entering data for a user account:
1. Review the list in the table to determine if the user account you wish to enter has already been entered. If so, find the user in the list and click Edit to review their account settings. If not, proceed to step 2.
2. Click the Add New Account button. Enter the user account general characteristics. Click Save.
3. Optional, enter additional contact information for the user account by clicking the User Contact Information menu option.

ADD The Add New Account button is located above the table. This will open a new window that enables you to add a new user account record.

VIEW Click View to open a small window to show you the details about the user account in a read-only format.

EDIT Click Edit to open a window that enables you to edit the details about the user account. The Edit button will be enabled for all user accounts.

2.16.2.1 Add / Edit User Account

Navigation Launched from the Account Administration page.

The Add/Edit User Account Information page enables you to enter the information necessary to create another user account.

In order to access this page you must have Administrative Manager (AM) privilege of either “All Rights” or “View & Create” rights.

Enter the user’s full name as you would say it, for example “John Doe”, rather than “Doe, John”. CASM automatically generates the User ID from the new user’s last name and first name when you enter it in to the Full Name field. Write down the User ID because you will need to provide this to the user so they may access CASM. After you enter all the information and click the save button, the page remains open. At this time you may edit your entries and click save again, or click New to clear the page for a new user account entry.

The password must be a “strong password” composed of alpha, numeric and special characters. The initial password entered by the AM will be validated and an error message will be provided if the password does not meet the criteria. Write down the password you enter because you will need to provide this to the user so they may access CASM.

More detailed instructions are available in the CASM Account Administration Instruction Guide. If you do not have this manual, please request it from your ICTAP contact.

SAVE Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.

RESET If you are entering new data, the Reset button will clear the page. If you are editing an existing record and have not clicked Save yet, the Reset button will return the original data to the form.

NEW If you are entering multiple user accounts, click New to clear the page for a new entry.

Summary Table There are potentially two summary tables that may appear on the Add/Edit User Account page. The first summary table presents the state/urban area(s) to which the user is assigned. The second summary table presents either the jurisdiction(s) or agency(s) to which the user is assigned. In each case, at least one state/urban area and at least one jurisdiction or agency must be assigned to a user.

DELETE – Click Delete to disassociate a user account from an assignment. The delete button will not be enabled if it is the only assignment. If you wish to delete this assignment you must first make a new assignment, then you will be able to delete the old one.

Field-level detail:

Field	Notes
*Full Name	Enter user’s full name, in the order first name last name (e.g., John Doe). You may include middle initials. Required.
*User ID	Once you enter the Full Name, CASM auto-generates the User ID based on the last name plus first letter(s) of first name. The auto-generation of User ID is the CASM standard and cannot be changed once it is saved. If you do not like the User ID or made a spelling error and you have not yet saved the entry, click the New button to clear the page and start over. **Make note of this User ID so you can provide it to the user. This is the User ID they will use to login.** Required.
*Email	Enter user’s email address. This is very important since it provides the means to contact the user. Required.
*Password	Enter the new password for the user. The password must be 8-20 characters and include one special character (!@#$%^&*?[]{}_) and a combination of alpha (capital and lower case) and numeric characters. **Make note of this Password so you can provide it to the user. This is the password they will use to login.** Required.
*Password Again	Enter the new password again. Required.
*Privilege	Select the Privilege Level for this user. 1. “State/Urban Area” Privilege allows the user access to enter and view data for all agencies in the assigned state/urban area. 2. “Jurisdiction” Privilege allows the user access to enter data for all agencies in the assigned jurisdictions, which are limited to the counties associated to the state/urban area. It allows access to view all data for the state/urban area. 3. “Agency” Privilege allows the user access to enter data for the assigned agencies. It allows access to view all data for the state/urban area. Please note, the agency records must already exist in the

	state/urban area dataset before you can assign users to them. 4. "CAM Only" Privilege prevents access to CAS for data entry, but allows the user access to CAM to view all data in the assigned state/urban area. The list that is presented to you may vary somewhat based on your own privilege level. Required.
*Admin Rights	Select the Admin Rights Level for this user. 1. "All Rights" makes the user an AM. It allows the user to create new user accounts and to delegate that authority to other users they create. 2. "View & Create" makes the user an AM. It allows the user to create new user accounts, but they may not delegate that authority to other users. **3.** "None" means the user is not an AM. It prevents the user from access to the Account Administration pages or creating new user accounts. But these users will be able to use the other parts of CAS and CAM**.** **"None" is the selection that should be used for most new user accounts.** The list that is presented to you may vary somewhat based on your own admin rights level. Required.
*Account Status	Select the account status for this user. All accounts should be initially set to Normal. Normal is the "active" status. The AM can reset a locked-out user account by setting the status back to "Normal". Other Account Status settings: 1. "Account Closed" is the setting to close a user account. The user will not be able to log into CAS or CAM. 2. "Contact Administrator" is the setting to put a user account on hold. The user will not be able to log into CAS or CAM. If they attempt to login to CAS or CAM, they will be notified to contact their administrator. 3. "Exceeded Failed Logins" is the setting that occurs automatically if a user attempts to login with the wrong password three consecutive times. When a user account is set to this status the user cannot log into CAS or CAM. **4.** "Normal" is the setting for an active, open user account. **This is the only account status setting that allows a user to login to CAS and CAM.** Required.
*Assign State/Urban Area(s)	Select an individual State/Urban Area or hold the CTRL Key and select multiple States/Urban Areas. The list is populated with all states/urban areas that you have authorization to access. If you are assigned a single state/urban area (normal case), then you will not see this selection. All users that you create will automatically be associated to your state/urban area. Required.
*Assign Jurisdiction(s)	If you selected to create a user with "Jurisdiction" privilege in the box above, you must now select the specific jurisdictions (counties) to which this user shall have access. Select an individual county or hold the CTRL Key and select multiple counties. The list is populated with all counties in the state/urban area that you selected in the last step or to which you have authorization to access. Required, if you are creating a jurisdiction-privileged user.
*Assign Agency(s)	If you selected to create a user with "Agency" privilege in the box above, you must now select the specific agencies to which this user shall have access. Select an individual agency or hold the CTRL Key and select multiple agencies. The list is populated with all agencies in the state/urban area that you selected in the last step or to which you have authorization to access. You will be able to sort the agency list alphabetically or by jurisdiction hierarchy. Required, if you are creating an agency-privileged user.
Notes	Use this space to enter any other comments. Optional.

2.16.3 Administrative Tools

Navigation Launched from Menu Bar, Accounts/Administrative Tools

The Administrative Tools page provides you with more tools that will assist you in managing your user accounts. You can create reports, select user accounts for email and manage the AM assignments for the users that have been created under you. This page is only accessible to users who are Administrative Managers.

User Account Reports

In order to view or print a report, you must select one of the four reports. The report will appear in a new window where

you may view or print it.
You can also cut and paste the text from the report window into a Microsoft Word or Excel document. There are four variations of the user account report:

1. All Accounts – This report gives you an output of all the user accounts that you have created or that have been created by one of your delegates.
2. Active Accounts – This report gives you an output of all the user accounts that have status "Normal" or "Exceeded Failed Logins".
3. Closed Accounts – This report gives you an output of all user accounts that have status "Account Closed" or "Contact Administrator".
4. Short Report – This report gives you an output of all user accounts that you have created or that have been created by one of your delegates in a short, concise table. You can cut and paste this table directly into Microsoft Word or Excel for further sorting and editing.

Email Users
In order to email your users individually or as a group, you may use this feature to select the user account(s) you wish to email. You may select user accounts in the following ways:

1. All Accounts – This list provides a way to select all your user accounts to email.
2. Active Accounts – This list provides a way to select all of your user accounts that have status "Normal" or "Exceeded Failed Logins".
3. Closed Accounts – This list provides a way to select all of your user accounts that have status "Account Closed" or "Contact Administrator".

Once you have made your selections the select list will be populated with user account names. After you make your selections from the list and click the Send Email button, your default email program will open and the "To" line will be populated with the email addresses from your list.

A maximum of approximately 30 names may be selected for each send e-mail attempt.

SEND EMAIL to Selected Users	Click Send Email button once you have selected the user accounts on the page that you wish to email. Your default email program will open with the email addresses in the To line. The Send Email button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.

Field-level detail:

Field	Notes
*Select Account(s)	Select an individual user account name or hold the CTRL Key and select multiple user accounts. The list is populated with user accounts according to the criteria you selected. Required.

Manage Administrative Managers Assignments
The Manage AMs section enables you to change who is the AM for whom. This section is only available if you have Administrative Manager privilege of "All Rights" and you have created at least one user account.

This section enables a top Administrative Manager (AM) to reorganize the subordinate user accounts that are managed by their delegate AMs.

For example, let's say that you create a delegate AM to create user accounts in a three county area. The delegate AM acted in that capacity for one year and created a number of user accounts. Now the delegate AM has changed jobs and you wish to assign a new delegate AM for that region. You may create the new delegate AM user account on the Add/Edit User Account
page, and you will use this section to reassign the user accounts created by the old delegate to the new delegate so that the new AM may manage the existing user accounts.

SAVE	Click Save once you have entered data on the page that you wish to save to the database. The Save button will not enable until all required fields have been filled. Required fields are marked with an asterisk.
RESET	Click Reset to clear the page.

Field-level detail:

Field	Notes

*Select Current AM	Select the AM user account from which you wish to remove responsibility. The list is populated with active user accounts that have AM privilege under you, plus yourself. Required.
*Select New AM	Select the AM user account to which you wish to add responsibility. The list is populated with active user accounts that have AM privilege under you, plus yourself, except the one you selected in the last box. Required.
*Select User Accounts to Transfer	Select the user accounts that you wish to transfer responsibility from the Current AM to the New AM. You may select a single user account or hold the CTRL Key and select multiple user accounts. The list is populated with user accounts that were created by the Current AM. Required.

2.17 User Feedback

Navigation Launched from any CAS Page, including the CASM home page.

The User Feedback page enables you to send feedback directly to the CASM Team on any subject. Type your comment and click Submit. Your comment will be reviewed by the CASM Team on a weekly basis. If you have not logged-in yet, you will be prompted for your username and password.

This page is not intended for help requests, but can be used to submit problem reports or recommendations for change. The CASM Team may coordinate further action with you.

SUBMIT Click Submit once you have entered data on the page that you wish to send to the CASM Team. The Submit button will not enable until you enter some text in the subject line or comment area.

CANCEL Click Cancel to close the window if you do not wish to send in your feedback comment.

Field-level detail:

Field	Notes
Subject	Enter a subject line for your comment.
Comment	Enter your comment. Include as much descriptive text as you wish.

3.0 Glossary

Term	Definition
Administrative Manager	A CASM user who has the authority to create new CASM users. In addition, an administrative manager also has the ability to delete radio systems and mutual aid systems.
Agency	In CASM, an agency is defined as a first responder agency or organization, such as a police department, sheriff, or fire department. It may also be a governmental agency, organization or emergency management group. Think of an agency as a group of people providing a service in the interest of public safety that other public safety agencies need to interoperate with. An agency may own, maintain, or use communication assets.
AM	Administrative Manager
CAM	Communication Assets Mapping component of the Communication Assets Survey and Mapping tool (CASM).
CAS	Communication Assets Survey component of the Communication Assets Survey and Mapping tool (CASM).
CDCSS	Continuous Digital Controlled Squelch System, also known as DCS, Digital Coded Squelch. CDCSS Tones provide a digital method for squelching a radio from picking up communications that are not intended for the listener. CDCSS tones are associated to transmit and receive frequencies on conventional channels.
Checkbox	A form control that is used on the CAS web forms that enable you to check or un-check the box. Example of an unchecked and checked box. 
Communication Asset	In CASM, a communication asset is a radio system, mutual aid channel or system, gateway, radio cache, or dispatch center.
Console Equipment	Equipment that exists at a dispatch center and is used as the control module for the radio system.
Conventional Radio System	A conventional radio system is any non-trunked land mobile radio system.
CSQ	Carrier Squelch
CTCSS	Continuous Tone Coded Squelch System. Also known as PL Tones, Channel Guard. CTCSS Tones provide an analog method for squelching a radio from picking up communications that are not intended for the listener. CTCSS tones are associated to transmit and receive frequencies on conventional channels.
Dispatch Center	In CASM, a dispatch center is defined as a center that provides dispatch service for one or more agencies. It may or may not also perform as a PSAP. The dispatch center may contain console equipment that supports “patching” between radio system channels or talk groups or may not provide console patches.
EMS	Emergency Medical Service

Enabled Button	A form control that is used on the CAS web forms that enable you to perform an action of the page, such as submit your data to the database. Example of an enabled and disabled button: 
EOC	Emergency Operations Center
EOD	Explosive Ordinance Disposal Team
ERP	Effective Radiated Power
FCC	Federal Communications Commission
Frequency Band	A named subsection of the frequency spectrum, such as VHF or UHF.
Hazmat	Hazardous Materials Team
Hexadecimal	The base 16 number system. In CASM, it is used for identifying a NAC code. A hexadecimal number consists of digits between 0-9, and the letters A-F.
Jurisdiction	In CASM, a jurisdiction is defined as a geographic area in which an agency has authority to exercise power or in which an agency is located. Currently, CASM supports jurisdictions of type: state, county and city. In the future, more jurisdiction types will be supported, such as districts and military bases.
Lat	Latitude
LMR	Land Mobile Radio, also known as PMR, Private Land Mobile Radio
Lon	Longitude
Mixed Mode	Mixed mode is a situation when two different types of tones or codes are added to a single frequency pair. For example, a transmit frequency may have a CTCSS tone and the matching receive frequency may have a NAC code associated to it.
Mobile Radio	A radio that is installed in a vehicle.
NAC	Network Access Code. Similar to a tone (CTCSS) used for squelch, but applicable to a P25 digital system.
NPSPAC	National Public Safety Planning Advisory Committee
POC	Point of Contact
Point of Contact	In CASM, a point of contact is defined as a person that is a contact person for an agency/organization, radio system, tower, dispatch center, gateway, radio cache or for the state/urban area in general. There may be more than one contact person for any of those items.
Portable Radio	A handheld radio.
PSAP	Public Safety Answering Point
Radio Button	A form control that is used on the CAS web forms that enable you to select from a set of options. Example of a selected and unselected radio button: 

Radio Cache	In CASM, a radio cache is defined as a set of radios that is configured, stored, and available to support a response to an incident.
Radio System	In CASM, a radio system is defined as a Land Mobile Radio (LMR) system; an organized set of channels or talk groups that are used by an agency for communications. The channels are likely repeated on one or more structures (towers). The system may be trunked or conventional (non-trunked) or may operate in both modes. It may consist of a single channel or a set of channels and may serve a single first responder agency or 500 (or more!) first responder agencies.
Repeated	Communication via a pair of frequencies, usually indicating half-duplex communication. Half-duplex is communication via two frequencies; one for transmit and one for receive, but like simplex transmissions, while one user speaks, the other must listen.
Repeater / Base Station	A component of a land mobile radio system that provides a powerful transmission of the audio signal over the radio waves.
RF	Radio Frequency
RF Coverage	The geographic area in which the users of the radio system will receive and transmit audio transmissions.
Rx	Receive Frequency
Rx Only	A Receive-only channel. A channel that may be listened on, but may not be transmitted on.
Simplex	Communication via a single frequency. When one user is speaking, the other must wait for the first user to finish before they may speak. Often used in land mobile radio, especially in direct-mode or talk-around channels.
Simulcast	Simulcasting is a technique used by radio system designers to coordinate transmissions on multiple tower systems using the same frequency pair at the same time. Simulcast system implementations are efficient in their use of frequency spectrum in that the same channel is re-used on each tower, but require fine-tuning so that transmissions do not interfere with each other.
Subscriber unit	A radio that has access to a radio system.
Talk Group	A logical channel in a trunked system.
Talk-around Channel	A talk-around channel is also known as direct-mode or car-to-car channel. This is a simplex channel that may be used for communications between two radios without the support of a repeater/base station for communications. A simplex channel.
Trunked Radio System	A trunked radio system is any land mobile radio system that utilizes a trunking methodology for improving the efficiency of channel use across the group of users (subscriber units).
Tx	Transmit Frequency
Tx Only	A Transmit-only channel. A channel that may be transmitted on, but is not listened to.
UHF	Ultra High Frequency. A subsection of the radio spectrum. For the purposes of land mobile radio, UHF falls between 450-512MHz.

Urban Area	In CASM, an urban area is a set of counties, in one or more states that represents a populated area.
USAR	Urban Search and Rescue Team
USGS	United States Geological Survey
VHF	Very High Frequency. A subsection of the radio spectrum. For the purposes of land mobile radio, VHF falls between 150-174MHz
Voting	Voting is a technique used by radio system designers to improve the talk-in range for mobile and portable radios in the field. For example, in a single-channel, single-tower conventional radio system, the dispatcher is able to broadcast messages over the high-power base station attached to the tower; this is known as the talk-out range and generally represents the system RF coverage. The field personnel will receive the message when they are within the footprint (coverage) of the tower. The mobile and portable radios used by field personnel are not nearly as powerful as the base station and when they click the push-to-talk button on their radios to communicate back to the dispatcher, the signal cannot reach to main tower. One solution to this problem is to include receive-only towers that are strategically located in the coverage area which listen for transmissions from mobiles and portables. When a signal is received it is relayed to a voting comparator at the main tower site which chooses the strongest signal and re-transmits it on the base station for all to hear.

4.0 Need vs. Ability Analysis Description

Need vs. Ability Analysis
The Need vs. Ability Analysis illustrates the correlation between agency pairs' ability to talk and their need to talk. A graphical representation clearly indicates which agency pair's need to talk outstrips their overall ability to talk. This gets right to the heart of identifying real interoperability gaps. The Need vs. Ability Analysis is available in the CAM component.

The circles plotted on the graph represent a set of agencies pairs. The closer the circles are to the diagonal line, the more likely their interoperability methods match their need to communicate. The larger the circle and farther away from the diagonal line to the left, the greater the need vs. the ability to talk.

This visualization assists state/urban area officials to determine which agencies need the most attention in tackling overall interoperability deficiencies.
Additionally, the user will get an overall sense of how agencies in the state/urban area are served by their interoperability methods.

To create the Need vs. Ability graph, users shall be able to select the agencies they wish to see in the analysis. The analysis examines the agency pairs' ability to talk based on the interoperability algorithms that currently determine compatibility between agencies and correlates that to the agency pairs' need to talk. The results are presented in a graphical format that enables users to click on graph components to drill down into the data.

The Need vs. Ability features includes:

- Interactive Graph
- Graph Interpretation
- Agency Need Analysis
- Interaction with the Interoperability Matrix
- Information in Popup and Report