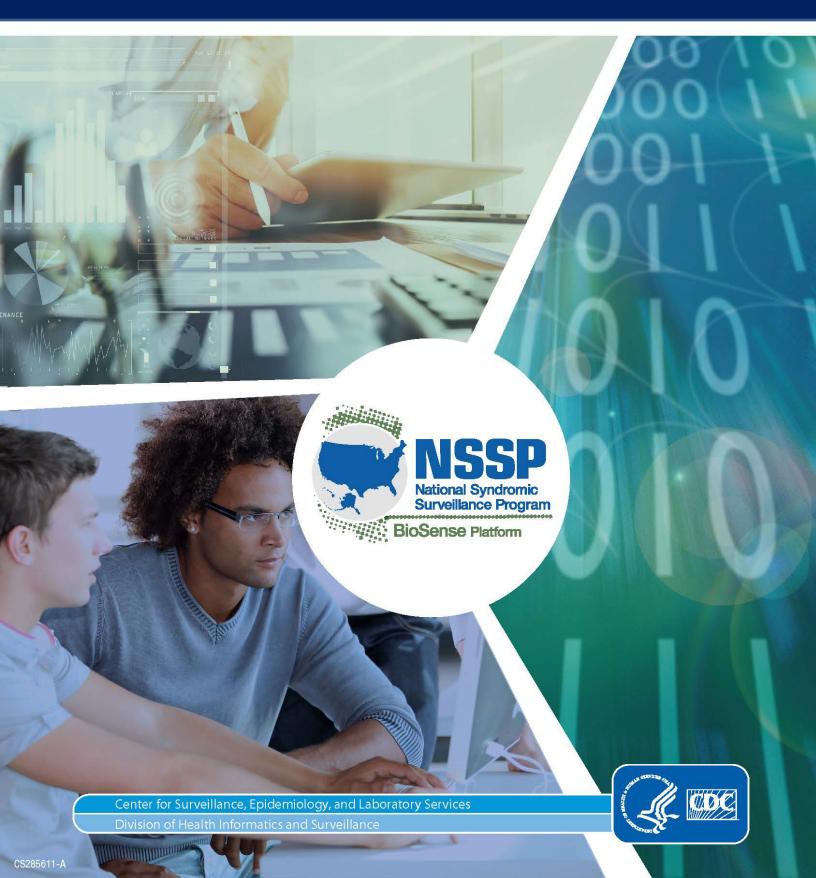
BioSense Platform Quick Start Guide to Using the

Master Facility Table

August 2022



Technical Assistance: support.syndromicsurveillance.org
The National Syndromic Surveillance Program (NSSP) promotes and advances development of the cloud-based BioSense Platform, a secure integrated electronic health information system that hosts standardized analytic tools and facilitates collaborative processes. The BioSense Platform is a product of the Centers for Disease Control and Prevention (CDC).

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Quick Start Guide to Using the MFT

1. Overview

The BioSense Platform's Access & Management Center (AMC) is the starting point for doing all the prep work needed to onboard new facilities. Before surveillance activities using the BioSense Platform can begin, use the Master Facility Table (MFT) to input facility information and work with the NSSP team to make sure the data feeds from each facility transmit accurately and produce data that meet your expectations.

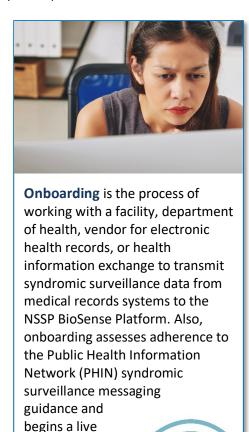
The MFT contains all necessary information for processing site data. Each site has its own MFT, and all sites follow the same standards and are required to provide the same details when adding a new facility. The information in your MFT helps ensure that data from your facilities are mapped correctly to the BioSense Platform and are easily identifiable when data are queried there.

MFT data must always be kept up to date. Otherwise, if a facility started using a new Facility ID or a new facility began sending data, the new data could be mapped incorrectly, corrupting results, or just written to the exceptions table, which would prevent these data from being processed. Any data sitting in the exceptions table will remain there until the MFT is updated—and only then can those data be resubmitted for processing.

This Quick Start Guide is designed for site administrators and provides guidance on the following activities:

- Add a new primary facility.
- Edit details (name, address, activation date, etc.) for a primary facility.
- Create associated facilities and crosswalk them with their primary facilities.
- Allow review of facilities pending approval.
- Change status of facilities or cancel a requested facility change.

This guide will help site administrators access and navigate MFT features. The guide will be updated as functionality is added.



data feed to the BioSense Platform.

First-time Access to the MFT

You must have a BioSense Platform Access & Management Center (AMC) account and be a site administrator or have been granted View Only or View/Edit access privileges to MFT. Only site administrators can grant View Only or View/Edit access to their site's users.

NOTE: In this guide, site administrator will also refer to a MFT View/Edit user and, in some cases, a MFT View-only user.

Browsers that support the MFT:

- ✓ Apple Safari
- ✓ Google Chrome
- ✓ Microsoft Edge
- ✓ Mozilla Firefox

Login to the MFT

To access the MFT, log in to the AMC with your username and password. If you have been granted access, you will see the "MFT" tab at the top of the AMC Home page with the other tabs you have access to.

2. Navigate the Master Facility Table (MFT)

Access & Management Center MFT Tab

By clicking the MFT tab, users with access open a page where they can:

- View the BioSense Platform Quick Start Guide to Using the Master Facility Table.
- Add a new primary facility.
- Add multiple primary facilities.
- Edit multiple primary facilities.
- Search for facilities by various filters.
- View or edit an existing primary facility.
- Add associated facilities to a primary facility.
- Download a report listing all your site's facilities.

View the MFT Quick Start Guide

Clicking on MFT Quick Start Guide will download a PDF version of this guide (Figure 1).

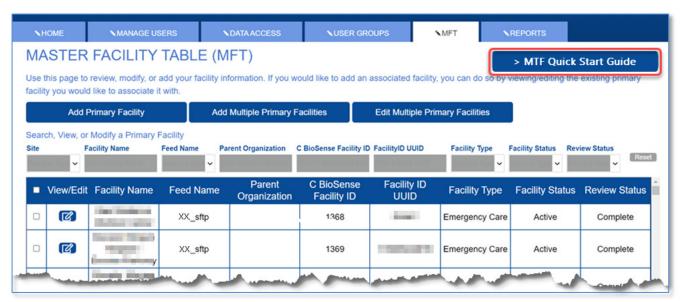


Figure 1. Master Facility Table Data-entry Fields and Button for Accessing the Quick Start Guide

Search for a Facility

Site administrators can search for a primary facility within their site. Figure 2 illustrates the filters available for narrowing the search.

Once the facility has been located, the site administrator can navigate to specific facility information by pressing the View/Edit button next to a facility found in the search results (leftmost column in Figure 2). This opens the facility information form so that the site administrator can view the record and update information, if needed.

Also pointed out in Figure 2 is the Download Report button, which downloads all Primary Facility records in your MFT database. The download is in Comma Separated Variable (CSV) format and can be easily opened with Excel or other spreadsheet application.



Figure 2. Filters, Opening an Existing Primary Facility Record, and Downloading a Report of All Primary Facility Records

See Section 5 for additional information on view and edit functionality.

In addition, there are three major activity buttons:

- Add Primary Facility,
- Add Multiple Primary Facilities, and
- Edit Multiple Primary Facilities.

A discussion on the Primary Facility Filters follows.

Primary Facility Filters

Some filters are dynamic and begin searching once the first character is entered. Others are selected from drop-down lists. The Facility Table below the filter fields lists all Primary Facilities.

- Site (drop-down list): For site administrators and users with MFT-View or Edit/View access, only their site's short abbreviation is selectable. Users with Operational Access may select from all sites.
- **Facility Name** (dynamic filter): This filter selects from existing filter names as shown in column two of the Facility Table.
- **Feed Name** (drop-down list): Some sites have more than one feed. All feeds in the site are listed.
- **Parent Organization** (dynamic filter): This filter selects from existing filter names as shown in column four of the Facility Table. Some sites do not use this field.
- **C_BioSense Facility ID** (dynamic filter): This filter selects from existing filter names as shown in column five of the Facility Table. This value is a calculated value based on when a facility is added to the MFT. The system autogenerates this value.
- **Facility ID UUID** (dynamic filter): This filter selects from existing filter names as shown in column six of the Facility Table. This filters on the Primary FacilityID_UUIDs, which are an assigned identifier unique to each primary facility.
- Facility Type (drop-down list): This is a static list of all possible facility types. These types are Emergency Care, Inpatient Practice Setting, Urgent Care, Medical Specialty, and Primary Care.
- **Facility Status** (drop-down list): This is a static list of possible facility statuses. The list values are Onboarding, Planned, and Not Planned.
- **Review Status** (drop-down list): This is a static list of review statuses. These are Pending NSSP onboarding team's approval, Pending site review, or Complete.

Add a Primary Facility

Site administrators can add primary facilities to the MFT. Pressing **Add Primary Facility**, as seen in Figure 2, will open a blank facility
information form. The site administrator then inserts information
about the new primary facility, for example:

- Primary facility name, address, and phone number.
- Primary facility identifiers.
- Facility type(s).
- Vendor information.
- Submission details.
- Facility status.
- Facility review details and site comments.

Download Facility Report

Site administrators may download a report in the form of a CSV file that contains <u>all</u> facilities registered in their site (Figure 2). The site selector to the left of the **Download Report** button defaults to your site. Those with Operational Access may select any site.

NOTE: Any filters applied when viewing the facility table are ignored when downloading the report. All primary facilities are downloaded.



What is a primary facility?

A *primary facility* is one designated to represent itself and any associated facilities **as a single entity**.

Facility data on the BioSense Platform are processed and mapped to the database exactly as received. Such mapping allows for detailed analysis of visits received at the lowest level identified in the incoming message.

A single timeseries graph can be viewed in ESSENCE for every primary facility and associated facilities. Additionally, when calculating c_patient_class in the Archive database, the primary facility determines the default patient class for messages received from that primary facility or its associated facilities.

3. MFT Screens and Required Fields

The MFT collects metadata and facility information, organized by section. The next few pages contain screen shots and tables that list the fields to complete on each screen. In the sections below, there is an indication (☑) next to fields where an entry is required. But be aware that, since most fields are required, **there is no indication of required fields in the MFT application**.

Some fields are autogenerated based on other entered data. These fields are greyed out and denoted below with this indicator: A.

Facilities with a status of "planned" or "not planned" require fewer field entries. However, NSSP encourages site administrators to complete as many fields as possible.

Required fields for "Planned" and "Not Planned" facilities:

- Facility Name
- FacilityID_UUID
- Facility_Status
- Site_ID
- Site

NOTE: Facilities with a status of "Onboarding" or "Active" require further review by the NSSP team before facility metadata is accepted. Refer to Section 4, <u>Facility Review</u>, for details.

Primary Facility Name and Address

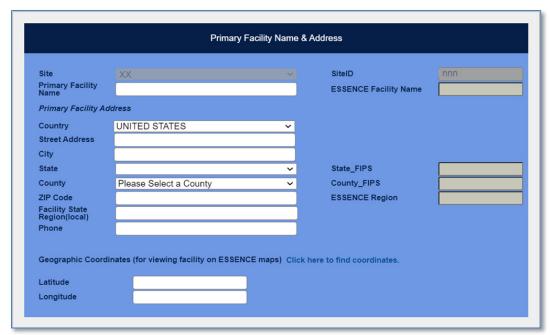


Figure 3. The Name and Address Section

Primary Facility Name and Address Fields

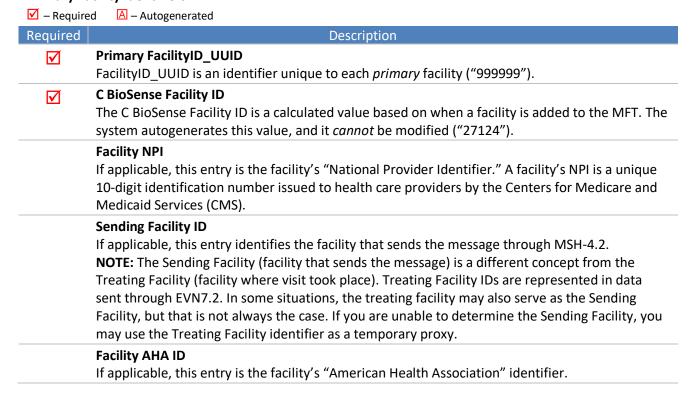
☑ – Required	A — Autogenerated
Required	Description
A	Site Short name of the facility's "parent site." The site is automatically selected based on the site administrator's login credentials. The Site ID is a numeric that identifies the facility and is autogenerated based on the site and <i>cannot</i> be modified.
A	Site ID This numeric code is internally generated and assigned by the application.
$\overline{\checkmark}$	Primary Facility Name The official name of the Primary Facility (e.g., Memorial Hospital).
A	ESSENCE Facility Name The facility name that displays in ESSENCE. This is an autogenerated field (e.g., XX-Memorial Hospital).
V	Primary Facility Address The facility's address includes several fields: the <i>Country</i> where the facility is located, <i>Street Address City</i> , 2-letter <i>State</i> (drop-down list), <i>County</i> (drop-down list), and 5- or 9-digit ZIP code where the facility is located.
	Facility State Region This is a nonstandard facility region that sites may choose to use for their own purposes (e.g., "25")
	Phone The main contact number for the facility.
A	FIPS Codes The state and county Federal Information Processing Standard Publication 6-4 (FIPS PUB 6-4 COUNTIES AND EQUIVALENT ENTITIES OF THE UNITED STATES, ITS POSSESSIONS, AND ASSOCIATED AREAS) code where the facility is located. These are autogenerated fields based on the state and county chosen.
A	ESSENCE Region ESSENCE autogenerated field based on the ZIP code entered (e.g., AL_Yukon). In ESSENCE, each facility is associated with a geographic region derived from the ZIP code of the facility. The ESSENCE Region influences analytics and visualization of facility data within the ESSENCE application.
V	Geographic Coordinates The facility location latitude and longitude in decimal form (e.g., -86.8142). Do not include the degree symbols or direction (i.e., N or W are not valid). The hyperlink "Click here to find coordinates" opens a geocoder web page (https://geocoding.geo.census.gov/geocoder/locations/address?form) that provides site administrators with geographic coordinates based on the address entered in the form.

NOTE: The geocoder returns X = Longitude and Y = Latitude.

Primary Facility Identifiers

Figure 4. Identifiers Section

Primary Facility Identifiers

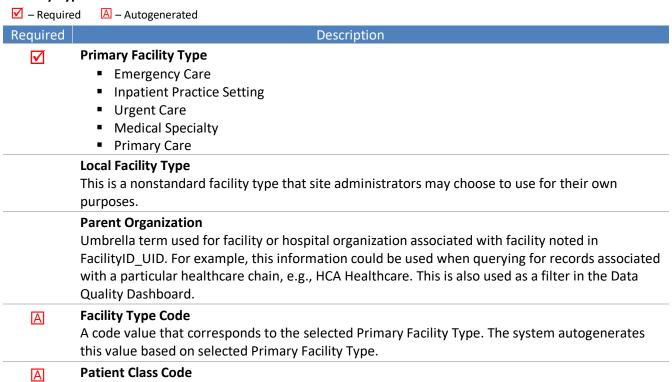


Facility Types

Facility Type(s)					
Primary Facility Type Primary Facility Type Local Facility Type Parent Organization	▼ Facility Type Code Patient Class Code				

Figure 5. Facility Types

Facility Types



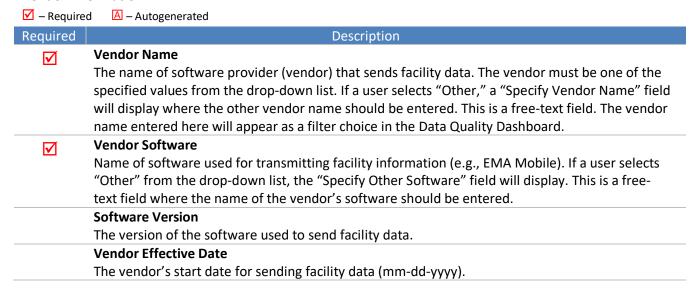
Autogenerated code that corresponds to the Primary Facility Type.

Vendor Information

Vendor Name Vendor Software	Please Select a Vendor Name	∨	
Software Version Vendor Effective Date	06-30-2021		
Volladi Elitotivo Bato	00-00-2021		

Figure 6. Vendor Information

Vendor Information



Submission Details



Figure 7. Submission Details

Submission Details ✓ – Required Autogenerated Required Description **Feed Name** \square The feed name is designated by the Secure File Transfer Protocol (SFTP) or Public Health Information Network Messaging System (PHINMS) account name to which the facility is being assigned. If a new feed is needed or the feed name is unknown, select "unknown" and the NSSP's onboarding team will be notified. This is also used as a filter in the Data Quality Dashboard. Send alert if this facility stops sending information for more than [__] hour(s)? $\overline{\mathbf{V}}$ The user can set the number of hours after a facility stops sending information before the system should send an alert (e.g., 72). NOTE: Facility alerts will only be sent for "Active" facilities. Temporarily disable facility data submission alerts? \square A YES/NO question that lets a user decide whether to temporarily disable facility submission alerts. The system will re-enable facility data submission alerts on [_____]. $\overline{\mathbf{V}}$ If a user answers YES to "Temporarily disable facility data submission alerts?" (the previous field), this field is populated with a date one week in the future from when the question is answered YES.

Facility Status

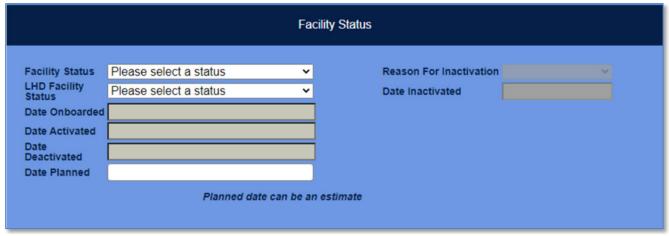
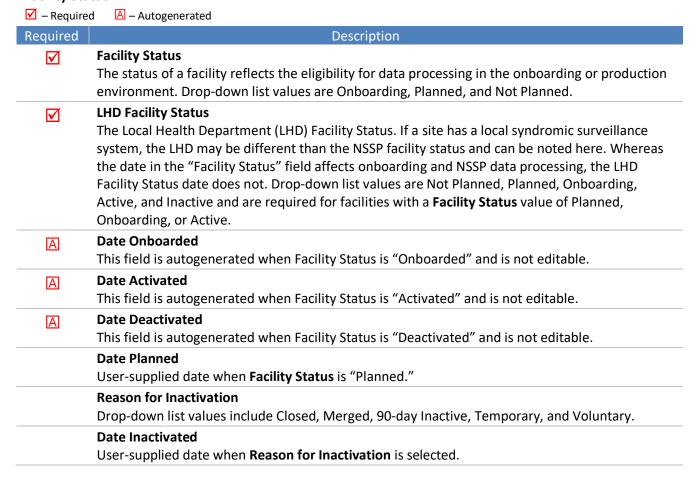


Figure 8. Facility Status

Facility Status



Site administrators must indicate a "Facility Status" for each primary facility. The following diagram (Figure 9) describes valid facility status values and expected activities associated with each. More information about the facility onboarding and activation process can be found at the NSSP Onboarding Resources, page.



Figure 9. Evolution of Facility Status

Version Control

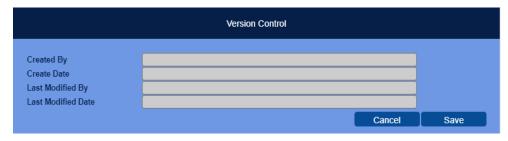


Figure 10. Version Control Information

Version Control

✓ - Required
 ✓ Created By/Date

 The username of the person who created the initial facility and the date that the facility was created. These fields are autogenerated and are not editable.

 ✓ Last Modified By/Date

 The username of the person who last modified the facility information and the date of that modification. These fields are autogenerated and are not editable.

4. Examples of Facility Setups

Example #1: Single Primary Facility Sends Data Under One ID

In this example, a single emergency department always sends HL7 messages with a treating facility ID = 11 and a sending facility ID = 11. By using the MFT module, you would register one *primary* facility with a FacilityID_UUID = 11. The BioSense Platform will then assign a generic C_Biosense_Facility_ID. At a high level, the MFT will display the following data:

Site	Facility_Name	FacilityID_UUID	C_BioSense_Facility_ID	Facility_Type	Default Patient Class
888	General	11	1	Emergency Care	E
	Hospital				

During data processing, the BioSense Platform uses a table titled "Operational Crosswalk" to ensure that the treating and sending facility IDs are valid for processing and assign C_BioSense_Facility_ID and other calculated field values as specified by BioSense Platform data processing rules. Please refer to the NSSP <u>Data Dictionary</u> for more information about data processing. Here, the Operational Crosswalk would include the following data:

Site	Input Facility ID (compare to incoming treating/sending facility ID)	Output Facility ID (value to output to C facility ID)	C_BioSense_Facility_ID	Default Patient Class
888	11	11	1	Е

In the example shown above, you'll see one time series in ESSENCE for C_BioSense_Facility_ID = 1.

Example #2: A Hospital with Multiple Reporting Departments

In this example, a single hospital includes an emergency department, inpatient care, and outpatient clinic within the same facility. The site administrator considers this a *single* facility within ESSENCE but wants to be able to separate the visits in the underlying Archive data.

To achieve this, register the emergency department as the primary facility. Then, add the information for the inpatient and outpatient care settings as associated facilities tied to that primary facility (see Section 5, Associated Facilities, for more information). In this scenario, the MFT would include the following data:

Site	Facility Name	FacilityID_UUID	C_BioSense_	Facility Type	Default	Primary_
Site	r actificy_ivallie	TacilityID_001D	Facility_ID	raciiity_rype	Patient Class	Facility
999	My Hospital – ED	123	2	Emergency Care	E	Υ
999	My Hospital – Inpatient	222	2	Inpatient	E	N
999	My Hospital – Outpatient	333	2	Outpatient	E	N

During data processing, the BioSense Platform uses a table titled "Operational Crosswalk" to ensure that the treating and sending facility IDs are valid for processing and assign C_BioSense_Facility_ID and other calculated field values as specified by BioSense Platform data processing rules. Refer to the NSSP <u>Data Dictionary</u> for more information about data processing. Here, the Operational Crosswalk would include the following data:

Site	Input Facility ID (compare to incoming treating/sending facility ID)	Output Facility ID (value to output to C_facility_ID)	C_BioSense_ Facility_ID	Default Patient Class
999	123	123	2	E
999	222	222	2	E
999	333	333	2	E

In the example shown above, you'll see one time series in ESSENCE for C_BioSense_Facility_ID = 2.

Adding Multiple Primary Facilities

Site administrators can add multiple primary facilities to the MFT by selecting the **Add Multiple Primary Facilities** button (Figure 11). The page displayed includes instructions on how to upload multiple primary facilities and a link to the downloadable template.



Figure 11. Add Multiple Primary Facilities Button

Once the downloaded template has been filled in with the required information, return to this page and select the **Browse** button (Figure 12) to search for and upload the completed template. When the template is successfully uploaded, click the **Submit** button to process the information.

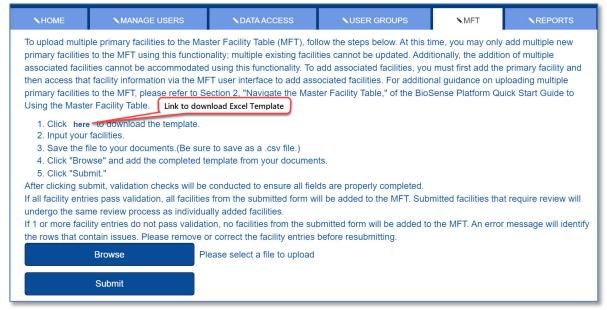


Figure 12. The MFT tab has instructions and action buttons to upload multiple primary facilities including a link to download the required Excel template.

NOTE: Currently, **the template does** *not* **accommodate multiple** *associated* **facilities**. To add associated facilities, you must first add the primary facility and then access that facility information (see Section 5, <u>View and Edit Primary and Associated Facilities</u>, for guidance).

Guidance to Successfully Submit Multiple Primary Facilities

The downloadable Add Multiple Primary Facilities template (Figure 13) provides some guidance to successfully complete the template and upload multiple primary facilities.

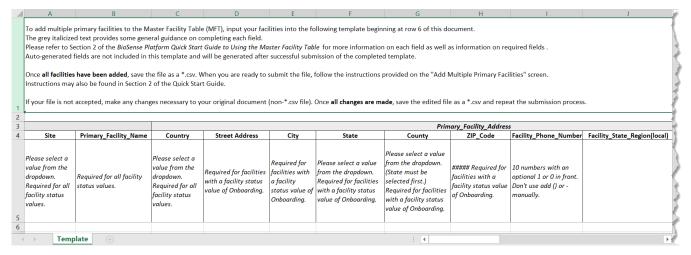


Figure 13. Row 5 of the Multiple Primary Facilities template provides hints to assist in entering required information. (NOTE: This screenshot only shows the first 10 columns. There are 32 columns in all.)

To avoid your submittal being rejected, please review the following guidelines before completing, saving, and submitting the template:

- Refer to the MFT Screens and Required Fields in Section 2, Navigate the Master Facility Table for information about each field and for information on required fields.
 NOTE: Autogenerated fields are not included in the template but will be generated once the completed template has been successfully processed.
- Row 1 contains general instructions for use of this template.
- Follow the guidance in row 5 for completing certain fields (grey italicized text).
- Input your facilities into the template starting at row 6.
- Do not add to or delete columns from the template.
- Do not edit or delete rows 1 through 5.
- Do not change cell formatting (e.g., merge cells or remove data validation).
- If your Excel application requires Windows-sensitive labels, set the sensitivity to Public, General, or None because the other levels could interfere with uploading your data.

Once facility entries pass validation (Figure 14), facility information from the submitted form will be added to the MFT. Any submitted facilities that require review will undergo the same process as manually added facilities. For information about the review process and reasons for review, refer to Section 6, Facility Review.

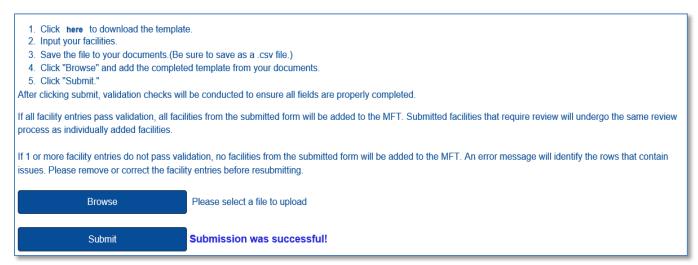


Figure 14. Message Displayed When Multiple Primary Facilities Upload is Successful

If one or more facility entries *do not* pass validation, <u>no facilities</u> from the submitted form will be added to the MFT. An error message will identify the rows that contain issues (Figure 15).

If the file submission fails, make changes to the original template document (not the CSV file). Correct or remove the rows that contain issues. Once the changes are made, save the edited file again in CSV format and repeat the submission process. Removed rows, if any, may be entered manually later.

For example, if a site administrator attempts to submit 50 facilities and the submission is not successful due to issues on two rows (e.g., rows 8 and 10), the site administrator should first try to correct the facility entries within the original template file and resave it as a CSV file. If the submission is still unsuccessful when the new CSV file is submitted, the site administrator may choose to remove the problematic facility entries from the

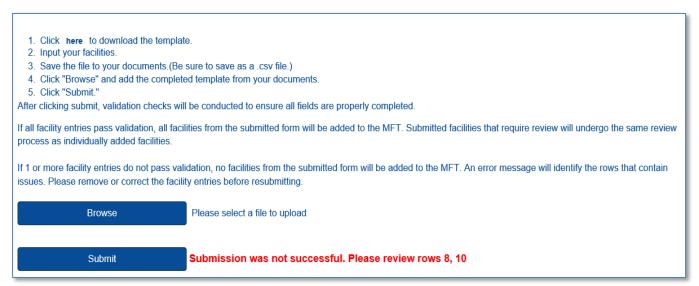


Figure 15. Message Displayed When Multiple Primary Facilities Upload Fails

template, resave the template in CSV format, and resubmit the facilities that passed validation. Later the problematic facilities may be added individually using the **Add Primary Facility** option to enter them.

NOTE: The template has internal checks and will often identify the specific fields that will not meet validation criteria, allowing errors to be corrected before submittal.

Editing Multiple Primary Facilities

It is now possible to edit multiple primary facilities using a method similar to the Add Multiple Primary Facilities procedure. Here, you first select the primary facilities you wish to edit and create an Excel file with these facilities. This file is similar to the Add Multiple Primary Facilities template but is already populated with data from your selected primary facilities.

The instructions in Figure 16 are displayed when you click on Edit Multiple Primary Facilities.



Figure 16. Edit Multiple Primary Facilities Instructions

Below the instructions, you will find the table of your primary facilities. Use the checkbox on each row to select the facilities you want to edit. As noted on Figure 16, you may select up to 100 facilities to edit at a time.

Figure 17 shows a sample primary facility table you may select from.

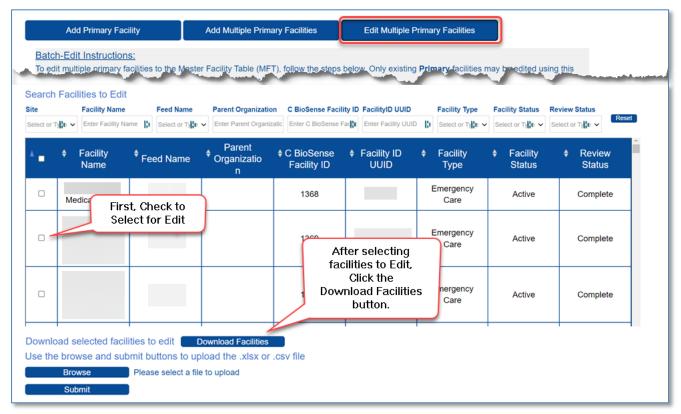


Figure 17. Selecting Facilities to Edit/Download Facilities to Edit Spreadsheet

When you click **Download Facilities**, an Excel spreadsheet with the selected facilities data will be created and downloaded to your workstation. Figure 18 is a sample of a downloaded spreadsheet with three facilities selected for editing.

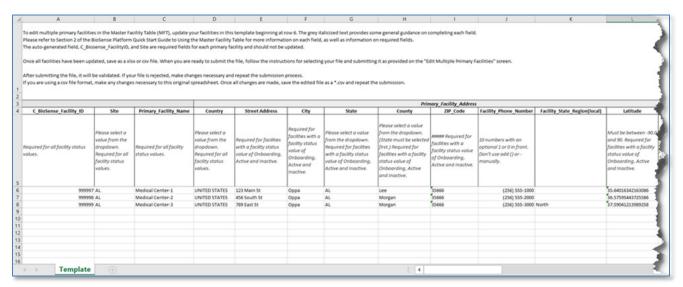


Figure 18. The sample input template contains data from selected facilities populated. (NOTE: This figure only displays the first 12 columns of the template. There are 35 columns in all.)

Refer to the <u>MFT Screens and Required Fields in Section 2–Navigate the Master Facility Table</u> for information about each field and for information on required fields. **NOTE:** The C_Biosense_Facility_ID is provided for each facility. Other autogenerated fields are not included in the template but will be generated once the completed template has been successfully processed.

- Row 1 contains general instructions for use of this template.
- Follow the guidance in row 5 for completing certain fields (grey italicized text).
- Input your facilities into the template starting at row 6.
- Do not add to or delete columns from the template.
- Do not edit or delete rows 1 through 5.
- Do not change cell formatting (e.g., merge cells or remove data validation).
- If your Excel application requires Windows-sensitive labels (e.g., Public, General, Restricted Use, or Highly Sensitive), set the sensitivity to Public or General because the other levels could interfere with loading your data.

5. View and Edit Primary and Associated Facilities

Not everyone can view a site's MFT records, for example, regular users do not have access to these records. Those users granted MFT View-only privileges may access the MFT tab to search and view MFT records for their site, but they may not create new facilities or modify existing ones.

Site adminstrators and users granted MFT View/Edit privileges may view, create, or edit a primary facility. By searching the site or by scrolling through the table until the desired site is found, they can click the **View/Edit** icon to display the facility information and make any edits to existing facilities, as needed.

When you select the MFT tab, a table with all primary facilities is displayed. Since these data are fetched from the database, sites with numerous facilities can take some time to construct their table. While this happens, the fields in the search bar will be greyed out (Figure 19).



Figure 19. Search Bar is grayed out until table is fully loaded.

When the table is fully populated, the search bar fields will turn white (Figure 20), and the search bar and table will become responsive. Locate the facility you wish to view or edit by scrolling through the table or using the search fields. Once you have located the facility, click on the icon in the left-most column to display the detailed information for that facility.



Figure 20. Search Bar is no longer greyed out after table is fully loaded.

Once the desired primary facility is located, click on the View/Edit icon to access the record (Figure 21).

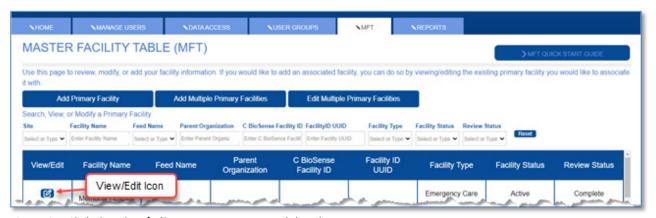


Figure 21. Click the View/Edit Icon to access record detail.

Primary Facilities

Primary facilities (Figure 22) are created to represent themselves and any associated facilities as a single entity in the BioSense Platform. Facility related data (e.g., patient visits and data associated with those visits) are processed and mapped to a site's database exactly as received. This mapping allows detailed analysis of the data received.

A primary facility is one designated to represent itself and any associated facilities as a single entity in AMC and ESSENCE.

The status of a primary facility determines if records transmitted to the BioSense Platform are eligible for processing.

Two other sections are available when viewing or editing a primary facility record:

- Associated Facilities
- Facility Review (refer to <u>Section 6, Facility Review</u>, for more detail)

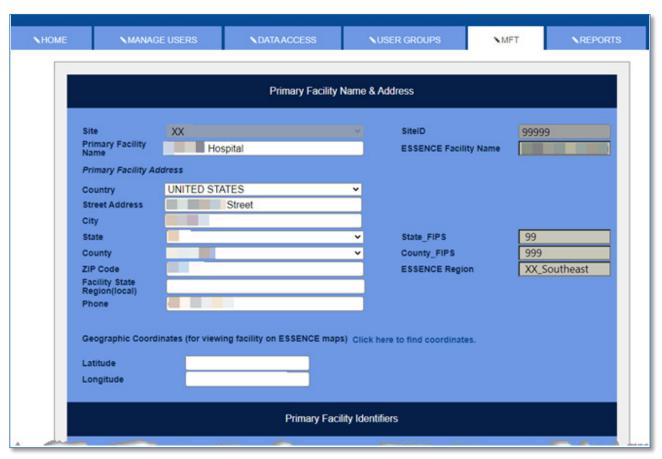


Figure 22. Primary Facility Name & Address Section

Associated Facilities

Associated facilities are affiliated with primary facilities but are not considered separate facilities in AMC and **ESSENCE**. Associated facilities can only be added after their primary facility has been created. Select the primary facility, then navigate to its associated facility Information section to enter them.

Generally, sites use associated facilities to capture information about:

- Other facility types that are directly associated with the primary facility.
- Facility IDs that should be converted to the primary facility's ID ("historic crosswalk" information).
- C BioSense Facility ID of a primary facility (e.g., multiple facilities reporting under one primary facility identifier).

Site administrators and users with View/Edit MFT privileges may add associated facilities; however, when new associated facilities are added, the primary facility is locked until the new associated facilities are reviewed and approved by the NSSP onboarding team.



If you have changes to the primary facility, make those changes before adding associated facilities.

Please contact the NSSP Service Desk (https://support.syndromicsurveillance.org) if you need to modify associated facility data or have questions about associated facilities and how to use the MFT to support your data processing needs.

Figure 23 and the following table show information to be entered for associated facilities. The checked-box symbol ($\boxed{\mathsf{M}}$) is used to indicate that a field is required, whereas a boxed A ($\boxed{\mathsf{M}}$) indicates that the field is Autogenerated.

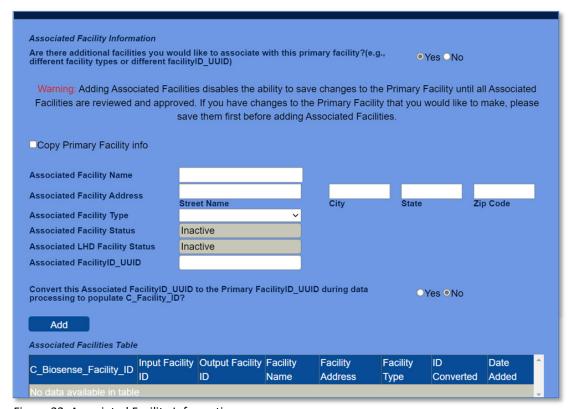


Figure 23. Associated Facility Information

Information Collected for Associated Facilities

🗹 – Requir	red 🔼 – Autogenerated
Required	Description
✓	Are there additional facilities you want associated with this primary facility? For example, there could be different facility types or different FacilityID_UUIDs [Yes No Radio Buttons] If the YES radio button is selected to answer this question, information and fields related to associated facilities will be displayed, and the site administrator can add associated facilities. If NO, then no information or fields will display.
	Copy Primary Facility Info When this box is checked, the information (facility name, address, type, status, FacilityID_UUID, and output facility ID) of the primary facility will be copied.
	Associated Facility Name The name of the associated facility ("UAB Downtown Urgent Care").
	Associated Facility Address The associated facility's address includes several fields: street address ("1000 Main Street"), city ("Birmingham"), 2-letter state abbreviation ("AL"), county ("Jefferson"), and the 5- or 9-digit ZIP code where the associated facility is located ("35203" or "35203-3824").
A	Associated Facility Status The facility status of the associated facility. This field is autogenerated to match the facility status of the primary facility and cannot be modified (ex. "Onboarding").
A	Associated LHD Facility Status The status of the associated local health department (LHD) facility. This field is autogenerated to match the facility status of the primary facility and cannot be modified (ex. "Onboarding").
$\overline{\checkmark}$	Associated FacilityID_UUID The FacilityID_UUID of the associated facility. This can be the same or different from the primary facility's FacilityID_UUID (ex. "999999").
V	Convert this Associated FacilityID_UUID to the Primary FacilityID_UUID during data processing to populate C_Facility_ID?) [Yes No Radio Buttons] If YES, the OutputID of associated facility = OutputID of Primary Facility. If NO, the OutputID of

associated facility = InputID of associated facility.

The following examples give insight into using associated facilities to record facility information. From these examples, you can see the implications on data processing and visualization.

Example #1: Primary Facility with Associated Facilities—Same FacilityID_UUIDs

In the example shown in Figure 24, all associated facilities related to the primary facility have the same FacilityID_UUID as that of the primary. This ID scheme might be used if multiple urgent care practices want to report as the same facility even though they are at multiple locations.

C_Biosense_Facility_ID	Input Facility ID	Output Facility ID	Facility Name	Facility Address	Facility Type	ID Converted	Date Added	4
9999	1073601043	1073601043	Bay UC #1	280 Fireman Road	Urgent Care	N/A	02-01- 2022	
9999	1073601043	1073601043	Bay UC #2	980 Waxman Road	Urgent Care	N/A	02-01- 2022	Ī,

Figure 24. Associated Facilities with Same Facility ID as the Primary Facility ID

Example #2: Primary Facility and Associated Facilities—Different FacilityID_UUIDs, Not Converted

In Figure 25, the associated facilities related to the primary facility have different FacilityID_UUIDs than one another and the primary. When asked the question "Convert this Associated FacilityID_UUID to the Primary FacilityID_UUID during data processing to populate C Facility ID?" the site administrator chooses NO.

For example, a site administrator might want to add a pediatric emergency department and a "regular" emergency department that will share a single physical location. Both report using different facility ID values—but in ESSENCE, both are tracked as a *single facility*. In the underlying Archive processed data, separating the two for detailed analyses can be useful.

_Biosense_Facility_ID	Input Facility ID	Output Facility ID	Facility Name	Facility Address	Facility Type	ID Converted	Date Added
8888	999911	999911	Medical	400 N Edwards Street	Emergency Care	N	02-01- 2022
8888	999912	999912	Medical Center UC	400 N Edwards Street	Urgent Care	N	02-01- 2022

Figure 25. Shown are associated facilities with Facility IDs different than their Primary Facility ID. (**NOTE:** The Output Facility IDs have not been converted to the Primary Facility's Facility ID.)

Example #3: Primary Facility and Associated Facilities—Different FacilityID UUIDs, Converted

In Figure 26, the associated facilities related to the primary facility have different FacilityID_UUIDs than one another and the primary. When asked the question "Convert this Associated FacilityID" UUID to the Primary FacilityID_UUID during data processing to populate C_Facility ID?" the site administrator chooses YES.

An example of when this might be used is if a site administrator has a facility that usually sends data under a single ID value. Occasionally, however, a technical glitch lets an old facility ID value come through. The site administrator wants to convert this ID to the correct value in the system but does not need to differentiate these data in the underlying Archive Processed data.

C_Biosense_Facility_ID	Input Facility	Output Facility	Facility	Facility	Facility	ID	Date
	ID	ID	Name	Address	Type	Converted	Added
7777	059999	1003814971	Spring Medical Center	3719 Spring Street	Emergency Care	Y	02-01- 2022

Figure 26. Shown is the Associated Facility with Facility ID that is different than its Primary Facility ID. (NOTE: The Output Facility has been converted to Primary Facility ID.)

6. Facility Review

Facility Review Overview

Once a facility has been added or modified, the system will determine if further review by the NSSP onboarding team is required. Facility Reviews are conducted to ensure that sites are successfully prepared to send data to the BioSense Platform. You can track the status of review within the MFT by checking the field named "Record Status." If your facility requires review, the "record status" and "review reason" fields on the Facility Information screen will contain detailed information. Facilities that are approved or do not need to be reviewed are marked as "complete" in the "record status" field, and the "review reason" field will be blank. Facilities that need to be reviewed are marked as "pending OB approval" in the "record status" field, and the "review reason" field will contain details on the reason for review.

The Facility Review workflow blocks immediate updates to the ESSENCE facility tables and Operational Crosswalk. The Operational Crosswalk is used for data processing in the Onboarding and Production environments. Please refer to the NSSP Data Dictionary (opens in Excel) for more information about data processing. The ESSENCE facility tables and Operational Crosswalk are only updated when "record status" is "complete."

Why does my facility require review?

- Facility Status changed to (or from) "Active"
- Facility_ID_UUID exists in other site
- AHA ID exists in other site
- Facility NPI exists in other site
- Sending Facility ID exists in other site
- Emergency Facility missing AHA
- Feed Name is Unknown
- Associated Facility Crosswalk Review
- Changed Facility_ID_UUID
- County and ESSENCE_Region mismatch

Figure 27 and the following table show information that the NSSP onboarding team will enter during their Facility Review. The status of the review and site comments may be recorded here as well. **NOTE:** The Analytic Data Management team review (ADM Review) is no longer used and will be removed in a later release. The boxed A (A) indicates that a field is Autogenerated.

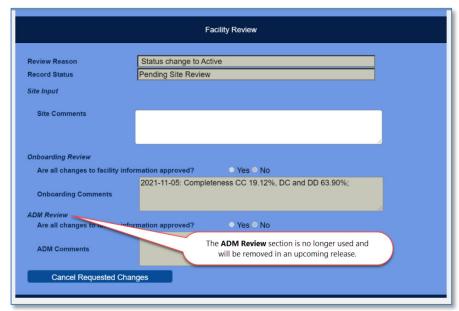


Figure 27. Facility Review Section

Information Collected for Facility Review

✓ – Required 🗡 – Autogenerated

Required	Description				
A	Review Reason				
	The reason, if applicable, that a facility has entered the review workflow. This field is autogenerated and <i>cannot</i> be modified.				
A	Record Status The status, if applicable, of a facility within the review workflow (Pending OB (Onboarding team's) Approval, Pending Site Review, or Complete). This field is autogenerated and <i>cannot</i> be modified.				
	Site Comments This free-text field allows site administrators to enter relevant information about the facility being reviewed.				
A	Onboarding (OB) Comments Onboarding review fields include the question "Are all changes to facility information approved?" and a section for comments. When the facility's record status is "Pending OB Approval," the NSSP onboarding team will answer this YES/NO question as to whether the facility has been approved and, if necessary, add comments.				
A	Analytic Data Management (ADM) Comments Onboarding review fields include the question "Are all changes to facility information approved?" and a section for comments. When the facility's record status is "pending ADM approval," the ADM team will answer this YES/NO question about whether the facility has been approved and, if necessary, add comments. The ADM Review is no longer used and will be removed in an upcoming release.				
	Cancel Requested Changes Button When a facility has a status of "Pending OB Approval" or "Pending Site Review," the Cancel Requested Changes button will appear at the bottom left of the Facility Review section. A site administrator or NSSP onboarding team member may use the Cancel Requested Changes button to remove the requested changes under review and revert to previously saved version. Pressing the button will set the record status to "complete" and the review reason to "null."				

Figure 28 illustrates the facility review workflow for moving facilities through the onboarding process into an active status.

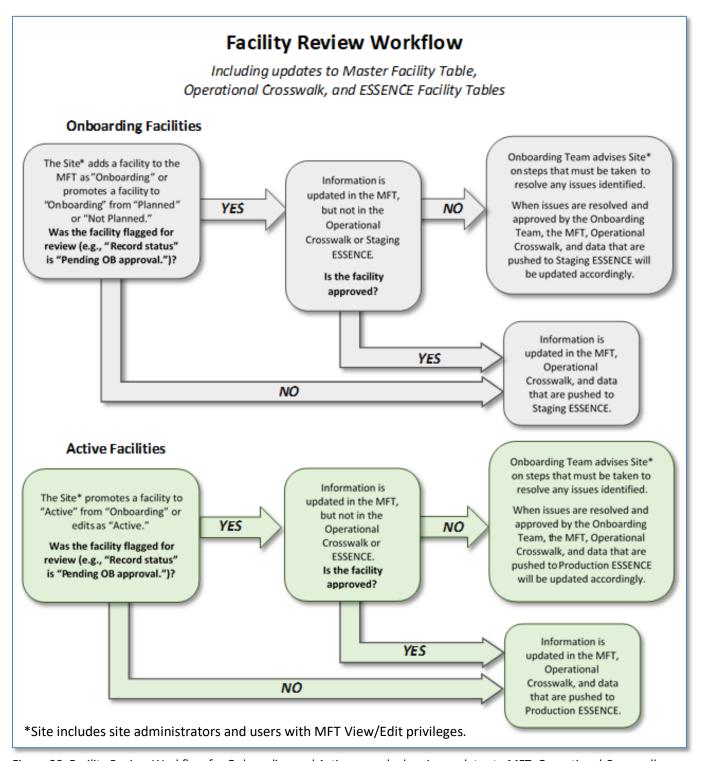


Figure 28. Facility Review Workflow for Onboarding and Active records showing updates to MFT, Operational Crosswalk, and ESSENCE.

Canceling Changes

If a facility is under review, i.e., when its Review Status is *Pending OB Approval*, the record is locked and the site administrator cannot change the facility information. However, site administrators can, while the facility is in Pending Onboarding (OB) Approval status, cancel outstanding changes by clicking the **Cancel Requested Changes** button in the Facility Review section. This button is only visible when the facility is in *Pending OB Approval* status. Clicking this button resets the facility information to previous values, removes the record from the facility review queue, and unlocks it.

What Happens When Changes Are Rejected

If a facility's changes are rejected by the onboarding team reviewers, the site administrator will receive a "notice of rejection" email. The email will contain reviewers' comments notifying the site of what needs to be changed.

When rejected, the record will be unlocked. Then, the MFT's Facility Information screen will show the "record status" to be "Pending Site Review," and the "review reason" field will contain details provided by the onboarding team for the reason for rejection. Also, the comments sections may contain reviewers' comments about what needs to be changed. Site administrators can then modify and resubmit facility for review.

NOTE: Once the site admnistrator makes needed changes and additions, the facility review workflow will be triggered and the NSSP team will resume facility review procedures and, again, the facility record is locked.

Data Processing Considerations

The NSSP team strives to minimize the time each facility spends in review. When a facility is in review status, the MFT facility metadata is effectively "out of sync" with the Operational Crosswalk and ESSENCE facility tables. During this time, you may want to compare the facility metadata stored in the MFT with facility metadata used during data processing (i.e., in the Operational Crosswalk and ESSENCE). To make this comparison, the following query may be helpful:

Query for Comparing Metadata

Use the following query to compare primary facility metadata in the MFT to the data in the Operational Crosswalk for a specific facility ID:

```
SELECT
a.C_Biosense_Facility_ID,
a.Record_Status AS Review_Status,
                                                                           To view information for
a.Facility_Status AS "(Requested)MFT_Facility_Status",
                                                                           all facilities pending
b.Facility Status AS "(Current)Crosswalk Facility Status",
                                                                           review, use the following
a.FacilityID_UUID AS MFT_Output_FacilityID_UUID
                                                                           where statement:
"(Requested)MFT Output FacilityID UUID",
b.Output_FacilityID_UUID AS
                                                                           WHERE a.Record Status
"(Current)Crosswalk Output FacilityID UUID"
                                                                           <> 'Complete'
FROM <site> MFT a
JOIN <site> Operational Crosswalk b on a.C_BioSense Facility ID=b.C_BioSense Facility ID
WHERE a.C BioSense Facility ID='<XXXXX>'
and a.Primary_Facility = 'Y'
and b.Operational Crosswalk ID = (select max(Operational Crosswalk ID) from
<site>_Operational_Crosswalk where C_Biosense_Facility_ID = '<XXXXX>')
```

Executing the preceding query for comparing metadata will produce a table that contains the following information:

C_BioSense		(Requested)	(Current)	(Requested)	(Current)
_	Review_Status	MFT_Facility	Crosswalk_	MFT_Output_	Crosswalk_Output_
_ Facility_ID		_Status	Facility_Status	Facility_ID	FacilityID_UUID
Primary	The status of	The status of	The status of the	The Primary	The Primary ID as
unique	the facility	the facility as	facility as noted	Facility ID as	noted in the
identifier	within the	noted in the	in the	noted in the	Operational
for the	review	MFT Module.	Operational	MFT Module.	Crosswalk and is
facility.	workflow (e.g.,		Crosswalk and		used for data
	pending OB	If you change	used for data	If you change	processing.
	approval,	the facility	processing.	the facility's	
	pending site	status, this field		PrimaryID_	If you change the
	review, or	will reflect your	If you change the	UUID, this field	facility's
	complete).	requested	facility status,	will reflect your	PrimaryID_UUID,
		change.	this field will	requested	this field will reflect
			reflect the	change.	the facility's
			facility's status in		PrimaryID_UUID in
			the Operational		the Operational
			Crosswalk and		Crosswalk and
			ESSENCE.		ESSENCE.

Use Case Example Output 1: Facility Status changed from Onboarding to Active; facility is currently pending review by NSSP Team

C_BioSense_	Review_Status	MFT_Facility	Crosswalk_	MFT_Output_	Crosswalk_Output_
Facility_ID		_Status	Facility_Status	Facility_ID	FacilityID_UUID
1234	Pending OB Approval	Active	Onboarding	100	100

NOTE: The MFT preserves the requested facility status of "Active," but the Operational Crosswalk will retain a facility status of "Onboarding" until the facility changes are approved.

Use Case Example Output 2: FacilityID_UUID is modified for an active facility; facility is currently pending review by NSSP Team

C_BioSense_	Review_Status	MFT_Facility	Crosswalk_Facility	MFT_Output_	Crosswalk_Output_
Facility_ID		_Status	_Status	Facility_ID	FacilityID_UUID
1234	Pending OB Approval	Active	Active	200	100

NOTE: The MFT preserves the requested new FacilityID UUID value. However, the Operational Crosswalk will retain the old FacilityID_UUID value until the facility changes are approved (i.e., any messages received from the facility will be mapped to the old FacilityID_UUID value in the XX_Processed table until changes are approved).

Running SQL Queries in RStudio

You may have queries you would like to run using SQL scripts to check on the status of recently added facilities or for other reasons. These may be executed in RStudio Workbench by "wrapping" your query in R code, as shown below.

R Wrapper Code

RStudio Workbench User Manual (site administrator setup and user license required)

```
## NSSP RStudio Wrapper for SQL code
## Paste SQL code between the double quotes (") below.
## Update file to what you want the .csv file to be named in the final line.
datamart <- dbConnect(odbc::odbc(), dsn = "BioSense_Platform")
table <- dbGetQuery(datamart, pasteO("
##Paste your SQL code here. Output will be stored in the "table" object.
"))
write.csv(table, file ="TableName.csv", row.names = FALSE)</pre>
```

Running SQL Queries in SAS

SQL scripts may be executed in SAS Studio by "wrapping" your query in SAS code below.

SAS Studio Wrapper Code

SAS Studio User Manual (site administrator setup required)

```
/* NSSP SAS Studio Wrapper for SQL code. */
/* Update FileName to what you want the .xlsx file to be named in the OUTPUT section. */
options source source2 mprint mlogic symbolgen notes nocenter dlcreatedir errors=1
compress=yes;
proc datasets lib=work nolist kill;
%include "/opt/sas/shared/homes/&sysuserid./User Info.sas";
proc sql noprint;
%include "/opt/sas/shared/homes/%scan(&sysuserid.,1,@)/User Info.sas";
connect to odbc (datasrc='BioSense Platform' user=&UserID. password=&PW.);
create table work.data1 as
select * from connection to odbc
(Paste your SQL code here between the (). Output will be stored in the "table" object.)
disconnect from odbc;
quit;
/* OUTPUT */
libname xlout XLSX "FileName.xlsx"
data xlout.data1;
set work.data1;
run;
libname xlout clear;
```