Align Module 6: Creating Reports

This tutorial will explain how to create reports using maps in the CEDS Align tool. Reports can be created about maps that have been shared with all, whether or not a user is logged into the CEDS website. Additional reports are available to logged-in users about their own maps that have not yet been shared with all.

Map-Based Reports (Topic 1)
This topic will discuss the map-based reporting features for Align maps. Users do not have to be logged in to the CEDS website to access map reports. However, when not logged in, users are restricted to maps that have been shared with all.

To begin, select Tools>Align from the green menu at the top of the CEDS website. You are taken to the Align main menu. Under Use, there are two options: EXPLORE Map-Based Reports and EXPLORE Element-Based Reports. For this topic, select EXPLORE Map-Based Reports. You are now at the first step of generating a map-based report.

If you are logged in and working on your own map, you can also access the Reports screen by selecting View Reports under the Using the Map feature on the Manage Map screen.

The Align tool allows you to filter the available maps so that you can quickly find the maps you are seeking. For each filter, the selection of ALL is available. The first filter is Domain. The Domain relates to whether a map is Early Learning, K12, Postsecondary, Career and Technical Education, Adult Education, Workforce, Assessments, P20W, or Other. The second filter is Affiliation Type. The Affiliation Type will change based on the Domain chosen. Click Next to go to Step 2 of generating a map-based report.

A list of states and territories is now displayed. The states with maps that are available for building reports are bolded. More Than One State means that the map applies to an education stakeholder that crosses state lines. Not Applicable means that the map applies to an education stakeholder, such as a national association, that does not relate to a specific state. Select the states of interest by clicking on the checkbox to the left of each state’s name. Click All to select all options. Click Next to go to Step 3.

Step 3 displays the maps that meet the Domain, Affiliation Type, and State criteria you selected. First, click to the left of a state name. Now the Domain is displayed. Expand further by clicking to the left of the Domain or by selecting Expand All above the entire list. Now the available maps are displayed. You can select as many maps as you like. If you select between 1 and 10 maps, they will be displayed on the screen. If, however, you select more than 10 maps, they will only be available via download. Select your maps and select Next to go to Step 4 of generating a map report.

Step 4 shows the types of reports available to you. If you are not logged in or do not have a user account, you will see the three reports along the top. These three reports are available to all
users on maps that have been Shared with All. When logged in, these reports are available for any maps that have been shared, as well as for any maps to which you are assigned, regardless of whether or not they are Shared with All. Descriptions of each of these reports will be provided in the upcoming sections.

Select a report and click Next to go to Step 5. This step allows you to filter the report to display information based on specific CEDS elements, rather than on all elements. To limit the CEDS elements related to the report, uncheck All CEDS Elements. You now see the CEDS element tree view. The list you see first is made up of the domains in CEDS. Expand a domain to show the entities by selecting the small box to the left of the appropriate domain. Expand an entity to show the categories. Expand the categories to show the elements. You select the element by clicking the checkbox to the left of the element’s name.

You can also filter for a CEDS element by using the keyword search or by filtering based on domain. To select all CEDS elements, recheck All CEDS Elements. Click Next to view the report.

Specific Map-Based Reports (Topic 2)
This topic will discuss specific map-based reports. This section assumes you have completed Steps 1 to 3 of generating an Align map-based report and have selected the map or maps for which you wish to create the report. For the purposes of this demonstration, we will select All CEDS Elements in Step 5 for each report.

Data Dictionary Only Report (Topic 2.1)
This topic will discuss the Data Dictionary Only Report. The Data Dictionary Only Report displays the element information for the selected maps. When multiple maps are selected, each map is listed side by side.

Select the Data Dictionary Only report and click Next.

When the Data Dictionary Only report appears, you will see each map you selected when you generated the report. If you selected only one map, you will see the map’s name. Click on the greater-than sign to see the map’s elements, organized in columns labeled System Name, Database Name, Table Name, and Element Name. If you selected more than one map, each map will appear side by side in columns. For each element, the System Name, Database Name, and Table Name will be specified, if that information was included in the mapping. For more information about a particular element, click Show Details on that row. A pop-up box appears that shows all the information about that element.

The entire map or maps can be downloaded to view all details at once. To download the map, hover over Options and select Download Full Report in the top right corner.

If you have run this report and want to see the CEDS elements aligned, hover over Options and click Show CEDS Alignment. Now you see all the map information in the first column. The next columns are the CEDS elements to which your element has been aligned as well as the
responses to the two alignment questions. For more information about the alignment questions, please view Align Module 4: Aligning Elements to CEDS. This time when you select Show Details you see the map’s Element Information on the left and the CEDS element information on the right.

To choose another report, hover over Options and click Select New Report in the top right corner.

**Data Dictionary + CEDS Info Report (Topic 2.2)**

This topic will discuss the Data Dictionary + CEDS Info Report. The Data Dictionary + CEDS Info Report will display the element information for the selected maps along with the CEDS elements to which the maps have been aligned. When multiple maps are selected, each map will be listed in its own subsequent column.

Select the Data Dictionary + CEDS Info report and click Next to go to Step 5. Click Next to view the report. Note that the CEDS Align tool now allows for cross-domain alignment; that is, the system will show you when the elements align to one another, even if you selected maps in separate domains.

This report is the same report as when you select the Data Dictionary Only report and choose Show CEDS Alignment from the Options menu. Choosing this report from the menu allows you to view the report without having to go through the Data Dictionary Only report.

The entire map or maps can be downloaded to view all details at once. To download the map, hover over Options and select Download Full Report in the top right corner.

**CEDS Elements with No Alignment (Topic 2.3)**

We will now discuss the CEDS Elements with No Alignment Report.

The CEDS Elements with No Alignment Report is a report of CEDS elements that were not aligned to the map. The system will base the report on the domain chosen in Step 1 of the report creation. If all domains are chosen, then it displays all CEDS elements.

This report is an excellent method for verifying that you have completed your alignment. Select the CEDS Elements with No Alignment report; then click Next. Click Next to view your report.

To view the report, click the greater-than sign next to your map name. The system displays the CEDS elements not aligned to your map. By clicking Show Details, you can view the CEDS element information.

**Elements with Unfinished Alignment (Topic 2.4)** The next report we will discuss is the Elements with Unfinished Alignment report. This report is only accessible when you are logged in, and can only be generated for maps to which you are assigned. The Elements with
Unfinished Alignment report is available only to Map Administrators and Authorized Users. This report shows any elements in the map that have not been aligned to CEDS or marked as Element Could Not Be Located in CEDS.

This report is a great way to check that the alignment of a map is complete. To run the report, select Elements with Unfinished Alignment and click Next. Then click Next to view the report. If there are no elements with an unfinished alignment, the screen will simply say No records to display. If, however, there are elements that are unaligned, they will be displayed here. You can then click the Align button to complete the alignment directly from this screen.

You can download this information in a report by selecting Download Full Report.

**User-Defined Elements (Topic 2.5)**
The User-Defined Elements report is a report that provides a listing of all user-defined elements in the map. This report is only accessible for maps to which you are assigned as either a Map Administrator or Authorized User. You must be logged in to access this report.

When the report is generated, the system lists all elements in the selected maps that were marked as Element Could Not Be Located in CEDS. If no elements in the selected maps were marked this way, the system will display a message stating such.

**Validate Consistency (Topic 2.6)**
The Validate Consistency report is available to Map Administrators and Authorized Users when they are logged in. This report is also accessible under Using the Map in the Manage Map menu in Align. With this report, users have the ability to check the consistency of the alignment of elements that have multiple instances within their map.

When you run this report, the system looks for multiple instances of the same element name and multiple instances of the same element ID. If your map has multiple instances of the same element name, but you did not align the elements exactly the same, the report will show those elements under the Common Element Names header. Expanding the plus sign beside the element name shows a table with a purple header row. The CEDS element is in this row, and information about the CEDS element is revealed in a pop-up box when the purple row is selected.

Below the CEDS element are rows showing the path for all instances of this map element that align to the CEDS element displayed. The map element is hyperlinked so that when selected, the details about that element appear in a pop-up window. In the columns next to the element, the responses about definition and option set alignment appear.

Multiple groupings of CEDS elements indicate that the map element was aligned to different CEDS elements, depending on the instance of the map element. Multiple paths displayed under a CEDS element indicate that either one or both of the definition and option set alignment responses varied across instances of the map element.
Note that inconsistencies across instances of a map element may be necessary, given the context of each instance. If, however, the inconsistencies are erroneous, the user can correct the issue by selecting the Align button next to the appropriate map element instance and making the necessary edits.

The same thing is displayed under the Common Element IDs header, except that the system lists multiple instances of the same element ID instead of the same element name.

If there are no inconsistencies across the map, the system will display a message indicating such.

**Map Data Formatted for Upload (Topic 2.7)**
We will now discuss the Map Data Formatted for Upload report.

The Map Data Formatted for Upload report is available to Map Administrators and Authorized Users when they are logged in. This report is also accessible under Data Elements in the Manage Map menu in Align.

This report is only available as a download to Excel. All the fields within a user’s map are included in the report. The report is formatted the same as the data dictionary upload template. Each option is displayed in its own row, and all the fields required for a successful upload are included and in the appropriate format. This means that once it is downloaded, it can be updated and then loaded back into Align as a new map.

**Modification/Change History (Topic 2.8)**
You can only create a Modification/Change History report on maps for which you are a Map Administrator. For information on Map Administrators, please view Align Module 2: Map Administration.

Select the Modification/Change History report and then click Next. Select the arrow next to the Map name to view the report.

The Modification/Change History report allows the Map Administrator to view a list of the modifications made to a map during a specified time frame and/or for a specified user.

To filter the report based on a time frame, enter the beginning time frame in the first text box and the ending time frame in the second text box. Then click Filter.

To filter the report based on a user, choose the user from the dropdown box. Then click Filter.

Both filter options can be used at the same time, allowing the Map Administrator to view the modifications made by a specific user during a specified time frame. To remove the filter from the report, click Clear Filter.
The sort order for the report can be changed to ascending or descending by clicking on the column date header. By default, the report is in descending order.

**Element-Based Reports (Topic 3)**

Element-based reports allow the user to first select one or more CEDS elements and then generate reports based on those elements. At this time, there is only one element-based report. This report allows the user to see maps that have been shared with all that have alignments to the selected CEDS elements.

To begin, select Tools>Align from the green menu at the top of the CEDS website. You are taken to the Align main menu. Under Use, click EXPLORE Element-Based Reports.

The first step to generating the element-based report is to select one or more CEDS elements. You can either search for an element via the search box or drill down into the Domain Entity Schema to find the element or elements you wish to select. To use the search box, simply type a word or words and select Filter or press Enter. To narrow the search results, select a domain from the Domain dropdown box and select Filter. The results display in a table with the first column of the table showing the domain, entity, and category and the second column showing the element name. You can view more information about the element by clicking on the element name. If you wish to select the element, click the box to the left of the row and a check mark will appear. If you want to clear the results, select Reset Filter. Note that selecting Reset Filter after you select an element will clear the selection.

You can also search for an element by drilling down into the Domain Entity Schema. Simply click the small box to the far left of the domain, entity, or category to further expand it until you get to the elements. You can see details about an element by clicking on the element name. To select the element, click the box to the left of the element name and a check mark will appear. You can also select an entire domain, entity, or category by clicking the checkbox next to the appropriate level. Selecting an entire domain or entity may result in a slower response time due to report generation on a large number of elements.

Once you have selected all of the elements you wish to see, click Next. The report now displays all of the elements in a column with a plus sign to the left of each element name. Click on the plus sign to expand a single element, or select Expand All at the top to expand all elements at once. When an element is expanded, if there is at least one map that has been shared with all that aligned to the CEDS element, it will appear in a table. If no maps that have been shared with all align with the CEDS element, the system will display a message indicating such.

When maps have alignment to the CEDS element, the report will display the Map Name, the Affiliation Name, the State, the System, the Database and Table Names, and the map’s Element Name. The Element Name is a link and, when selected, opens the element details page.
Using the Options button at the top of the screen, you can download the report, select additional CEDS elements, or start over on selecting elements.

This completes *Align Module 6: Creating Reports*. For information on how to manage your maps, upload a data dictionary, align elements to CEDS, or create reports, please view the other tutorials available on the CEDS website.