This reference guide is intended for TracDat users with access to the Ad Hoc Reporting Tool. This reporting tool allows the user to create custom queries from the TracDat database to return data in views and sets not found on the stock TracDat reports.

This reference guide will serve as a general introduction to the reporting tool – here you will find a step-by-step walkthrough in addition to some definitions and explanations of the reporting tool and the edit screens. This guide is not intended to serve as a replacement for training and/or consultation on TracDat reporting.

Since the Ad Hoc Reporting Tool is an evolving feature of TracDat, we encourage you to share your feedback with us about the tool’s usability, data retrieval, and interface. Please email us at support@nuventive.com.

The information in this reference guide is organized according to the stock nomenclature that originally comes with TracDat. Please be aware that your experience with TracDat may look slightly different than the screenshots below due to the software’s dynamic labeling feature and your specific institution’s configuration.

**Note to TracDat Administrators**
The Ad Hoc Reporting Tool may be toggled on and off for any unit under Institution > Configuration > Application Settings > Navigation Settings > Reports > Ad Hoc

!! Units checked will NOT see the Ad Hoc Reporting Tool !!

### Navigation - Getting There

Within TracDat, reports are divided into one of 5 groups:

**Administrative – Institution/Reporting Unit – Assessment Unit – Course – Ad Hoc**

Depending on your Permissions, Navigation Settings, and Dynamic Labeling, when you are at the Assessment Unit level, you will see some form of these headings under the Reports Tab:

- Assessment Unit | Course | Ad Hoc

At the Reporting Unit level, you will see these:

- Reporting Unit | Assessment Unit | Course | Ad Hoc

and at the Institution level, you will see these:

- Admin | Institution / Reporting Unit | Assessment Unit | Course | Ad Hoc
Creating a Report

Because of the flexibility and potential formatting of the tool, creating a good Ad Hoc Report may take a few tries to get it exactly how you want it. This guide will show a good way to start and some tips to keep in mind, but there are many different routes to take that could be successful.

1. Click on Create New Ad Hoc Report button

When first using the reporting tool, you will likely not have any Ad Hoc Reports saved, so there will not be any reports defined. Select the Create New Ad Hoc Report button to start a new report.

2. Define your Report

Output: Reports can be run as HTML, PDF (default), (Microsoft) EXCEL, or (Microsoft) WORD.

Suggestions:
- **HTML** is best for Reports that you would like to View On-Screen.
- **PDF** is best for Small (few pages) Reports that you would like to Print As Is.
- **EXCEL** is best for Reports that have a Large Data Set, those that need Extensive Formatting Changes, or those that will benefit from the Advanced Filtering and Sorting capabilities in Excel.
- **WORD** is best for Reports that you would like to Print, but with Formatting Changes.
**Layout:** Reports can appear as either Landscape (default) or Portrait (in HTML, PDF, and WORD).

**Title:** Reports must have a title – this will appear at the top of the report (in HTML, PDF, and WORD).

**Subtitle:** This will appear underneath the report Title on the report (in HTML, PDF, and WORD).

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**Sample Title**

Sample Subtitle

Sample Data Columns

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**Description:** Does not appear on the report - Only appears on the Ad Hoc Report listing. Often used for further distinction among reports.

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<table>
<thead>
<tr>
<th>Report Title</th>
<th>Description</th>
<th>Data View</th>
<th>Created By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Title</td>
<td>Sample Description</td>
<td>Assessment Unit - Unit Summary</td>
<td>Admin, TracDat</td>
</tr>
</tbody>
</table>

**3. Choose your Data View**

**Data View:** In Ad Hoc Reporting, data can be requested by existing sets of database fields within TracDat. The Data View allows you to choose from one of the more commonly queried sets. This collection is ever-expanding and will continue to be modified to users’ needs.

The Data Views mainly represent the data behind the different navigation tabs within TracDat. Depending on the Unit selected from the Selected Unit drop-down in TracDat, the Data Views currently available in for the Ad Hoc Report are:

**Below are the original labels from TracDat – these may have been altered for your Institution**

**Managing Data Views:**

TracDat Administrators will be able to hide individual Data Views for either all Assessment Units and/or all Reporting Units. This can be done by navigating to: Institution > Reports > Ad Hoc > Manage Data Views and then editing each Data View to be hidden.

!! Type of Unit checked will NOT see the applicable Data View !!
| Assessment Unit – Course Observations | Data Fields under the Assessment Plan and Observations Tabs related to Course data |
| Assessment Unit – General | Data Fields under the Assessment Unit Tab > General Sub-Tab |
| Assessment Unit – Objective Summary by Objective Status | Selected Data Fields under the Assessment Plan and Observations Tabs related to Unit Objectives |
| Assessment Unit – Objective Summary by Objective Type | Selected Data Fields under the Assessment Plan and Observations Tabs related to Unit Objectives |
| Assessment Unit – Assessment Plan | Data Fields under the Assessment Plan Tab |
| Assessment Unit – Unit Observations (All Observations) | Data Fields under the Assessment Plan and Observations Tabs related to Unit data – All Observations |
| Assessment Unit – Unit Observations (Related directly to Objectives) | Data Fields under the Assessment Plan and Observations Tabs related to Unit data – Only those Observations related directly to Objectives |
| Assessment Unit – Unit Observations (Related to Tasks) | Data Fields under the Assessment Plan and Observations Tabs related to Unit data – Only those Observations related to Tasks |
| Assessment Unit – Unit Observations (Related to Assessment Methods) | Data Fields under the Assessment Plan and Observations Tabs related to Unit data - Only those Observations related to Assessment Methods |
| Assessment Unit – Unit Summary | Data Fields appearing under the Home > Summary Tab related to Assessment Unit data |
| Assessment Unit – Observations (All Observations) related to Goals | Data Fields under the Assessment Plan and Observations Tabs related to Unit data – All Observations + Related Goals |
| Assessment Unit – Observations (Related directly to Objectives) related to Goals | Data Fields under the Assessment Plan and Observations Tabs related to Unit data – Only those Observations related directly to Objectives + Related Goals |
| Assessment Unit – Observations (Related to Tasks) related to Goals | Data Fields under the Assessment Plan and Observations Tabs related to Unit data – Only those Observations related to Tasks + Related Goals |
| Assessment Unit – Observations (Related to Assessment Methods) related to Goals | Data Fields under the Assessment Plan and Observations Tabs related to Unit data - Only those Observations related to Assessment Methods = Related Goals |
| Assessment Unit – Unit Plans related to Goals | Data Fields under the Assessment Plan Tab + Related Goals |
| Institution – General | Data Fields under the Institution Tab > General Sub-Tab |
| Reporting Unit – General | Data Fields under the Reporting Unit Tab > General Sub-Tab |
| Reporting Unit – Observations | Data Fields under the Observations Tab; also includes Goals under Reporting Unit Tab > General Sub-Tab |
| Reporting Unit – Summary | Data Fields appearing under the Home > Summary Tab related to Reporting Unit data |
Unit – Goal Relationships
Data Fields under the Institution/Reporting Unit/Assessment Unit Tab > Goals Sub-Tab; used to retrieve relationships between sets of Goals within TracDat

Unit – Goals
Data Fields under the Institution/Reporting Unit/Assessment Unit Tab > Goals Sub-Tab; used to retrieve lists of Goals

Enter Query
SQL Query String for Advanced Users and Custom Reports

‘Enter Query’ Feature:
If there is a special combination of data that you would like to retrieve, enter a SQL query string to run a custom report or contact Nuventive Services Consultant to see if we can work with you to create a custom report or ensure that you can query the necessary data.

NOTE: This feature is only available to those with TracDat Administrator permissions.

4. Choose your Unit(s) and Reporting Fields

Output: PDF
Layout: Landscape
Title: New Report
Subtitle:
Description:

Data View: Assessment Unit - Unit Summary
Units: Assessment Unit

Units: Choose the Unit(s) that you would like to see on the report. If you are currently in an Assessment Unit, you will only see that Unit available. Pick the Unit by clicking on it.

Tip: Select multiple Units by holding the Ctrl (Mac = Command) Key down and clicking. Or you can hold the Shift key to select multiple consecutive Units.

Reporting Fields: Choose the Data Fields that you would like to query by placing a check in the box to the left of the Data Field Title.

The Ad Hoc Reporting Tool will query the selected Data Fields in the selected Unit(s) and then display the results in columns from left to right, starting with the topmost selected Data Field on the left.
After marking your Data Fields, you can click the **Save** button at the bottom of the window. This will save your report for future use and also let anyone else who has access to the Unit to run it. Save when you have made good progress on building the report – navigating away from the page will negate all work that hasn’t been saved. You can always edit the saved version!

### 5. Refining the Reporting Fields

After saving the report, click the **Run Report** button to get a sense of what the report looks like. This will give you an idea of where the data appears and the general layout of the report.

The Ad Hoc Reporting Tool creates reports that are columnar in nature. They are structured similar to the 4 and 5-column stock TracDat reports but only display the fields that you choose. However, you can modify some variables to the look and functionality of the report.

You can make the below changes if you return to the Ad Hoc > Edit Screen:

- **A. Change the Order of the Data Fields** that appear on the Report. Since the Ad Hoc Reports retrieve data in a columnar display, the first field checked will appear first on the left side of the report, the second next, and so forth. Using the arrows to the left of the Field names, you can reorder the fields so they appear either further left or right on the report.

- **B. Rename the Data Field Titles** – this will rename them only for the current Ad Hoc Report.

### Tip:
The field Titles will be the dynamic labels corresponding to the Unit Type of the Unit that you are working in. If you would like to see the original database field names, you can hold your cursor over each field title.
C. **Adjust the Width of the Data Field** on the Report (numbers are in pixels). Fields are pre-set to a certain width but may be altered to create a more readable and intuitive report. **Note:** Custom fields appear as 1500 pixels by default. Make them smaller if they take up too much room on the report.

D. **Change the Format** of numerical fields on the Report. You can adjust the number of decimals, or format the numerical data to display as currency with a dollar sign and two decimal places.

E. **Add a Footer Summary** to the bottom of the Report related to each Field. **The options in the drop-down for the Footer Summary depend on the type of Field:** Text Fields can be counted (Count = total data points returned, Distinct Count = total unique data points returned), *Date Fields* can also be counted and the Min/Max be returned (Count, Distinct Count, Minimum, Maximum), and *Numerical Fields* have all options (Count, Distinct Count, Minimum, Maximum, Total, Average, Standard Deviation, Variance).

F. **Select one or more Data Fields to Group** the data. Grouping by a certain column will automatically place that field at the top of the field order (and make it left-most on the report). In addition, repetitive entries will be eliminated, allowing for a more clean and understandable report.

**Examples of the group by this column feature:**

Not Grouped

<table>
<thead>
<tr>
<th>Outcome Name</th>
<th>Outcome</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 1</td>
<td>Students will be able to write effectively.</td>
<td>Result 1</td>
</tr>
<tr>
<td>Outcome 1</td>
<td>Students will be able to write effectively.</td>
<td>Result 2</td>
</tr>
<tr>
<td>Outcome 1</td>
<td>Students will be able to write effectively.</td>
<td>Result 3</td>
</tr>
<tr>
<td>Outcome 2</td>
<td>Students will be able to think critically.</td>
<td>Result 1</td>
</tr>
<tr>
<td>Outcome 2</td>
<td>Students will be able to think critically.</td>
<td>Result 2</td>
</tr>
</tbody>
</table>

Grouped by Outcome Name

<table>
<thead>
<tr>
<th>Outcome Name</th>
<th>Outcome</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 1</td>
<td>Students will be able to write effectively.</td>
<td>Result 1</td>
</tr>
<tr>
<td>Outcome 1</td>
<td>Students will be able to write effectively.</td>
<td>Result 2</td>
</tr>
<tr>
<td>Outcome 1</td>
<td>Students will be able to write effectively.</td>
<td>Result 3</td>
</tr>
<tr>
<td>Outcome 2</td>
<td>Students will be able to think critically.</td>
<td>Result 1</td>
</tr>
<tr>
<td>Outcome 2</td>
<td>Students will be able to think critically.</td>
<td>Result 2</td>
</tr>
</tbody>
</table>

Grouped by Outcome Name first, then Outcome

<table>
<thead>
<tr>
<th>Outcome Name</th>
<th>Outcome</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 1</td>
<td>Students will be able to write effectively.</td>
<td>Result 1</td>
</tr>
<tr>
<td>Outcome 2</td>
<td>Students will be able to think critically.</td>
<td>Result 1</td>
</tr>
<tr>
<td>Outcome 1</td>
<td>Students will be able to write effectively.</td>
<td>Result 2</td>
</tr>
<tr>
<td>Outcome 1</td>
<td>Students will be able to write effectively.</td>
<td>Result 3</td>
</tr>
<tr>
<td>Outcome 2</td>
<td>Students will be able to think critically.</td>
<td>Result 2</td>
</tr>
</tbody>
</table>

G. **Filter the Report Results** by criteria within a selected field or fields. There is the option to further filter the results by field criteria.

1) **Select the Field** where you would like to filter.
2) **Select the Type of Filter** to use.
3) **Enter in the Criteria** to filter the fields.
4) **Click** the **Insert** button to Add the Filter
5) **Repeat for Additional Filters**, using **AND/OR** to qualify the filter

### Types of Filters to use and their Meanings:
- **=** Equals / Is
- **!=** Does NOT Equal / Is NOT
- **>** Greater Than
- **<** Less Than
- **>=** Greater Than or Equal to
- **<=** Less Than or Equal to
- **LIKE** Field is Similar to
- **NOT LIKE** Field is NOT Similar to
- **IS NULL** Field Equals Blank
- **IS NOT NULL** Field Equals NOT Blank

### Tip: To Filter By Text
Use the LIKE filter type to account for possible misspellings or mistakes.
To use wildcard character(s) to expand your search, use the LIKE filter type and add the % symbol to indicate a wildcard.
When you use the LIKE filter, TracDat will automatically add wildcard characters bookending the search.

**Example:**
To return any Assessment Methods that have the words ‘writing’ and ‘rubric’ in them, your Filter Entry should look similar to the one below:

```
d.assessmentMethod LIKE '%writing%rubric%'```

### Tip: To Filter By a Date Range
Use Greater Than or Equal to filter type, enter the date range beginning date and click ‘Insert’.
Use the Less Than or Equal to filter type, enter the date range end date and click ‘AND’

**Example:**
Your Filter Entry should look similar to the one below:

```
b.observationDate > '1/1/2011' AND b.observationDate < '12/31/2011'```

### 5. Permissions to Ad Hoc Reports
Since Ad Hoc Reports are saved to the unit in which they were created, all saved reports are accessible to any TracDat users who have access to the Ad Hoc reports within that unit.
However, depending on the permissions of the TracDat user, he/she will have varying access to the Ad Hoc Report, based upon who created the report. The permissions are defined below:

**TracDat Admin:**
- Create – New Reports
- Edit / Run / Copy / Delete – All Ad Hoc Reports

**(Unit) Admin:**
- Create – New Reports
- Edit / Run / Copy / Delete – All Ad Hoc Reports in the Unit

**User:**
- Create – New Reports
- Run / Copy – All Ad Hoc Reports in the Unit
- Edit / Run / Copy / Delete – Ad Hoc Reports that they have Created

**Reports Only:**
- Create – New Reports
- Run / Copy – All Ad Hoc Reports in the Unit
- Edit / Run / Copy / Delete – Ad Hoc Reports that they have Created

**Copying an Existing Ad Hoc Report** will allow the user to rename and then modify the original report so that the original report is preserved; yet the user can make changes and then save those changes as their own report. Ad Hoc Reports that are created in an Assessment Unit can be copied to other Assessment Units. Likewise, Ad Hoc Reports that are created in a Reporting Unit can be copied to other Reporting Units.

**Examples** of the different Types of Permissions:

**Logged in as (Unit) Admin (or TD Admin):**

<table>
<thead>
<tr>
<th>Report Title</th>
<th>Description</th>
<th>Data View</th>
<th>Created By</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report 1</td>
<td>Report Created by Admin</td>
<td>Administrative - Assignments</td>
<td>Johnson, Scott</td>
<td>edit</td>
</tr>
<tr>
<td>Report 2</td>
<td>Report Created by User</td>
<td>Assessment Unit - Unit Summary</td>
<td>DeSante, Paul</td>
<td>edit</td>
</tr>
</tbody>
</table>

**Logged in as (Unit) User (or Reports Only):**

<table>
<thead>
<tr>
<th>Report Title</th>
<th>Description</th>
<th>Data View</th>
<th>Created By</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report 1</td>
<td>Report Created by Admin</td>
<td>Administrative - Assignments</td>
<td>Johnson, Scott</td>
<td>run</td>
</tr>
<tr>
<td>Report 2</td>
<td>Report Created by User</td>
<td>Assessment Unit - Unit Summary</td>
<td>DeSante, Paul</td>
<td>edit</td>
</tr>
</tbody>
</table>
6. Running the Report

When you are on the Edit Report screen, you have a few options when running the report. Please see the numbered bullets beneath that correspond to the numbered sections on the screenshot and that describe the options of running a report.

1) Reports can be previewed while toggling between different parameters before final report generation. The preview will display only one page of the report at a time, giving the user a chance to quickly review both the format and some content before deciding whether or not to choose a further action for this report (Group A, below). For more information on these actions, please see bullets 2-5 below.
While in the Preview Report mode, users can also page through the report using the Paging Tools (B), and also resize the view on the screen using the View Tools (C).

2) The Open Report button will open your report in the format chosen on the Edit Report page.

3) The Save button will save the report for future use.

4) Reports can be downloaded as Zip files. All required resources (report images, related documents, and linked reports) are also included in the Zip. The Zip can then be extracted and the complete report can be viewed from a PC, CD, or published to a website.

5) Reports can also be saved directly to the Document Repository and viewed just like any other document. When saved to the Document Repository, reports are saved as a Zip file to ensure all related data is included and saved. When viewed, the report will display in the format chosen on the Edit Report page. If desired, this saved report can be downloaded as a Zip file to your computer later from the Document Repository.