

Reporting Content FAQ

This section addresses questions relating to interpreting data in reports and navigating reports.

We understand there are numerous aliases for what are either the same metrics or closely related metrics. What NocTel Insight provides are metrics by NocTel's definition.

It may be that your definition of a metric does not meet the same definition NocTel Insight implements that shares the same name. In this case, we recommend two remedies:

1. Export the report data to Excel (Crosstab) and rename the columns to your liking. If metrics need to be calculated differently this can be performed in Excel or a different in-house reporting platform for your organization.
2. Submit a custom reporting request to NocTel Insight Support. This is only recommended if the metric definition should be calculated differently than how it is calculated by standard NocTel measures. We do not recommend submitting a custom reporting request only to have the column names changed.

This is exactly the problem that *Views* solve! Views are associated with a user individually and multiple Views can be created for the same report. A View defines all the filter, parameter, and Zoom Level selections and remembers it. This means if you want to jump between different views of the same report without needing to manually change filters, etc. you can make a View for each relevant way you want to view the report.

Additionally, you can set a View to be the *default* way the report is displayed to you specifically.

NocTel Insight's tabular reports look a lot like Excel or spreadsheet applications present. However, NocTel Insight is smarter in that it wants to implicitly group data together - this is done based on the *order of columns* in a report. This relative implicit grouping is performed from *left to right* making the leftmost column the overarching super group meaning it should be the broadest column with the fewest unique values. For example, consider a report that has the following unique columns: ID, Hire Date, Departure Date, Salary, Person, and Department.

If you were to lay out a tabular report in NocTel Insight ordering these columns specifically in the order of *Department, Salary, Person, ID, Hire Date, Departure Date* then if you sorted on Salary, the sort would be performed *relative to Department*. Suppose we had the following data:

Department	Salary	Person
IT	65,000	Misha Mansoor
IT	62,000	Paul Gilbert
Finance	57,000	John Petrucci
Finance	72,000	Mark Holcomb

If you performed that sort *descending by Salary* you would end up with the following result:

Department	Salary	Person
IT	65,000	Misha Mansoor
IT	62,000	Paul Gilbert
Finance	72,000	Mark Holcomb
Finance	57,000	John Petrucci

Not the order you'd normally expect in Excel, but it occurred because NocTel Insight implicitly groups like values within columns and forms bucket subgroups. This means the salary sort was performed relative to each *unique grouping of Department* and did not agnostically look at the overall data in the set. Whereas Excel is happy to take any arbitrary column and sort everything relative *just to that column*, NocTel Insight does not have the same sort of looseness. This is much less of a problem in visual reports since plots like bars are actually an aggregation of something that's been visually bucketed. For example, revenues would be plotted in blue, operating expenses in orange, and profit margin in green. Sorting simply on "order all the values of the data set by revenue descending" is not a very useful action since it emphasizes just the revenue column and doesn't give a clear relationship to the other columns in the same row or at large.

If you were to take the following data and try to sort it in the same way, you would end up the exact same result:

Department	Salary	Person
Development	65,000	Misha Mansoor
IT	62,000	Paul Gilbert
Marketing	57,000	John Petrucci
Software	72,000	Mark Holcomb

Why? Because Department is our leftmost column that all the other columns are expected to be relative to (e.g.: Salary *relative* to Department) having *unique values* for each Department across all our rows means the subgroups NocTel Insight creates all consist of just one row. A bucket of a single row is already technically sorted.

If you require sorting on tabular data we recommend you perform an export to Excel (Crosstab) and perform the desired sorting there.

This is expected behavior. NocTel Insight will automatically change the orientation of labels relative to the web browser size and the monitor resolution. When there are many subtotal values and the web browser size is small, NocTel Insight may hide the smaller values to prevent cluttering the interface. In most cases, you can hover your cursor over such values (if they can be distinguished visibly) and a tooltip will display showing detailed information about the highlighted value.

This is expected behavior. NocTel Insight limits to 20 distinct colors on a legend to values, so when the legend is tied to a very large set of *unique values* that are tied to a legend color this results in colors being reused. The color assignment in legend to the value is done randomly.

While reusing colors for values on a legend are undesirable and can result in the same color being rendered for two different values next to one another, it is generally not a good practice to display a very large number of legend coded values. We recommend you filter down the data set - especially when looking at larger trends.

This is expected behavior. Since filtering and setting parameters can cause the explicit value range to vary wildly, using a linear scale on the Y-Axis can cause smaller values to be completely imperceptible on the report visualization. In most cases NocTel Insight uses logarithmic scaling of the Y-Axis so that the largest values in the data set are still very prominent, but the smaller values are not completely crowded out. On the Y-Axis this causes the tick mark scaling to not be consistent groupings like 1,000 2,000 3,000 and so on. You will likely see scaling like 0 10 100 1000 5000 10000 and so on.

NocTel Insight scales the Y-Axis in respect to the *smallest and largest* values in the resulting data set.

This is expected behavior. When plotting multiple metrics in the same view with their own dedicated chart, it often does not make sense to use a fixed uniform Y-Axis scale across them all. In the event one chart plots on a much larger scale than all the others (effectively being an outlier of the group), using a uniform scale all the other group member charts could become imperceptible. By having independent Y-Axes for each such chart, you can still interpret the same data patterns while being able to view each member well individually.

In the case of *dual axis* visualizations, the Y-Axis is synchronized between both plots expressed on the same plane. When one plot's Y-Axis values are considerably larger than the other's it will cause a "smooshing" effect of the lesser plot's values causing potentially dramatic rendering. This is normal and intentional as dual axis visualizations are intended to show the correlated relationship between two metrics that calculate different things but have a shared property (generally on the X-Axis, which is usually time interval).

NULL values in some columns and filters are nothing to be worried about, though it's understandable to be concerned. Due to the use of multiple data sources in more reports, NocTel Insight uses a technique known as *blending* to take data from different origins and present it as a single unified data set. This is very similar at a larger scale to performing *joins* in SQL.

When blending occurs, rows that have values for some columns may not have a corresponding column to link with. When this happens there's only one half of the potential data that gets presented, so the missing half (or more) that couldn't be linked on is presented back as a NULL. Given this, you can think of such NULLs as being equivalent to "Not Applicable" or "Not Available".

It depends. For map-based visualizations NocTel Insight will *not display* any data points in which it cannot at a minimum determine a valid lat/long value or if the geocoordinate typed data does not result in a unique lat/long value. Attempting to map data points with incomplete data can result in grossly inaccurate attribution. For example, consider a data point that simply has "Portland, United States". Without a ZIP code or a state, there are multiple cities named Portland within the US this could be.

In visualizations that are not map-based, NULL values may be included though in many cases NULL values are reformatted or renamed in a more friendly manner such as "N/A".

Personalized Dashboards fall under the same conditions as custom reporting and carry the same terms. If a personalized or custom dashboard is implemented, it can be set for the specific user (or users) to be their default page that is loaded after successfully logging into NocTel Insight. See [Custom Reporting](#) for more info.

This can be setup if you are a licensed user. After logging in navigate to the content you wish to use as your default and open it. Once the report or dashboard has loaded, click your profile icon found in the upper right hand corner and then select **Make This My Start Page**.

If you wish to revert back to the Account default, this can be done anytime by clicking your account profile icon and selecting **My Account Settings** then selecting "Reset to Default" under the Start Page section.

They are unless there is a parameter that stipulates evaluation differently, such as a parameter stating "No Older Than" with a date selector.

This is due to NocTel Insight refreshing data on a nightly basis. Generally this means "Today's" data is not available.

Notify us at support@noctel.com stating the timezone that's missing. We will update it within short order. As of right now NocTel Insight only includes the standard United States timezones.

Select **False** if your Timezone's year-round Timezone is Standard Time.

NocTel Insight does not DST automatically. It is recommended that you create a DST sensitive View for reports to quickly jump back and forth or to simply update your existing Views when DST changes occur.

This is not an error and is known as *nesting*. NocTel Insight loves to implicitly create relationships with data. In tabular reports, nesting is shown as one row having multiple subrows fit inside it. For example, if a column is used to indicate a Year, then rows that have the same value for the Year column are condensed under that same year to visually show the relationship.

When you export report data to Excel (Crosstab), nesting does not occur - NocTel Insight isn't actually changing the underlying data, just the way it's visually presented to you.

Nesting has the benefit of NocTel Insight knowing or having a strong idea of how data rows relate or may relate to one another. This enables faster processing of filtering. An example of this would be a report that lists the following columns in order: Birth Year, Birth Month, Birth Date, Name. Everyone in your data set born in 1990 would be grouped under a big "single" row for 1990. Everyone born in the month of March of the year 1990 would further be grouped together as a big row for 1990, March. If you had filters in place to select what Birth Year, Birth Month, and Birth Day to include or exclude; if you were to exclude all months but March (but keeping all years and days), NocTel Insight would refer to the known relationships it drew and very quickly make the irrelevant data go away.

Forecasts must make use of grouped data that has not been aggregated as a **total or subtotal** in order to maintain the relationship scope to perform the forecast calculations. When there is a subtotal provided for a member at some nesting level, the subtotal listed has condensed all the individual data values into a single value - this is an aggregation.

When you change filter and parameter settings when viewing a report you only change it for yourself. Multiple users viewing the same report at the same time do not interact or otherwise interfere with one another.

In most cases this is due to changing filter, parameter, and/or Zoom Levels. When the underlying data and/or its grouping presentation (e.g.: displaying by Queue or something else) is changed, this results in different data being generated that NocTel Insight renders for the report visualization. For example, if your original report view started by listing data grouped by Day and you exported the export would show the aggregated values per Day. Changing the Zoom Level to instead be by Month and exporting would cause the data to be aggregated per Month resulting in different data sets exported between the two.

Out of box there are few standard reports that directly tie together operational data between NocTel services. This is done since not all customer organizations may use all the services.

NocTel services such as Talk and Flow never perform hard deletes on data. That is, entirely removing the record and making it non-existent. Deletes in services are *logical* - also known as "soft" - deletes in which the deleted entity is marked as deleted but not truly deleted from the database.

From an end user standpoint, there is no distinguishing the hard delete from the soft delete and new entities can be created that have the same label, name, description, etc. can be created at a later time. Understand that while there may be duplicate entries with different column values that populate, they are actually not the same unique row as there is always a unique identifier. In most cases NocTel Insight reports never expose the internal unique identifier as end users never see or use it.

To prevent the same entity from being listed multiple times in a data set, we recommend explicitly only filtering enabled/active or deleted - you should avoid filtering on both statuses.

Some tabular reports in NocTel Insight feature a large number of columns. For users with lower resolution monitors or using mobile devices, not all columns may be displayed at once. NocTel Insight will attempt to render as many columns as can fit in your web browser window.

The Zoom Level is changed by hovering over (almost) any Date or Timestamp column. When hovering over such columns, a + and - icon overlay will be displayed with the column's name. Selecting - (minus) will zoom the granularity of the data aggregation *out* (e.g.: If viewing by Day, zooming out once would go to by Week). Selecting + will zoom the granularity of the data aggregation *in* (e.g.: If viewing by Day, zooming in once would go to by Hour).

The supported Zoom Levels are:

- Year
- Quarter[^]
- Month
- Week
- Day
- Hour*
- Minute*
- Second*

[^]Quarter follows a standard year. NocTel Insight does not currently allow for custom quarters to be defined.

*These zoom levels are only available to *time stamp* fields. *Date stamp* fields do not contain an hour, minute, or second time part and therefore cannot zoom to these levels.

When you make selections to filter data through drop downs and parameters, you modify the overall set of data NocTel Insight can consider to render your report. When you do this you are typically *reducing* the amount of data NocTel Insight analyzes. Depending on parameter values and filter selections made, the remaining data set to consider may not include certain values at all. When this happens, such values are often excluded from filter drop downs as options.

This is done to help reduce clutter in filter option lists that can have many possible values. This does not mean the data is gone - modifying or removing filters may expose certain options again if there is any corresponding data present that contains that particular value.

Consider the following data set:

Color	Thing
Blue	Dog
Blue	Bird
Green	Dog

If we filtered on Color and wanted *only* Blue, then attempting to filter again afterward on Thing would show us the options Dog and Bird. This is because of the data leftover from the *first* filtering, those are the valid values that remain where filtering would result in a *change* in the resulting data on the second filtering.

On the other hand, if we first filtered on Thing saying only to include Bird; then filtering again afterward on Color would only give us the option of Blue because that's the only row where the Thing was Bird. The non-Bird rows where we had two possible Color values are not considered anymore and NocTel Insight does not bother showing you filtering options whose selection will not cause the data to be further filtered into a smaller set.

In most cases this occurs because you did not scroll down and select the Apply button in the filter. This is intentional as filterable fields can potentially have many options. Without the end user explicitly flagging NocTel Insight of when they've completed making or modifying their selections on the field filter, NocTel Insight would immediately reprocess the data set whenever an option is selected or de-selected. This results in a cumbersome experience.

If the data does not update when using Parameters this may be the result of the new value(s) encompassing the same data set as the previous values. For example, if your possible data ranges from 2000-01-01 to 2010-01-01, setting an End Date of 2010-01-01 then changing it to 2011-01-01 would result in the same data being returned as there is no data beyond 2010-01-01.

The Forecast plot requires sufficient historical data in order to create a plot with the *minimum* acceptable confidence interval. This is typically in the realm of 3 weeks' worth of data, but it can vary depending on your Zoom Level setting.

When more historical is provided relative to the Zoom Level (e.g.: by Day, by Month) the resulting forecast becomes more nuanced as there is more data to consider to build trends, discount outlier values, and factor in seasonality.

In some reports the title displayed in the upper left corner will *dynamically update* relative to parameter selections you may have made, which dictate the dimensionality (and possibly aggregation method) of the rendered report. This is done to help inform you of what calculations you are looking at and in respect to without needing to review what filter and/or parameter selections.

This *only affects* the title displayed within the report, it does not affect the published name of the report itself.

NocTel Insight reporting data is **not intended for billing purposes** and does not reflect any applied charges or their effective rates that can vary by organization. This disclaimer is often stated in reports where operational data and analysis could be misconstrued for billing data.

Account and service billing data greatly differs from NocTel Insight's analysis of operational data in several important ways:

- Usage billing for NocTel Talk is performed *per minute per call*. For example, a call that is 2:31 in duration is billed as 3 minutes because that call was halfway through a third minute in duration.
- *Direct* type calls on NocTel Talk (extension to extension dials) are typically not billed. Records of direct calls are important from an operational standpoint, but generally do not have any presence when billing service usage. In an organization that does 80% of all calls as Direct extension dials, examining the overall minutes versus what was billed for minutes used would result in a highly lopsided calculation.
- NocTel Insight data can include *deleted* Extensions on the account to have a window into historical data. Billing only considers what's valid for the billing cycle.
- NocTel Insight reports generally allow great flexibility with date ranges - either explicit start/end dates or a relative range. This means using a strict range of 90 days or "This Month" in reports will generally cover multiple billing cycles or a partial billing cycle.