

## Hybrid Dietz

Performance measurement systems usually provide different versions of the Dietz methodology for calculating the returns of components of portfolios for a single time period, which here is taken to be a day. These methodologies address trades in a manner that associates them with different times of day:

1. All the trades at the open of the day.
2. All the trades at the close of the day.
3. All trades at the middle of the day.
4. All purchases at the open of the day and all sales at the close of the day.
5. All sales at the open of the day and all purchases at the close of the day.

Each of these methodologies requires that one also decide how to address the complementary aspect of each trade's funding or proceeds. For example, if one sells a portion of a holding, that usually means that cash has in some sense "purchased" that sale amount. So, one needs to take special care with the treatment of cash when sales and purchases are treated differently.

These various methods are meant to address difficulties that can arise when the combination of the opening value and trades of a component of a portfolio create a basis for its return that leads to misleading return values. However, different components, even on the same day, can lead to opposing problems. Sometimes one component of the portfolio militates for using one methodology and another on the same day militates for using a different methodology. While Opturo provides the option for the user to employ each of the versions of Dietz methodology listed above, Opturo also provides an advanced unique methodology that is a hybrid of these methodologies. This hybrid Dietz methodology allows, on each day, the user to employ one designated methodology for some components and other designated methodologies for other components. This allows for the application of the methodology militated by each component to be used for that component, no matter what mix of methodologies the other components are assigned.

It is important to note that this hybrid methodology still fulfills the requirement that, on each day, the returns of the components of a portfolio roll up to the correct return for the portfolio, just as is the case for all the versions of the Dietz methodologies offered by Opturo.