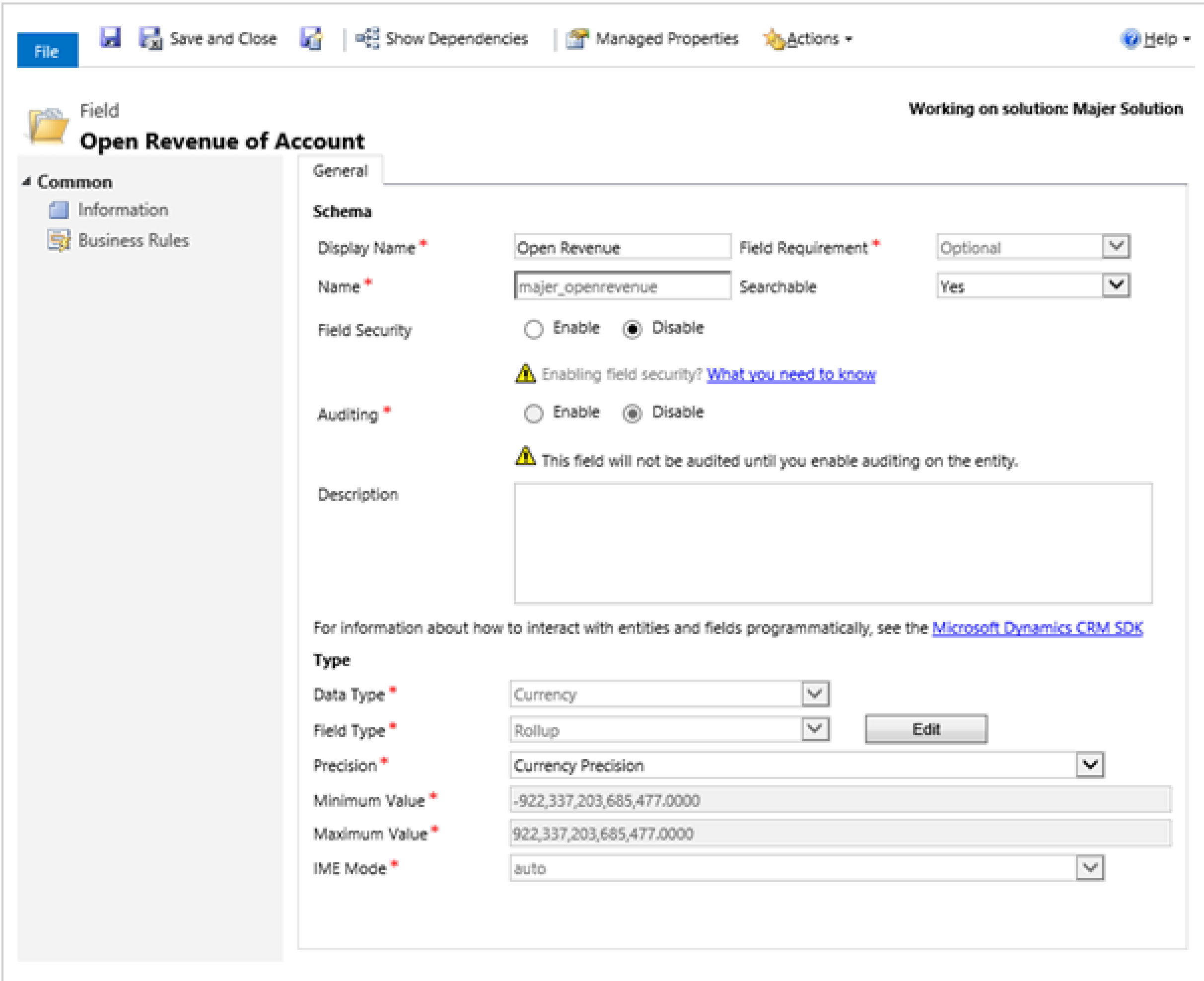
Rollup Fields:

Rollup fields are used to perform record level aggregation from related records. For example, if you wanted to have a field on the Account that rolled up the Estimated Revenue for all Open Opportunities related to the Account, you could easily identify at the Account level what the Total Open Revenue was and then know what Accounts you should focus most of your time and energy on.

Similar to Calculated Fields, Rollup Fields do not support all data types. Rollup fields are only available for Whole Number, Decimal Number, Date & Time, and Currency fields. The table below shows how you can rollup child data using the rollup fields for the different data types.

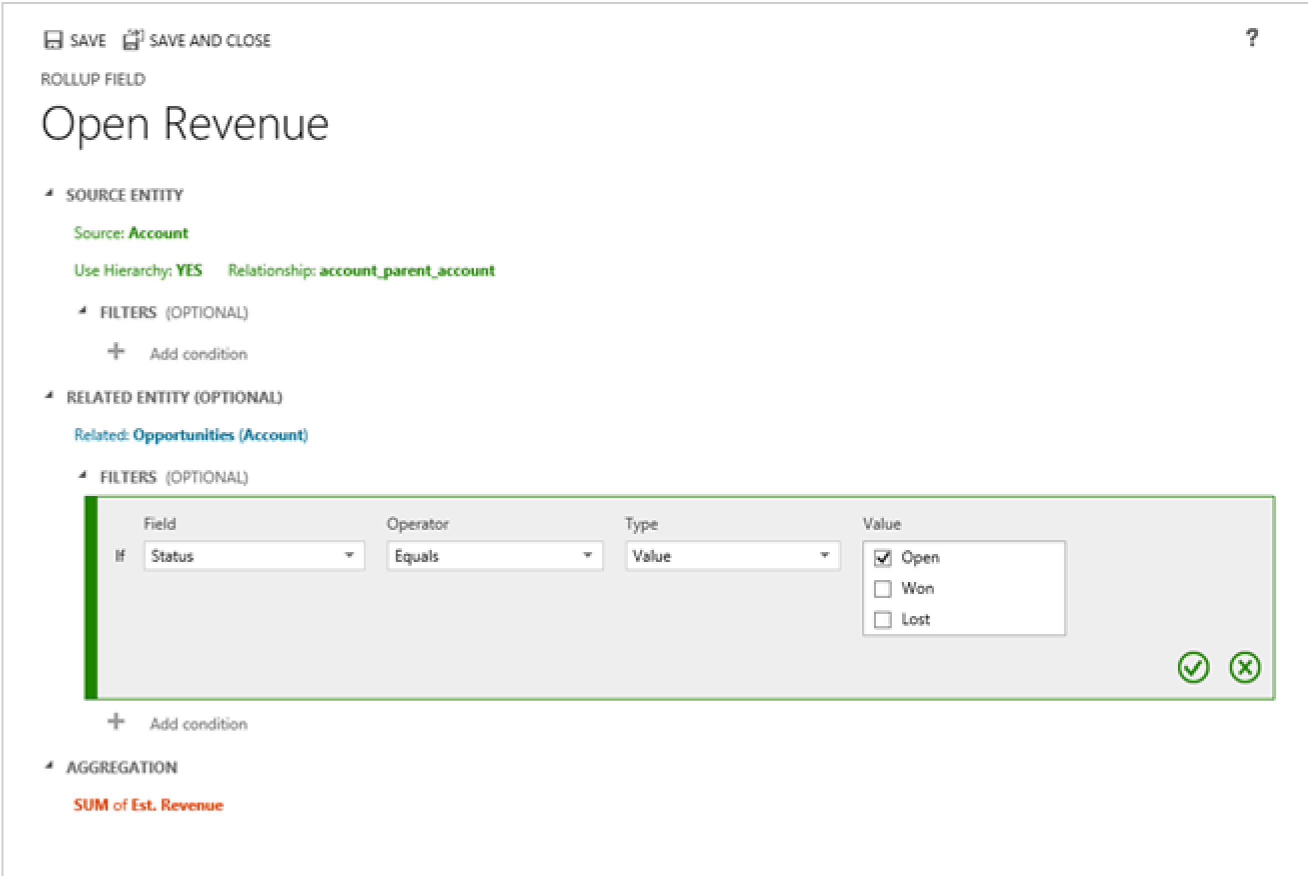
Data Type	COUNT	MAX	MIN	SUM
Whole Number	x			
Decimal	x	x	x	x
Currency		x	x	x
Date & Time		x	x	

Similar to Calculated Fields, when you're creating your field, you'll see an Edit button appear if you choose Rollup for Field Type.



When you click on the Edit button you'll see a similar modern UI as when you edited your Calculated Fields, Business Rules, or Business Processes.

When editing the Rollup Field, you can select to use a hierarchy or not. If you select to use the hierarchy, then what will happen is that all related records that are related to any record in the hierarchy will be used in the rollup (you can optionally filter records in the hierarchy as well). An example here would be if you want to find the Total Open Revenue for Opportunities that are related to any Account in a hierarchy (versus those Opportunities that are just related to the current Account).



The calculation of a Rollup Field is different than a Calculated Field. Whereas the Calculated Field was performed synchronously immediately after clicking Save on a record, a Rollup Field is calculated using asynchronous jobs. This is performed automatically but if you wanted to, a user could manually kick off the rollup calculation job on demand. You can also use the API to recalculate rollup fields on demand using code.

Similar to Calculated Fields, Rollup Fields are actually virtual fields that are NOT stored in the database. However, they can be used and displayed like any other physical field in views / reports / charts / forms / Field Level Security.

You can solve some pretty complex business use cases using both Calculated Fields and Rollup Fields. Rollup Fields can be a part of a Calculated Field, and a Calculated Field can be a part of a Rollup Field.l

When modifying fields that affect the calculation, the calculated field is calculated synchronously after a Save is performed. The the end user will get immediate feedback that data has changed after the form is refreshed.

Limitations:

Like all new features, it's important to note the limitations and areas that hopefully Microsoft will improve upon with future releases:

- General:
  - Workflows aren't trigger by field updates
  - Latest values not available in plugin create/update pipeline
- Calculated Fields:
  - Can only go 1 level up in N:1 relationships
  - Can only have all ANDs or all ORs in Conditions
  - Not available for offline
  - Have to save the record first before calculated field is updated when form refreshes
  - Only Calculated fields using all simple fields can be sorted
- Rollup Fields
  - Only available using a single directly related 1:N entity
  - Complex calculated fields cannot be used in rollups
  - Rollup using other rollup fields is not supported

Rollup Fields

Rollup fields are for calculations for across one to many relationships. You can think of these formulas as similar to using sum, min, max and count in Microsoft Excel. Here are some examples for how Rollup Fields can be used:

- Total Revenue: provides the total revenue for all opportunities related to an account.
- Total Open Cases: shows the sum of all cases that are open to a linked account.
- Qualified Leads: shows the total number of qualified leads that originate from a specific campaign.