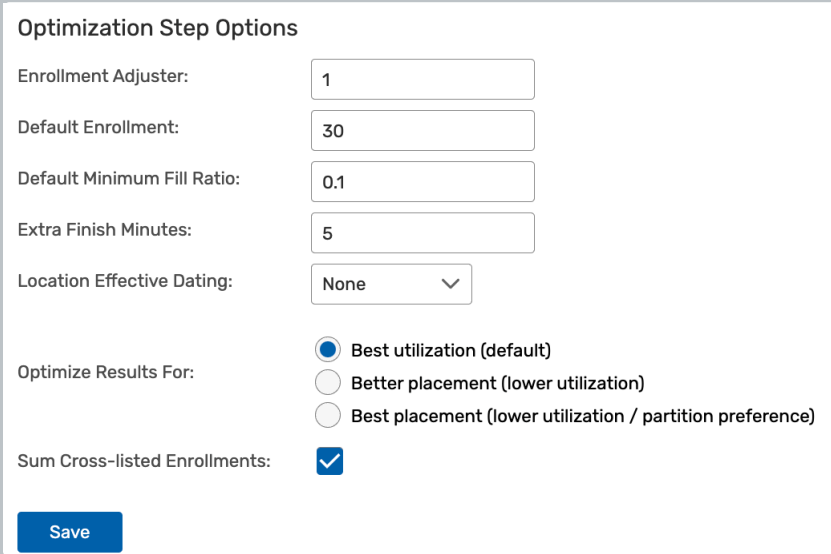


Getting Better Run Results



The screenshot shows a web form titled "Optimization Step Options". It contains several input fields and a "Save" button. The fields are: "Enrollment Adjuster" with a text input containing "1"; "Default Enrollment" with a text input containing "30"; "Default Minimum Fill Ratio" with a text input containing "0.1"; "Extra Finish Minutes" with a text input containing "5"; "Location Effective Dating" with a dropdown menu showing "None"; "Optimize Results For:" with three radio button options: "Best utilization (default)" (selected), "Better placement (lower utilization)", and "Best placement (lower utilization / partition preference)"; and "Sum Cross-listed Enrollments:" with a checked checkbox. A blue "Save" button is at the bottom left of the form area.

Optimization Step Options

Enrollment Adjuster: 1

Default Enrollment: 30

Default Minimum Fill Ratio: 0.1

Extra Finish Minutes: 5

Location Effective Dating: None

Optimize Results For:

- ☒ Best utilization (default)
- ☐ Better placement (lower utilization)
- ☐ Best placement (lower utilization / partition preference)

Sum Cross-listed Enrollments: ☒

Save

Image: Optimization Step Options when configuring an Optimizer run.

Use the Enrollment Adjuster Effectively

Use the Enrollment Adjuster to compensate for inflated or inaccurate section enrollment estimates. For example, if you know that additional students may register for sections after you run Schedule25, when you do run it set the Enrollment Adjuster to 1.05 to represent a 5% increase, so, for example, a section with an enrollment of 100 would only be placed in a location that seats 105 or more.

Conversely, if you want to give Schedule25 more placement "wiggle room," you could set the value at 0.95 (5% decrease) with the understanding that some sections might be placed in locations with insufficient capacity for their enrollment size.

Don't Set Minimum Fill Ratio Too High

In general, specifying a high Minimum Fill Ratio is not necessary—the recommended default level is 10%. Schedule25 automatically attempts to find the best utilization for every section it places, but on occasion may have to place a few sections in locations with poor utilization. If you set your minimum fill ratio high, for example 50%, sections that could only be placed at 49% utilization (or lower) would be Impossible to Place.

The best use of a high value for this setting is when you are trying to push for better utilization after a completed run. For example, if after a run the overall average utilization is 80%, you could start a new run (without accepting the results of the first) and set the Minimum Fill Ratio higher in an attempt to boost the average above 80%. But keep in mind that increasing your overall utilization in this way comes at the expense of overall placement – as your utilization goes up, the number of sections that can't be placed goes up as well.

Do Multiple Runs

There are many reasons why you might want to run Schedule25 more than once. The more data (sections and

locations) you provide to Schedule25, the more it has to work with, which will typically give you better overall utilization—but that may not be your ultimate goal.

For example, if you want to guarantee that large classrooms (with a capacity of 100 or more) are only scheduled for large sections (sections with a maximum enrollment of 75+) you could create a run where your location and event searches pull those particular data sets. After placing all your large sections in large rooms, you could then run Schedule25 a second time with all the remaining sections needing locations and with all locations that seat less than 100.

Another example would be to run Schedule25 for all sections early in your academic cycle (for example, in March for the Fall semester), but keep only the assignments that have a minimum utilization of 70%, leaving all other sections without rooms. After another 6–8 departments adjust their section data in your SIS, run Schedule25 again. This time, keep all assignments that have a minimum utilization of 50%. This might still leave a small number of sections without assigned locations that you would then assign manually, because you want a human being to make these final, more difficult, assignment decisions.