
Technical Bulletin #12

This technical bulletin describes an Astoria Search issue and its resolution.

Issue

The Astoria Search engine uses several optimization techniques when you execute a search that consists of multiple criteria boxes joined with the AND criteria box operator. How you order these criteria boxes controls the optimization technique used by the Astoria Search engine, ultimately affecting Astoria Search's performance.

Resolution

If you join two or more criteria boxes with the AND criteria box operator, make sure that the one that you expect to get the fewest search results is the first criteria box. For example, the following search:

```
Element Name is "section"  
AND  
Element Attribute "number" is "2.27(803)"
```

takes a significant amount of time to complete; however, reversing the order to:

```
Element Attribute "number" is "2.27(803)"  
AND  
Element Name is "section"
```

takes only a second to complete. This is because there are can be many sections, but only one element with an attribute "2.27(803)". In the first search example, the second criteria box is evaluated for many objects, while in the second search, the second term is evaluated for only one object.