

## Solve the Service Area Analysis and Export (Be Prepared to Wait)

```
In [5]: directionlist = ["FROM","TO"]
for direction in directionlist:
    arcpy.na.Solve(
        in_network_analysis_layer=f"Service Area {direction} with 94",
        ignore_invalids="SKIP",
        terminate_on_solve_error="TERMINATE",
        simplification_tolerance=None,
        overrides=""
    )
    #Export Service Area Polygons
    arcpy.conversion.ExportFeatures(
        in_features=fr"Service Area {direction} with 94\Polygons",
        out_features=fr"\\Mac\Home\Documents\ArcGIS\Projects\FinalProjectStart\FinalProjectStart.gdb\ServiceArea_{direction}_94",
        where_clause="",
        use_field_alias_as_name="NOT_USE_ALIAS",
        field_mapping=r'FacilityID "FacilityID" true true true 4 Long 0 0,First,#,Service Area With 94\Polygons,FacilityID,-1,-1;Name "Name" true true tr
        sort_field=None
    )
    #Export Service Line Features
    arcpy.analysis.PairwiseDissolve(
        in_features=fr"Service Area {direction} with 94\Lines",
        out_feature_class=fr"\\Mac\Home\Documents\ArcGIS\Projects\FinalProjectStart\FinalProjectStart.gdb\ServiceAreaLines_{direction}_94",
        dissolve_field="FacilityID",
        statistics_fields="Shape_Length SUM",
        multi_part="MULTI_PART",
        concatenation_separator=""
    )
    #Export Lines to Count Overlapping Segments
    arcpy.analysis.PairwiseDissolve(
        in_features=fr"Service Area {direction} with 94\Lines",
        out_feature_class=fr"\\Mac\Home\Documents\ArcGIS\Projects\FinalProjectStart\FinalProjectStart.gdb\CountLines_{direction}_94",
        dissolve_field="SourceOID",
        statistics_fields="Shape_Length COUNT",
        multi_part="MULTI_PART",
        concatenation_separator=""
    )

    print(f"Exported Service Area {direction} with 94 Exisiting")

    arcpy.na.Solve(
        in_network_analysis_layer=f"Service Area {direction} without 94",
        ignore_invalids="SKIP",
```