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Enterprise Route Management

Configure ERM API

**Prepared for:**

ERM Customers

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1. Overview

The ERM API uses a configuration file that controls many aspects of functionality. These configurations include:

* Field visibility and order in all tables
* Editability of fields
* Controls specific functionality

If there is a configuration value found in the file that is not listed in this document, it should not be changed.

* 1. Configuration File

The configuration file for the ERM API is the config.json file under the middleware\src\config folder in the install location of the API service.

1. Configuration

Note that in the actual file all the values below have a “config.” Prefix. It has been left out here for brevity.

* portalUrl
  + URL of ArcGIS Portal that hosts ERM items.
* hostingServerBaseUrl
  + URL of ArcGIS Server that host GP Services.
* ermAPIUrl
  + The URL of the API itself.
* dashboardTemplateItemId
  + The Portal item ID of the template Dashboard. If not using Dashboard functionality, can be set to blank.
* templateWebMapId = used when the Dashboard will have more layers than just the ones from ERM Template service.
* planTemplateFeatureServiceUrl
  + The URL of the ERM\_Plan\_Template feature service.
* planDefaultsFeatureServiceUrl
  + The URL of the ERM\_Plan\_Defaults feature service.
* planRegistryFeatureLayerUrl
  + The URL of the ERM\_Registry table.
* bsiGPBaseUrl
  + The URL of the BSI Service.
* dashboardGPUrl
  + The URL of the GP Service used to create Dashboards. If not using Dashboard functionality, can be set to blank.
* vehicleLocationFeatureServiceUrl
  + If using dynamic planning functionality, this is the service layer that holds GPS locations of vehicles.
* workforce
  + Values are commented out in v4.0 as Workforce sync is not supported for this release.
  + layersItemId
    - The Portal item ID of the Workforce feature service.
  + dispatcherId
    - The ID value will be assigned to newly created Workforce assignments. Needs to have brackets around the ID.
  + locationField
    - Field from Orders table that will be mapped into the Location field in the Workforce layer.
    - All records in Orders table need to have a value. Any empty/null values will cause sync to fail.
  + descriptionField
    - Field from Orders table that will be mapped into the Description field in the Workforce Assignments layer.
  + duedateField
    - Field from Orders table that will be mapped into the Due Date field in the Workforce Assignments layer.
  + notesField
    - Field from Orders table that will receive the Notes value from Workforce Assignments layer.
* includeOrderPairs
  + True if Order Pairs functionality is being used.
* Logging (there is a section for the ERM API log and one for Workforce)
  + Level
    - Defines the amount of detail included in log files
  + Filename
    - Defines the log file path and name.
    - Use either / or \\ for the path syntax. A single \ will not read
  + Maxsizeinbytes
    - Defines how large log file will get before a new one is made.
  + Maxfiles
    - Defines how many log files will be kept. Once limit is reached the oldest is deleted.
* Routesymbologycolors
  + List of default colors that are assigned to Routes on Create Plan.
* Routesymbologywidth
  + The default width Route lines will be given on Create Plan
* includeNetworkAnalysisLyrInVRPResult
  + When set to true, the VRP output layer is saved in the jobs output folder on the ArcGIS Server machine for the Network Analysis service. This can help with debugging issues. Should be left as false for Production.
  + Note that there is a configuration in Route Planner to expose this option in the app. If that option is exposed to user, it overwrites whatever option is in API config.
* zoneLabelingInfo
  + Controls the label for Zone layer. For more details on available options see https://developers.arcgis.com/web-map-specification/objects/labelingInfo/
  + Key Options to change:
    - expression - Arcade expression to create label
    - color/haloColor - [r,g,b,a]
    - font - size, style, weight, etc.
* ignoreGoeOrderFields
  + List of fields from the Orders table that will be ignored when determining if a Route’s GeoOrderState should update. Attributes will still be updated by manual edit, Refresh or Workforce Sync, but if the order is assigned the Route will not have its GeoOrderState changed to Unsolved.
  + This mainly deals with Workforce integration, so when updates come from the Workforce Sync that Solved/Committed Routes don’t get changed to Unsolved.
* ignoreRouteFields
  + List of fields from the Routes table that will be ignored when determining if a Route’s GeoOrderState should update. Attributes will still be updated by Refresh or manual edit, but the Route will not have its GeoOrderState changed to Unsolved.
* lockLoads
  + Only applicable if using Workforce and configure the application to use Loads and Order Pairs.
  + Will make sure when solving routes that have locked or in progress Loads that no new orders are added.
* keepAlive
  + Value to fix an issue when using a Load Balancer and refreshing very large plans.
  + Does not need to be adjusted unless getting timeout issues with large plans.

1. Document History

| Date | Description | Editor |
| --- | --- | --- |
| 11/3/2020 | Initial version | Mike Nelson |
| 11/16/2020 | Add zone labeling info | Mike Nelson |
| 12/2/2020 | Note about slashes with logging paths | Mike Nelson |
| 12/8/2020 | Note about WF ID brackets | Mike Nelson |
| 12/9/2020 | Workforce field configuration | Mike Nelson |
| 12/11/2020 | Added Ignore Fields info | Mike Nelson |
| 3/11/2021 | Added Ignore Route Fields info | Mike Nelson |
| 3/22/2021 | Add lockLoad info | Mike Nelson |
| 4/7/2021 | config.templateWebMapId details | Mike Nelson |
| 3/19/2022 | keepalive value | Mike Nelson |
| 6/14/2022 | Update for 4.2:  removed Solve Paramter remnanats | Mike Nelson |