RoundDateTime

Title RoundDateTime

Description

This tool is a simple geoprocessing scripting tool intended to assist with temporal data preparation by rounding the datetime field to the nearest unit placed in the respective time settings. If the round times are -1, the current date and time will be used for that parameter. The smallest unit to not have a -1 will be used as an indicator that the other units below it should be set to 0.

Usage

There is no usage for this tool.

Syntax

RoundDateTime (Input_Feature_Class, Date_Time_Field, New_Field_Name, Rounding_Year, Rounding_Month, Rounding_Day, Rounding_Hour, Rounding_Minute, Rounding_Second)

Parameter	Explanation	Data Type
Input_Feature_Class	Dialog Reference Is the input feature class or table for which a new time field will be added. _____ Python Reference Depends on https://docs.python.org/2/library/time.html#time.strftime.	Feature Layer
Date_Time_Field	Dialog Reference This is the ArcGIS date field that will be used to construct the datetime objects used in the created Pandas data frame. Years allowed by the tool will dependon python version. For example 2.7 cannot handle years before 1900. _____ Python Reference Generally the fields are selected from the feature class to be converted into a numpy array, then into a pandas data frame, then back to structured numpy array to be joined based on the object ID. This tool assumes there is an object ID to use to join to.	Field
New_Field_Name	Dialog Reference This is the name of the new text field that will be added to the feature class and then populated by a new rounded datetime. If the name already exists, then a unique one will be added. There is no python reference for this parameter.	String

Rounding_Year	Dialog Reference This is the number that the current unit will be rounded to. If the round times are -1, the current date and time will be used for that parameter. The smallest unit to not have a -1 will be used as an indicator that the other units below it should be set to 0. ● Examples: If Hour =2, the date times will be rounded every 2 hour period, and minutes and seconds would be set to zero. ● Examples: If Minute= 15, the date times will be rounded to every 15 minute period, and seconds would be set zero. There is no python reference for this parameter.	Long
Rounding_Month	Dialog Reference This is the number that the current unit will be rounded to. If the round times are -1, the current date and time will be used for that parameter. The smallest unit to not have a -1 will be used as an indicator that the other units below it should be set to 0. ● Examples: If Hour =2, the date times will be rounded every 2 hour period, and minutes and seconds would be set to zero. ● Examples: If Minute= 15, the date times will be rounded to every 15 minute period, and seconds would be set zero. There is no python reference for this parameter.	Long
Rounding_Day	Dialog Reference This is the number that the current unit will be rounded to. If the round times are -1, the current date and time will be used for that parameter. The smallest unit to not have a -1 will be used as an indicator that the other units below it should be set to 0. ● Examples: If Hour =2, the date times will be rounded every 2 hour period, and minutes and seconds would be set to zero. ● Examples: If Minute= 15, the date times will be rounded to every 15 minute period, and seconds would be set zero. There is no python reference for this parameter.	Long
Rounding_Hour	Dialog Reference This is the number that the current unit will be rounded to. If the round times are -1, the current date and time will be used for that parameter. The smallest unit to not have a -1 will be used as an indicator that the other units	Long

	below it should be set to 0. • Examples: If Hour =2, the date times will be rounded every 2 hour period, and minutes and seconds would be set to zero. • Examples: If Minute= 15, the date times will be rounded to every 15 minute period, and seconds would be set zero. There is no python reference for this parameter.	
Rounding_Minute	Dialog Reference This is the number that the current unit will be rounded to. If the round times are -1, the current date and time will be used for that parameter. The smallest unit to not have a -1 will be used as an indicator that the other units below it should be set to 0. • Examples: If Hour =2, the date times will be rounded every 2 hour period, and minutes and seconds would be set to zero. • Examples: If Minute= 15, the date times will be rounded to every 15 minute period, and seconds would be set zero. There is no python reference for this parameter.	Long
Rounding_Second	Dialog Reference This is the number that the current unit will be rounded to. If the round times are -1, the current date and time will be used for that parameter. The smallest unit to not have a -1 will be used as an indicator that the other units below it should be set to 0. *Microseconds will be set to 0 by this script, you can edit it further if you really want to round microsecond times. • Examples: If Hour =2, the date times will be rounded every 2 hour period, and minutes and seconds would be set to zero. • Examples: If Minute= 15, the date times will be rounded to every 15 minute period, and seconds would be set zero. There is no python reference for this parameter.	Long

Code Samples

There are no code samples for this tool.

Tags

Time, Datetime, Round Time, Round

Credits

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Use limitations

There are no access and use limitations for this item.

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