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import os

#Functions for manipulating datetime objects

#CCYY-MM-DDThh:mm:ssZ

def parseDateClass(s):

year, month, day = s.split("-")

day, tail = day[:2], day[2:]

hour, minute, second = tail[1:].split(":")

second = second[:2]

year, month, day = int(year), int(month), int(day)

hour, minute, second = int(hour), int(minute), int(second)

return createDateClass(year, month, day, hour, minute, second)

if os.name != "java":

from datetime import datetime, timedelta

#Helper functions for working with a date/time class

def createDateClass(year, month, day, hour, minute, second):

return datetime(year, month, day, hour, minute, second)

def printDateClass(d):

#Split off fractional seconds, append 'Z'

return d.isoformat().split(".")[0]+"Z"

def getNow():

return datetime.utcnow()

def getHoursFromNow(hours):

return datetime.utcnow() + timedelta(hours=hours)

def getMinutesFromNow(minutes):

return datetime.utcnow() + timedelta(minutes=minutes)

def isDateClassExpired(d):

return d < datetime.utcnow()

def isDateClassBefore(d1, d2):

return d1 < d2

else:

#Jython 2.1 is missing lots of python 2.3 stuff,

#which we have to emulate here:

import java

import jarray

def createDateClass(year, month, day, hour, minute, second):

c = java.util.Calendar.getInstance()

c.setTimeZone(java.util.TimeZone.getTimeZone("UTC"))

c.set(year, month-1, day, hour, minute, second)

return c

def printDateClass(d):

return "%04d-%02d-%02dT%02d:%02d:%02dZ" % \

(d.get(d.YEAR), d.get(d.MONTH)+1, d.get(d.DATE), \

d.get(d.HOUR\_OF\_DAY), d.get(d.MINUTE), d.get(d.SECOND))

def getNow():

c = java.util.Calendar.getInstance()

c.setTimeZone(java.util.TimeZone.getTimeZone("UTC"))

c.get(c.HOUR) #force refresh?

return c

def getHoursFromNow(hours):

d = getNow()

d.add(d.HOUR, hours)

return d

def isDateClassExpired(d):

n = getNow()

return d.before(n)

def isDateClassBefore(d1, d2):

return d1.before(d2)