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H dftactgrp(*NO) bnmdir('WEBSERVICE')

Fweathrspfmcf    e                workstn
F                                sfile(sfl:rrn)
F                                indds(dspindicators)

/copy /WebServices/weatherws/WeatherSoap.rpgleinc

d WebServiceDs      ds                likeds(This_t)
d ZipCodeDs         ds                likeds(xsd_string)
d ForeCastDs        ds                likeds(ForecastReturn_t)

D rrn                s                4 0
D workyear           s                2 0
D workdays          s                3 0
D workdatejul        s                5 0
D displaydate        s                d   datfmt(*iso)
D

D dspindicators      DS
D hourly...
D requested          1                1n
D endofjob            3                3n
D return             12               12n
D subfileclear       60               60n
D subfiledsp         62               62n
D zipcodezero        71               71n
D zipcodenot...
D found              72               72n
D webservicedown     73               73n

D zipcodealpha       S                5

D*-----
D* Program name: DisplayHourly
D* Purpose:          Launches www.weather.com with selected zip code
D* Returns:
D*-----
D DisplayHourly      PR                EXTPGM('HOURLYCL')
D zipcodealpha       5                const

/free

// Prompt user for zip code
dou endofjob;

exfmt screen1;

// Was EOJ requested?
if endofjob;
*inlr = *on;
return;
endif;

// Clear error conditons
zipcodezero = *off;
zipcodenotfound = *off;
webservicedown = *off;

// Zipcode cannot be equal to all zeros
if zipcode = *zeros;
zipcodezero = *on;
iter;
endif;

// Prepare to call soap service
clear WebServiceDs;

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clear ZipCodeDs;
clear ForecastDs;

//ZipCodeDs.value = %char(zipcode);
ZipCodeDs.value = %editc(zipcode:'X');

// Allocate space in storage
if stub_create_WeatherSoap(WebServiceDs);

// Invoke the Web service operation.
if stub_op_GetCityForecastByZip(WebServiceDs:ZipCodeDs:ForecastDs);
endif;

// Destroy Web service stubs.
stub_destroy_WeatherSoap(WebServiceDs);
endif;
// Check if an error occurred during call to service
if webservicesds.exccoccurred or webservicesds.excstring > *blanks;
webservicesdown = *on;
iter;
endif;

// When here, we got some data!

// See if we have success (value of '1' will be returned)
if forecastds.success.value = 0;
zipcodenotfound = *on;
iter;
endif;

// If we made it this far, good data has been received

city = forecastds.city.value;
state = forecastds.state.value;
wthrsta = forecastds.weatherstationcity.value;

// Prepare subfile control record
rrn = *zeros;
subfileclear = *on;
subfiledsp = *off;

write sflctl;

subfileclear = *off;
subfiledsp = *on;

// Capture detail data, load subfile
for rrn = 1 to 7;
// wthrdate = %subst(weatherdata.forecast(rrn).date:1:10);
// Description
desc = forecastds.forecastresult.forecast...
_ref.array(rrn).description.value;

// Morning Low
templo = forecastds.forecastresult.forecast...
_ref.array(rrn).temperatures.morninglow.value;

// Daytime High
temphi = forecastds.forecastresult.forecast...
_ref.array(rrn).temperatures.daytimehigh.value;

// Precipitation Morning
precpmo = forecastds.forecastresult.forecast...
_ref.array(rrn).probabilityofprecipitation.daytime.value;

// Precipitation Nighttime
precpnt = forecastds.forecastresult.forecast...
_ref.array(rrn).probabilityofprecipitation.nighttime.value;

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// Returned days will be days from January 1st (0-365)
workdays = forecastds.forecastresult.forecast...
_ref.array(rrn).date.value.yday;

// Returned year will be years from 1900, need to subtract 100
workyear = forecastds.forecastresult.forecast...
_ref.array(rrn).date.value.year - 100;

// Calculate julian work date. If valid move to display date, else move *loval.
workdatejul = (workyear * 1000) + workdays;
test(de) *jul workdatejul;
if not %error;
    displaydate = %date(workdatejul:*jul);
    wthrdate = %char(displaydate);
else;
    wthrdate = '01-01-0001';
endif;

write sfl;
endfor;

// Display subfile. If F1 is selected display weather.com
dou return;
exfmt sflctl;
if hourlyrequested;
    zipcodealpha = %editc(zipcode:'X');
    displayhourly(zipcodealpha);
endif;
enddo;
enddo;
```