# **GCAL CGI - MANUAL**

### **Basic Info**

Input: system variable QUERY STRING

Output: standard output Format of output: XML

#### Installation

gcal.exe should be copied into cgi-bin directory as any other CGI script. Also additional settings for Web Server should be performed so Web Server will know about this cgi program.

# Implementation

Calling this script is performed via HTTP request.

http://<ip-address>/cgi-bin/gcal.exe?<parameters>

<parameters> is list of parameters separated by character &

<parameters> = <parameter1>&<parameter2>&.....&<parameterN>

<parameter> is pair of strings separated by character =

<parameter> <key>=<value>

In the document gcalcgi-examples are examples of <parameters> as well as output from gcal.exe given by these queries.

### Next:

Functions (queries)
Parameters

# **Functions (Queries)**

In the first column is value of key q. By character x is denoted that parameter, which is relevant for that query.

| q          | la | lo | lt | lc | ty | tm | td | th | tmin | tc | ду | gm | gp | gt | dst |
|------------|----|----|----|----|----|----|----|----|------|----|----|----|----|----|-----|
| firstday   | Х  | Х  | х  | Х  | Х  |    |    |    |      |    |    |    |    |    |     |
| masastart  | Х  | х  | х  | Х  | х  | х  | х  |    |      |    |    |    |    |    |     |
| appday     | Х  | х  | х  | Х  | х  | х  | х  | х  | х    |    |    |    |    |    |     |
| sankranti  | х  | х  | х  | х  | х  | х  | х  |    |      | х  |    |    |    |    |     |
| calendar   | Х  | Х  | х  | Х  | Х  | х  | х  |    |      | х  |    |    |    |    | х   |
| gcalendar  | х  | х  | х  | х  | х  |    |    |    |      |    |    |    |    |    | Х   |
| naksatra   | Х  | х  | х  | Х  | х  | Х  | х  |    |      | х  |    |    |    |    |     |
| gtithi     | Х  | х  | х  | Х  | х  | Х  | х  |    |      | х  |    |    |    |    |     |
| tithi      | Х  | х  | х  | Х  | х  | х  | х  |    |      |    |    |    |    |    |     |
| next       | Х  | Х  | Х  | Х  | Х  | х  | х  |    |      |    |    | х  | х  | х  |     |
| gnaksatra  | х  | х  | х  | х  |    |    |    |    |      |    | х  | х  |    |    |     |
| paksastart | х  | х  | х  | х  | х  | х  | х  |    |      |    |    |    |    |    |     |

## **Parameters**

| parameter | explanation                     | example 1        | example 2        | possible values                                     |  |  |
|-----------|---------------------------------|------------------|------------------|---|--|--|
| key       | of value                        | •                |                  | •   |  |  |
| la        | latitude                        | 12N30            | 15S06            |   |  |  |
| lo        | longitude                       | 56E13            | 10W45            |   |  |  |
| It        | timezone                        | 5E30             | 7W00             |   |  |  |
| Ic        | location name                   | Mayapur          |                  |   |  |  |
| ty        | year                            | 2008             | 1965             | 1500 3000   |  |  |
| tm        | month                           | 1                | 5                | 112   |  |  |
| td        | day                             | 1                | 31               | 131   |  |  |
| th        | hour                            | 5                | 17               | 023   |  |  |
| tmin      | minute                          | 0                | 45               | 059   |  |  |
| tc        | count of days                   | 10               | 300              | 184000  |  |  |
| ду        | gaurabda<br>year                | 512              | 560              | 02500   |  |  |
| gm        | masa                            | 0                | 3                | 011 (0 is for Visnu Masa)                           |  |  |
| gp        | paksa                           | 0                | 1                | 0 for Krsna Paksa, 1 for<br>Gaura Paksa             |  |  |
| gt        | tithi                           | 1                | 15               | 115 (1 for Pratipat, 15 for<br>Purnima or Amavasya) |  |  |
| dst       | daylight<br>saving time<br>data | 3x0x5x0x10x0x5x0 | 11x0x5x0x3x0x5x0 | Explanation below.                                  |  |  |

## **Daylight Saving Time data**

This section explains the meaning of value of DST parameter in the query for calendar and gcalendar calculations.

# Example:

#### 3x0x5x0x10x0x5x0

Each parameter consists from 8 numbers separated by character 'x'.

First 4 numbers are for start date, second 4 numbers are for end date of DST within the year. Here is table with the meanings of numbers on given position:

| position | meaning   |
|----------|---|
| 1        | starting month of DST   |
| 2        | type of start day (0-start day is given by week and weekday within month, 1-start day is given by day within month) |
| 3        | if type is 0, then this is number of week (1,2,3,4 are absolute values, 5 means "last" week)                        |
|          | if type is 1, then this is number of day within month (1,, 31)  |
| 4        | if type is 0, then this is weekday number (0sunday, 1monday, 6saturday)   |
|          | if type is 1, then this is ignored but dummy number should be placed here   |
| 5,6,7,8  | the same as 1,2,3,4 except they are for ending date   |

## Example 1:

DST is starting on last sunday in March and ending on first sunday in November

Starting month is March ==> 3
Start date is given by week and weekday so type is ==> 0
Last week is ==> 5
Sunday is ==> 0
Ending month is November ==> 11
Ending date is given by week and weekday so type is ==> 0
First week is ==> 1
Sunday is ==> 0

Now we have resulting string 3x0x5x0x11x0x1x0

## Example 2

DST is starting on March 15 and ending on last sunday in October

Starting month is March ==> 3
Start date is given by day number so type is ==> 1
Day is ==> 15
Dummy number ==> 0
Ending month is October ==> 10
Ending date is given by week and weekday so type is ==> 0
Last week is ==> 5
Sunday is ==> 0

Now we have string: 3x1x15x0x10x0x5x0