Jewish calendar REST API

Posted on 15 June 2015 - 8:05 am by mradwin

Hebcal.com offers a REST API for fetching Jewish calendar data. The output format is in JSON.

The basic URL format is as follows:

https://www.hebcal.com/hebcal?v=1&cfg=json&maj=on&min=on&mod=on&nx=on&year=now&month=x&ss=on&mf=on&c=on&geo=geoname&geonameid=3448439&M=on&s=on

As with all Hebcal.com REST APIs:

Both HTTP and HTTPS (HTTP/1.1 and HTTP/2) are supported.

You may continue to use plain (port 80) HTTP for API requests if you wish to reduce CPU overhead on your client

To encourage HTTP caching proxies, proper Cache-Control and Expires are generated in the response

Compression is supported and encouraged; set the Accept-Encoding: br request header for brotli (best option) or Accept-Encoding: gzip (also very good)

HTTP Keep-Alive is supported for multiple subsequent requests without the overhead of TCP handshaking

Parameters and their meanings

v=1 – version. Required.

cfg=json – output JSON instead of HTML

cfg=json for JSON format (described in more detail below)

cfg=fc for fullcalendar.io integration

cfg=rss for RSS (Atom 1.0)

cfg=ics for iCalendar RFC 5545

cfg=csv for Comma Separated Values

Date

Date range may be specified either using year or both start and end:

year=now – “now” for current year, or 4-digit YYYY such as 2003

yt=G – Interpret year as Gregorian year (common era) – default

yt=H – Interpret year as Hebrew year (e.g. 5782)

month=x – default “x” for entire Gregorian year, or use a numeric month (1=January, 6=June, etc.)

start=2021-12-29 – Gregorian start date in YYYY-MM-DD format

end=2022-01-04 – Gregorian end date in YYYY-MM-DD format

Event options

All booleans, default “off”

maj=on – Major holidays

min=on – Minor holidays (Tu BiShvat, Lag B’Omer, …)

nx=on – Rosh Chodesh

mf=on – Minor fasts (Ta’anit Esther, Tzom Gedaliah, …)

ss=on – Special Shabbatot (Shabbat Shekalim, Zachor, …)

mod=on – Modern holidays (Yom HaShoah, Yom HaAtzma’ut, …)

s=on – Parashat ha-Shavuah on Saturday

leyning=off – reduce size of JSON by disabling the full kriyah/triennial Torah reading and aliyot details (default on when s=on)

D=on – Hebrew date for dates with some event

d=on – Hebrew date for entire date range

o=on – Days of the Omer

F=on – Daf Yomi

myomi=on – Mishna Yomi

Diaspora vs. Israel schedule for holidays and Torah Readings

Mutually exclusive options:

i=off – Diaspora holidays and Torah readings (default if unspecified)

i=on – Israel holidays and Torah readings

Candle-lighting and fast start/end times

c=on – Candle lighting times. Requires location, see below.

b=18 – Candle-lighting time minutes before sunset (the default is 18). For Jerusalem, the default is b=40

M=on – calculate Havdalah at nightfall – tzeit hakochavim, the point when 3 small stars are observable in the night sky with the naked eye (sun 8.5° below the horizon). This is the default, and this option is an excellent default for most places on the planet.

m=50 – calculate Havdalah as fixed 50 minutes after sundown. This option is used by those whose minhag is to end Shabbat a fixed number of minutes after sundown. Typically one would enter 42 min for three medium-sized stars, 50 min for three small stars, 72 min for Rabbeinu Tam, or 0 to suppress Havdalah times. Set to m=0 (zero) to disable Havdalah times.

Location

Mutually exclusive location for candle-lighting times:

geo=none – no candle-lighting location (default if unspecified)

geo=geoname – location specified by GeoNames.org numeric ID

requires additional parameter geonameid=3448439

Hebcal.com supports over 100,000 different GeoNames IDs. These are world cities with a population of 1,000 or more. See cities1000.zip from https://download.geonames.org/export/dump/.

geo=zip – location specified by United States ZIP code

requires additional parameter zip=90210

geo=pos – location specified by latitude, longitude, and timezone. Requires additional 3 parameters:

latitude=[-90.0 to 90.0] – latitude in decimal format (e.g. 31.76904 or -23.5475)

longitude=[-180.0 to 180.0] – longitude decimal format (e.g. 35.21633 or -46.63611)

tzid=TimezoneIdentifier. See List of tz database time zones. Be sure to use the “TZ database name” such as America/New\_York or Europe/Paris, not a UTC offset

geo=city – location specified by one of ~400 legacy city identifiers

requires additional parameter city=GB-London

deprecated: geo=geoname is preferred

Language

By default, event titles use a Sephardic transliteration. Append &lg=LANG to the URL to render the events titles using an alternate event language.

Miscellaneous

Add &hdp=1 to include heDateParts field on untimed (all-day) items in the response.

Callback

Optional callback parameter:

callback=function – wraps the JSON output text in parentheses and a function name of your choosing. Callback function names may only use upper and lowercase alphabetic characters (A-Z, a-z), numbers (0-9), the period (.), the underscore (\_).

Example output

{

"title": "Hebcal São Paulo May 2015",

"date": "2022-05-30T17:38:40.629Z",

"location": {

"title": "São Paulo, Sao Paulo, Brazil",

"city": "São Paulo",

"tzid": "America/Sao\_Paulo",

"latitude": -23.5475,

"longitude": -46.63611,

"cc": "BR",

"country": "Brazil",

"admin1": "Sao Paulo",

"asciiname": "Sao Paulo",

"geo": "geoname",

"geonameid": 3448439

},

"range": {

"start": "2015-05-22",

"end": "2015-05-25"

},

"items": [

{

"title": "Candle lighting: 5:11pm",

"date": "2015-05-22T17:11:00-03:00",

"category": "candles",

"title\_orig": "Candle lighting",

"hebrew": "הדלקת נרות",

"memo": "Parashat Bamidbar"

},

{

"title": "Erev Shavuot",

"date": "2015-05-23",

"hdate": "5 Sivan 5775",

"category": "holiday",

"subcat": "major",

"hebrew": "ערב שבועות",

"link": "https://hebcal.com/h/shavuot-2015?us=js&um=api",

"memo": "Festival of Weeks. Commemorates the giving of the Torah at Mount Sinai"

},

{

"title": "Parashat Bamidbar",

"date": "2015-05-23",

"hdate": "5 Sivan 5775",

"category": "parashat",

"hebrew": "פרשת במדבר",

"leyning": {

"1": "Numbers 1:1-1:19",

"2": "Numbers 1:20-1:54",

"3": "Numbers 2:1-2:34",

"4": "Numbers 3:1-3:13",

"5": "Numbers 3:14-3:39",

"6": "Numbers 3:40-3:51",

"7": "Numbers 4:1-4:20",

"torah": "Numbers 1:1-4:20",

"haftarah": "Hosea 2:1-22",

"maftir": "Numbers 4:17-4:20",

"triennial": {

"1": "Numbers 2:1-2:9",

"2": "Numbers 2:10-2:16",

"3": "Numbers 2:17-2:24",

"4": "Numbers 2:25-2:31",

"5": "Numbers 2:32-2:34",

"6": "Numbers 3:1-3:4",

"7": "Numbers 3:5-3:13",

"maftir": "Numbers 3:11-3:13"

}

},

"link": "https://hebcal.com/s/bamidbar-20150523?us=js&um=api"

},

{

"title": "Candle lighting: 6:05pm",

"date": "2015-05-23T18:05:00-03:00",

"category": "candles",

"title\_orig": "Candle lighting",

"hebrew": "הדלקת נרות",

"memo": "Erev Shavuot"

},

{

"title": "Shavuot I",

"date": "2015-05-24",

"hdate": "6 Sivan 5775",

"category": "holiday",

"subcat": "major",

"yomtov": true,

"hebrew": "שבועות א׳",

"leyning": {

"1": "Exodus 19:1-19:6",

"2": "Exodus 19:7-19:13",

"3": "Exodus 19:14-19:19",

"4": "Exodus 19:20-20:14",

"5": "Exodus 20:15-20:23",

"torah": "Exodus 19:1-20:23; Numbers 28:26-31",

"haftarah": "Ezekiel 1:1-28, 3:12",

"maftir": "Numbers 28:26-28:31"

},

"link": "https://hebcal.com/h/shavuot-2015?us=js&um=api",

"memo": "Festival of Weeks. Commemorates the giving of the Torah at Mount Sinai"

},

{

"title": "Candle lighting: 6:05pm",

"date": "2015-05-24T18:05:00-03:00",

"category": "candles",

"title\_orig": "Candle lighting",

"hebrew": "הדלקת נרות",

"memo": "Shavuot I"

},

{

"title": "Shavuot II",

"date": "2015-05-25",

"hdate": "7 Sivan 5775",

"category": "holiday",

"subcat": "major",

"yomtov": true,

"hebrew": "שבועות ב׳",

"leyning": {

"1": "Deuteronomy 15:19-15:23",

"2": "Deuteronomy 16:1-16:3",

"3": "Deuteronomy 16:4-16:8",

"4": "Deuteronomy 16:9-16:12",

"5": "Deuteronomy 16:13-16:17",

"torah": "Deuteronomy 15:19-16:17; Numbers 28:26-31",

"haftarah": "Habakkuk 3:1-19",

"maftir": "Numbers 28:26-28:31"

},

"link": "https://hebcal.com/h/shavuot-2015?us=js&um=api",

"memo": "Festival of Weeks. Commemorates the giving of the Torah at Mount Sinai"

},

{

"title": "Havdalah: 6:05pm",

"date": "2015-05-25T18:05:00-03:00",

"category": "havdalah",

"title\_orig": "Havdalah",

"hebrew": "הבדלה",

"memo": "Shavuot II"

}

]

}

If you don’t want candle lighting times, just use c=off and omit the zip and m parameters.

Example 2: Daf Yomi only

To get only the Daf Yomi for a given day (and not holidays) you can construct a URL that looks like this:

https://www.hebcal.com/hebcal?cfg=json&v=1&F=on&start=2022-06-07&end=2022-06-07

Example output:

{

"title": "Hebcal Diaspora June 2022",

"date": "2022-06-03T15:52:37.011Z",

"location": {

"geo": "none"

},

"range": {

"start": "2022-06-06",

"end": "2022-06-06"

},

"items": [

{

"title": "Yevamot 91",

"date": "2022-06-06",

"hdate": "7 Sivan 5782",

"category": "dafyomi",

"hebrew": "יבמות 91",

"link": "https://www.sefaria.org/Yevamot.91a?lang=bi&utm\_source=hebcal.com&utm\_medium=api"

}

]

}

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