CALENDAR INFO:
Historical Trading Hours, Holidays, and Contract Dates
File Format Document

Version 1.2

Overview

In order to provide historical intraday time series data across many asset types and markets worldwide, Tick Data must research, collect, and store historical trading session information for each market. This includes regular session hours for day/night sessions, early closes, late opens, and closed markets due to holidays. This metadata must be kept current and maintained historically so that TickWrite can produce accurate time series files regardless of when the trade or quote occurred.

For futures traders, this metadata is particularly important, as each individual symbol can have its own trading hours, and holidays can affect symbols traded on the same exchange differently. Furthermore, exchanges change these contract specifications far more frequently than most market participants realize. By subscribing to Calendar Info, users of Futures data can access this metadata in plain text.

The files can be downloaded nightly from our S3 (AWS cloud storage) or output via TickWrite 7 (when provisioned for Calendar Info).

Calendar Info consists of three files:

- Contracts.asc
- Sessions.asc
- SymbolInfo.asc

Contracts.asc and **SymbolInfo.asc** require little explanation, and examples of each are found below. The **Sessions.asc** file, which contains historical trading hours and holidays, is more complex and is detailed in the next section.

Contracts.asc has seven fields, and shows contract month trade and quote data start and end dates, along with contact expiration:

Symbol,Contract,Trade Start, Trade End, Quote Start, Quote End, Expiration Date
```
AD,H21,12/16/2019,03/15/2021,02/09/2017,03/15/2021,03/15/2021
AD,J21,12/30/2020,03/15/2021,11/18/2020,03/15/2021,04/19/2021
AD,K21,02/01/2021,03/15/2021,01/20/2021,03/15/2021,05/17/2021
```

SymbolInfo.asc is a description file that provides details on each futures symbol root in seven fields:

symbol,name,start_date,end_date,sector,exchange,timezone
```
AD,Australian Dollar,01/13/1987,01/01/2050,CURRENCY,CME Group,America/Chicago
AX,Australian 10 yr Bond,07/02/2001,01/01/2050,INTEREST RATE,ASX Group,Australia/Sydney
AY,Australian 3 yr Bond,07/02/2001,01/01/2050,INTEREST RATE,ASX Group,Australia/Sydney
BL,Euro-Bobl 5 yr,01/02/1997,01/01/2050,INTEREST RATE,Eurex,Europe/Berlin
```

Sessions.asc – Historical Trading Hours and Holidays

Sample

```
AD,DAY,02/09/2009,01/01/2050,7:20,14:00,Monday,Friday,0,0
AD,EVENING,02/09/2009,01/01/2050,17:00,7:20,Monday,Friday,-1,0
AD,POST_SETTLEMENT,02/09/2009,01/01/2050,14:00,16:00,Monday,Friday,0,0
AD,DAY_HOLIDAY,11/26/2020,11/26/2020,7:20,12:00,Thursday,Thursday,0,0
AD,POST_SETTLEMENT_HOLIDAY,11/27/2020,11/27/2020,X:XX,X:XX,Friday,Friday,0,0
AD,DAY_HOLIDAY,12/24/2020,12/24/2020,7:20,12:15,Thursday,Thursday,0,0
AD,ALL_HOLIDAY,12/25/2020,12/25/2020,X:XX,X:XX,Friday,Friday,0,0
AD,DAY_HOLIDAY,01/18/2021,01/18/2021,7:20,12:00,Monday,Monday,0,0
AD,POST_SETTLEMENT_HOLIDAY,01/18/2021,01/18/2021,X:XX,X:XX,Monday,Monday,0,0
AD,DAY_HOLIDAY,02/15/2021,02/15/2021,7:20,12:00,Monday,Monday,0,0
AD,POST_SETTLEMENT_HOLIDAY,02/15/2021,02/15/2021,X:XX,X:XX,Monday,Monday,0,0
AX,DAY,03/11/2012,01/01/2050,8:32,16:30,Monday,Friday,0,0
AX,OPEN_AUCTION,11/10/2015,01/01/2050,08:30,08:32,Monday,Friday,0,0
AX,EVENING,11/02/2020,03/14/2021,17:12,7:30,Monday,Monday,-3,-2
AX,EVENING,11/02/2020,03/14/2021,17:12,7:30,Tuesday,Friday,-1,0
AX,DAY_HOLIDAY,12/24/2020,12/24/2020,8:32,12:30,Thursday,Thursday,0,0
AX,EVENING_HOLIDAY,12/29/2020,12/29/2020,X:XX,X:XX,Tuesday,Tuesday,0,0
```

The **Sessions.**asc file contains historical trading session and holiday information for each futures root symbol by date or date range. The file shows any days when the market was closed, closed early, or opened late due to a holiday and the hours of applicable trading session, along with any changes that occurred.

Entries that are marked in the first field as ***All_Holiday. Evening_Holiday, Day_Holiday,*** or ***Post_Settlement_Holiday*** show individual holidays when the market is closed or partially closed. In futures markets, there are often early closes and late opens on and around holidays. These appear as events that show session hours for the relevant session or sessions. If the session hour fields are ***X:XX***, the market was closed for the entire session. ***All_Holiday***, with ***X:XX*** in the time fields, is used if the market is closed for the entire day, all sessions.

Entries that are marked in the first field as ***Evening***, ***Day***, ***Open_Auction,*** or ***Post_Settlement*** show changes in official session hours. If the end date for an entry is in the future (i.e. 2068), that entry shows current session hour information. If a futures market opens Sunday night for Monday's trading day with different session hours than the rest of the week, there will be a current entry for MONDAY to MONDAY and a current entry for TUESDAY to FRIDAY.

File Layout

These fields are comma-separated and are laid out as follows:

Field Name	***Type***	***Description***
Symbol	Text	Futures root symbol (Tick Data symbology)
Session_type	Text	Describes the type of entry: **ALL_HOLIDAY**: The market is closed for one or more trading days, all sessions. **EVENING_HOLIDAY**: The market is closed or partially closed for the night session that occurs prior to the Day session. **DAY_HOLIDAY**: The market is closed or partially closed for the Day session. **POST_SETTLEMENT_HOLIDAY**: The market is closed or partially closed for the night session that occurs after the Day session. **EVENING**: Trading hours for a night session that occurs prior to the Day session. **DAY**: Trading hours for the Day session. Some markets no longer have Day/Night sessions. In this case, DAY follows traditional Day Session hours. **POST_SETTLEMENT**: Trading hours for a night session that occurs after the Day session but is part of the same trading day.
Start_date	MM/DD/YYYY	First date the entry's trading hours took effect.
End_date	MM/DD/YYYY	Last date the trading hours were in effect. If this date occurs in the future, this entry contains the current session information.
Start_time	HH:MM	Start time of session. If a HOLIDAY, if "X:XX" market is closed for entire session. If a HOLIDAY shows a time, the market opened late, at the time specified.
End_time	HH:MM	End time of session. If a HOLIDAY, if "X:XX" market is closed for entire session. If a HOLIDAY shows a time, the market closed early, at the time specified.

Day_of_week_start	Text	Always a day of the week. The first trading day of the week to which the session hours pertain.
Day_of_week_end	Text	Always a day of the week. The last trading day of the week to which the session hours pertain.
Start_time_offset	Numeric	Always zero or negative, a number indicating that the open of the trading day occurs *n* days prior to the trading day. For example, if the EVENING session for a contract starts at 17:00 of the previous night, the value is -1.
End_time_offset	Numeric	Always zero or negative, the number indicating that the close of the trading day occurs *n* days prior to the trading day. For example, a market that has trading on Saturday until noon as part of the Monday session would show an EVENING session end time of 12:00 and an End_time_offset of -2.