CLD Exercise 7: Date Stamp Parsing

Objective

Develop a VI that takes a time stamp and reformats it into a string using the string outputs of the Get Date/Time String function. Use the given application front panel (Figure 1).
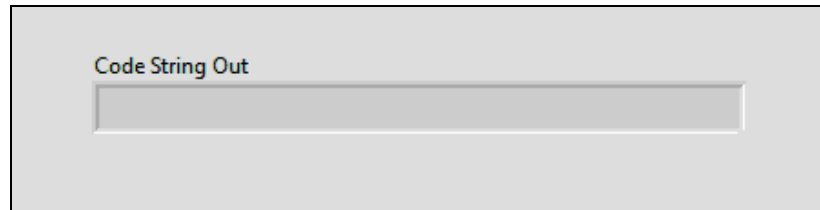

Figure 1. Application Front Panel

General Operation

The VI takes all the fields from a date stamp, such as year, hour, seconds, etc… and reformats them into a coded string. The code consists of twelve values separated by spaces. There must be a space character between each field, but not at the end of the string. The string must contain `0` as the first value and `lvinit` as the last value; these are values in addition to the date fields.

Application Terminology

Code String Out

The **Code String Out** indicator must display the results of the date string conversion to the code string out format.

Data Formats

This section describes the **Code String Out** format. The underlined text is the date stamp field name, the values inside the parenthesis are the new code values.

Format: Date Stamp Field (*New code value*), optional description

1. Start with `0`
2. 100th of seconds *(0 to 99),* 0 if not provided
3. Seconds *(0 to 59)*
4. Minutes *(0 to 59)*
5. Hours, 12 hour mode *(1 to 12)*
6. Date *(1 to 31)*
7. Weekday *(0 to 6),* 0 = Sunday, 1 = Monday, etc.
8. Month *(1 to 12)*
9. Year *(0 to 99),* year within the century
10. Century (*0 = 2000s, 1 = 1900s or 2100s*)
11. Mode (*0 = AM, 1 = PM*)
12. Followed by the command `lvinit`

For example:

> The date "01:04:13 PM Friday, April 12, 2013"
>
> becomes *0 0 13 04 01 12 5 4 13 0 1 lvinit*

Initialization

There are no specific initialization requirements.

Operation

VI Run

When started, the VI will immediately take the time and date from the *Get Date/Time in Seconds Function* and convert to the **Code String Out**.

Solution Notes

For solutions using non-US time stamps the parsing will be slightly different.   The provided solution is made for a US time stamp, and contains a switch that provides the two strings that would be produced by a US time stamp.

Challenge Exercise

Develop the same application using the Seconds To Date/Time Function to convert the Time stamp.