

Lesson 5 – Defining Time Zones & Holidays

The Entry-Master Security System needs to know when people are allowed or not allowed in the facility. This lesson covers how to define **Time Zones**.

Although the primary purpose of a Time Zone is to be used in **Access Groups**, determining what day-of-week and time-of-day a cardholder assigned to a group is allowed into doors contained within that group, Time Zones are used in several other areas sections of the Entry-Master system.

Examples of where a Time Zone might be used is to determine when an alarm is active (e.g. you might want to monitor a **Door Prop Alarm** on a specific door, but you only want it to alarm during off-hours, when the facility is normally closed). Or, you may want to unlock a door only during business hours (such as the front door, where customers usually walk in during the business day).

In all these cases, a Time Zone is typically the way these types of activities are scheduled.

The Entry-Master system allows up to 100 time zones to be defined (from **00** to **99**) and any combination of day-of-the-week and time-of-day can be used to define a Time Zone. For example, you can define a Time Zone that covers from **8:01am** to **5:05pm** on **Mondays** and **Thursdays** only.

To edit or add Time Zones, go to the **Main Menu**, then select **Option 3 – Enter Utilities Menu**:

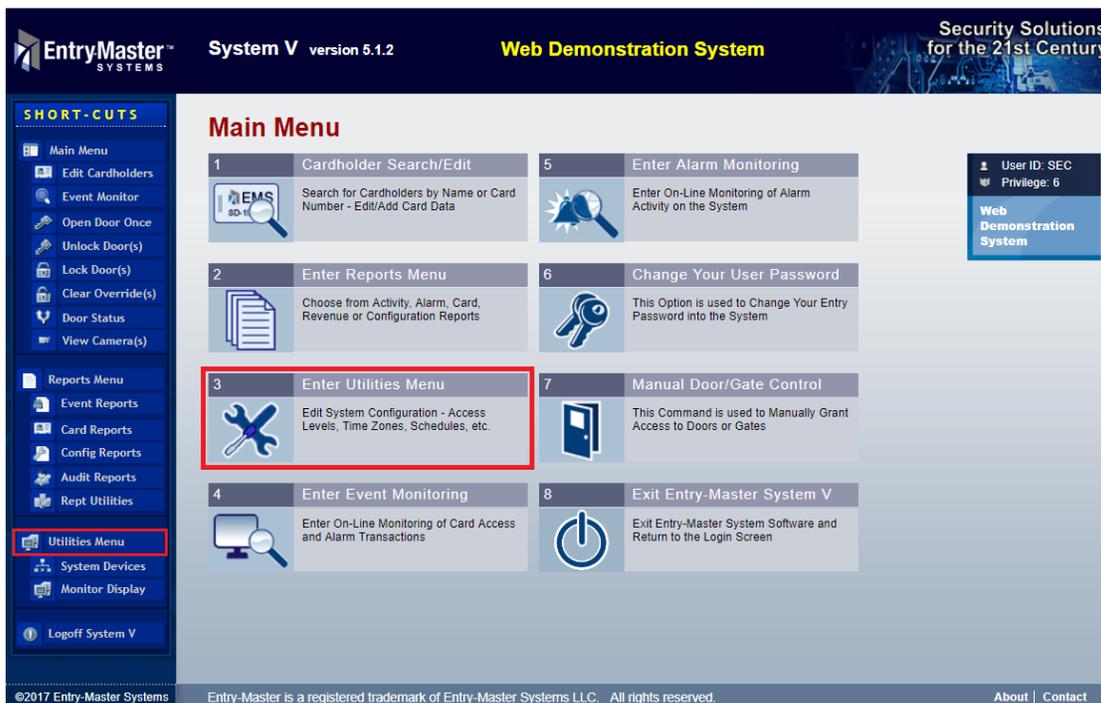


Figure 2-5-1. Selecting the Utilities Menu from the Main Menu

Next, select **Option 3 - Edit Time Zone Database** (Figure 2-5-2 below):

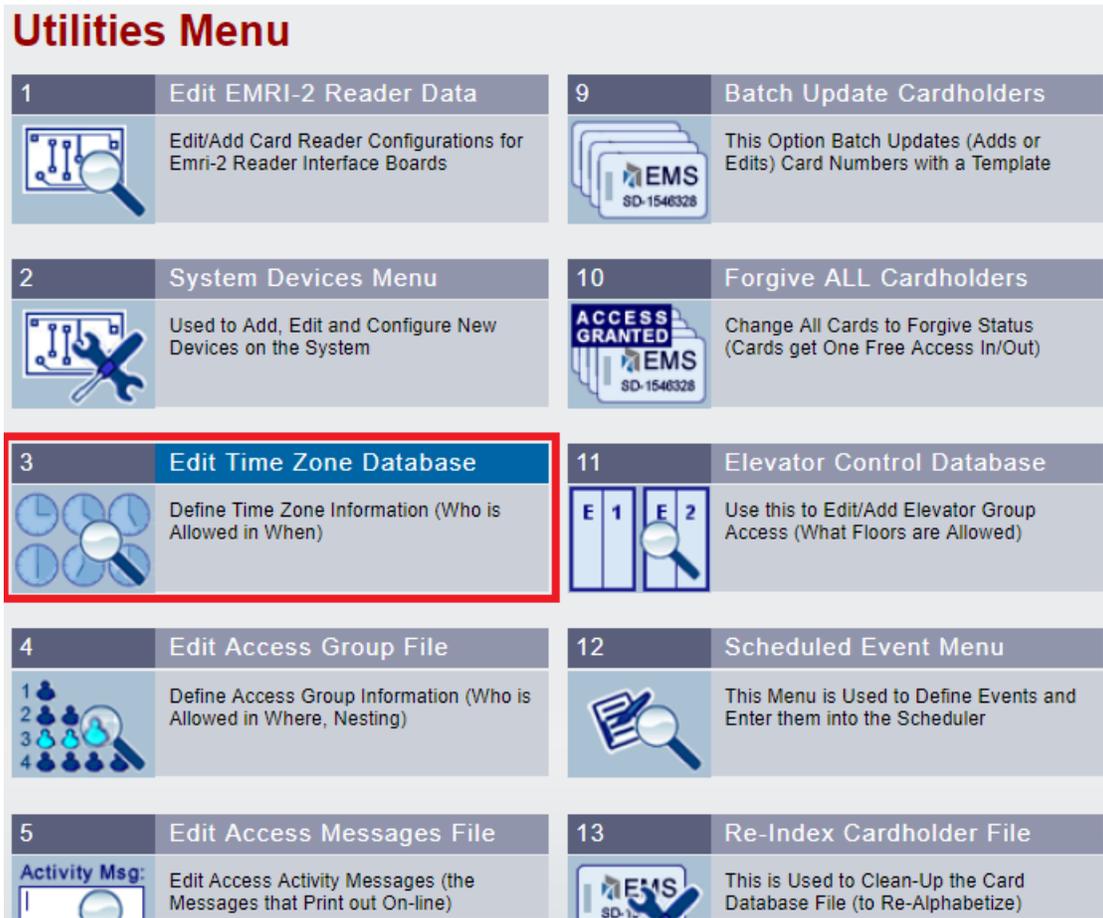


Figure 2-5-2. Selecting #3 - Edit Time Zone Database from the Utilities Menu

The Time Zone definition screen is displayed (Figure 2-5-3 below):

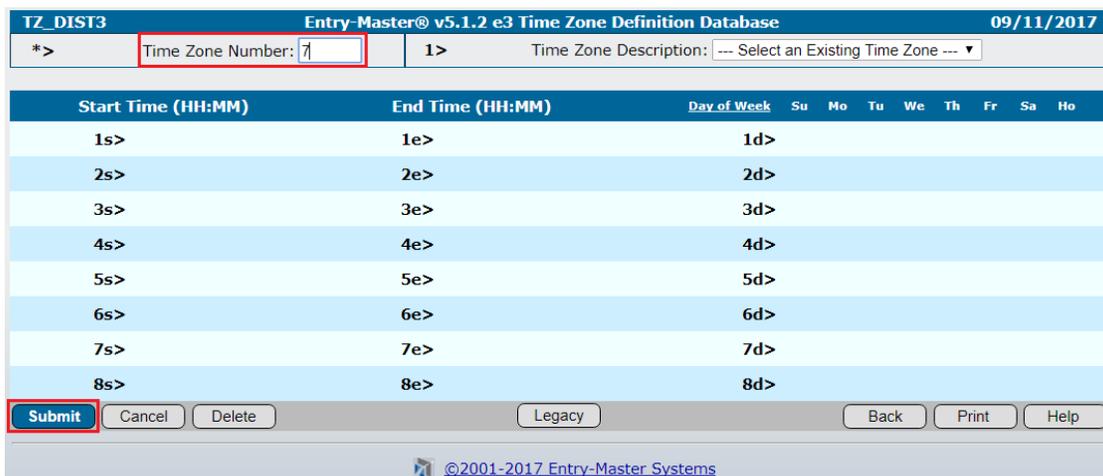


Figure 2-5-3. Creating Time Zone Number 07

Adding a New Time Zone to the System

On this screen (see **Figure 2-5-3** above), you can define the following:

- Time Zone Number
- Time Zone Description
- Up to eight (8) **Time Segments**, which include:
 - ❖ **Start Time** (when does the segment start)
 - ❖ **End Time** (when does the segment end)
 - ❖ **Days** (including Holidays) this time zone is valid

Specify the time zone number you want to define, from 0 to 99. For this example we will define Time Zone Number 7. Type “7” into the *> **Time Zone Number** field and click the “Submit” button (see **Figure 2-5-3** above). The screen should now look similar to the figure below:

TZ_DIST3		Entry-Master® v5.1.2 e3 Time Zone Definition Database		09/11/2017						
*>	Time Zone Number: 07	1>	Time Zone Description:							
Start Time (HH:MM)	End Time (HH:MM)	Day of Week	Su	Mo	Tu	We	Th	Fr	Sa	Ho
1s> 00:00	1e> 24:00	1d>	<input checked="" type="checkbox"/>							
2s> 00:00	2e> 00:00	2d>	<input type="checkbox"/>							
3s> 00:00	3e> 00:00	3d>	<input type="checkbox"/>							
4s> 00:00	4e> 00:00	4d>	<input type="checkbox"/>							
5s> 00:00	5e> 00:00	5d>	<input type="checkbox"/>							
6s> 00:00	6e> 00:00	6d>	<input type="checkbox"/>							
7s> 00:00	7e> 00:00	7d>	<input type="checkbox"/>							
8s> 00:00	8e> 00:00	8d>	<input type="checkbox"/>							

Buttons: Save, Cancel, Delete, Prev, Legacy, Next, Back, Print, Reset

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Figure 2-5-4. Time Zone Definition Screen

Note that the system converted the “7” you typed into “07” – the **Entry-Master** system will put the Time Zone Number into the format it requires.

Figure 2-5-4 above shows a blank Time Zone screen. The default setting for a Time Zone is a single *Time Segment* consisting of a **Start Time** of **00:00** - 12-Midnight (or zero hours) and an **End Time** of **24:00** – 12 Midnight (or 2400 hours).

The cursor is blinking on the 1> **Time Zone Description** field. The description should be precise and short, something that quickly identifies the Time Zone. The description cannot exceed 20 characters.

For this example, you will define the time zone for **Weekends and Holidays**. Type in “Weekends & Holidays” (19 characters). You can use upper and lower case letters in this field.

For this example, you will be changing the **Day of Week** checkboxes on *Time Segment #1* by unchecking the **Day of Week** checkboxes (field 1d>) for **Mo, Tu, We, Th** and **Fr**. The reason for this change is that we want *Time Segment #1* to be defined as **00:00 to 24:00** for **Sundays, Saturdays** and **Holidays** only.

Figure 2-5-5 below shows what the screen should look like after unchecking these checkboxes:

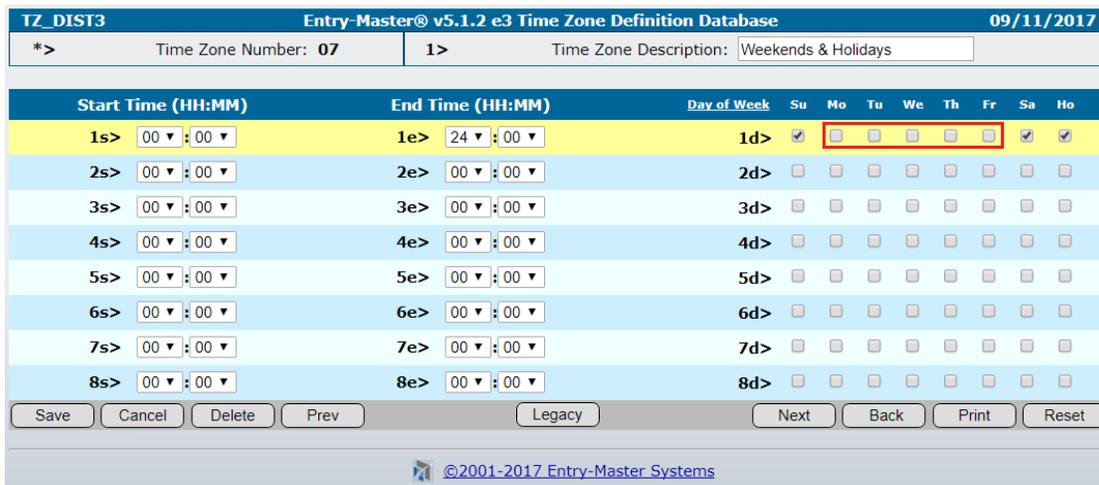


Figure 2-5-5. Unchecking Time Segment 1d> Mo, Tu, We, Th & Fr

Now you will need to define the “off-hours” Time Segments for the weekdays. A *Time Segment’s* **Start Time** can **never be earlier** than its **End Time** (in other words, you cannot “bridge” midnight with a single time segment). So, since we need to have this Time Zone to be “active” from **6:00pm to 7:00am**, we will need to define two additional Time Segments.

One segment will be “active” from **midnight to 7:00am**, and the other will be “active” from **6:00pm to midnight**. *Time Segment #2* consists of fields designated 2s> (Start Time), 2e> (End Time) and 2d> (Day of Week) – likewise, the third segment would be marked as 3s>, 3e> and 3d> – and so forth.

So, to define *Time Segment #2*, you will need to change the **End Time** and **Day of Week** fields (the **Start Time** is already set to **00:00 – Midnight**). Start by changing the **End Time 2e>** field to **07:00** – click on field 2e> of the **End Time** column, and use the drop-down menu to select **07**:

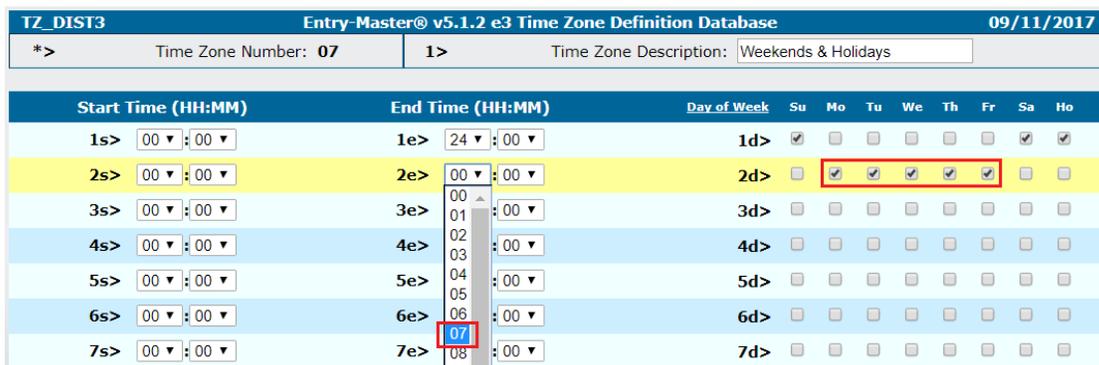


Figure 2-5-6. Selecting 07 and Checking 2d> Mo, Tu, We, Th & Fr checkboxes

To define *Time Segment #3*, you will need to change the **Start Time**, **End Time** and **Day of Week** fields. Start by changing the **Start Time 3s>** field to **18:00** (i.e. **6:00pm**) – click on field 3s> of the **Start Time** column, and use the drop-down menu to select “**18**” (Figure 2-5-7 below):

Start Time (HH:MM)	End Time (HH:MM)	Day of Week	Su	Mo	Tu	We	Th	Fr	Sa	Ho
1s> 00:00	1e> 24:00	1d>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2s> 00:00	2e> 07:00	2d>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3s> 18:00	3e> 00:00	3d>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4s> 00:00	4e> 00:00	4d>	<input type="checkbox"/>							
5s> 00:00	5e> 00:00	5d>	<input type="checkbox"/>							
6s> 00:00	6e> 00:00	6d>	<input type="checkbox"/>							
7s> 00:00	7e> 00:00	7d>	<input type="checkbox"/>							
8s> 00:00	8e> 00:00	8d>	<input type="checkbox"/>							

Figure 2-5-7. Selecting 2s> Start Time for Segment to 1800 hours

Follow the same procedure for the **3e> End Time** field and select **24:00** hours. Then, check the **Monday through Friday** checkboxes in the **3d> Day of Week** field, just as you did on the second time segment (see Figure 2-5-7 above).

Once those fields have been set, the screen should look like Figure 2-5-8 below:

Start Time (HH:MM)	End Time (HH:MM)	Day of Week	Su	Mo	Tu	We	Th	Fr	Sa	Ho
1s> 00:00	1e> 24:00	1d>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2s> 00:00	2e> 07:00	2d>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3s> 18:00	3e> 24:00	3d>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4s> 00:00	4e> 00:00	4d>	<input type="checkbox"/>							
5s> 00:00	5e> 00:00	5d>	<input type="checkbox"/>							
6s> 00:00	6e> 00:00	6d>	<input type="checkbox"/>							
7s> 00:00	7e> 00:00	7d>	<input type="checkbox"/>							
8s> 00:00	8e> 00:00	8d>	<input type="checkbox"/>							

Figure 2-5-8. Completed Time Zone Definition Screen

Figure 2-5-8 displays the completed Time Zone screen. Click the “**Save**” button (some versions have a “**Submit**” button instead) to **save** the **Time Zone** record. Note that previous versions of **Entry-Master** allowed for “**Grace Periods**” to be added to the beginning and/or ending of a time interval. This new version gives you Time Zone definition **down to the minute**.

Editing or Deleting an Existing Time Zone

To edit an existing **Time Zone**, navigate to the *Time Zone Definition Screen*, as you did at the beginning of this lesson, and click on the **2> Time Zone Description** field drop-down box. The drop-down box will display all of the Time Zones that are presently defined on your **Entry-Master** system.

For this example, select the Time Zone you just created – **07 – Weekends & Holidays**, as shown in **Figure 2-5-9** below:

The screenshot shows the 'TZ_DIST3' interface for 'Entry-Master® v5.1.2 e3 Time Zone Definition Database' on '09/11/2017'. The 'Time Zone Number' is '1' and the 'Time Zone Description' is '--- Select an Existing Time Zone ---'. A dropdown menu is open, listing various time zones. The option '07 - Weekends & Holidays' is highlighted with a red box. Other options include '00 - Not Allowed Access', '01 - Anytime (24 Hrs/Day)', '02 - Weekdays 8:00a-6:00p', '03 - M-F Evenings SS 24/7', '04 - MWF 8a-12p TT 12p-5p', '05 - MWF 8a-4p TT 9a-6p', '06 - Evenings & Weekends', '30 - Test Time Zone 30', '31 - Test Time Zone 31', and '32 - Test Time Zone 32'. The 'Submit' button is also highlighted in red.

Figure 2-5-9. Selecting an Existing Time Zone to Edit

Once you have selected the desired **Time Zone** and clicked the “**Submit**” button, the Time Zone you selected will display, at which point you may either edit the record and save it, or delete it (**Figure 2-5-10**):

The screenshot shows the 'TZ_DIST3' interface for 'Entry-Master® v5.1.2 e3 Time Zone Definition Database' on '09/11/2017'. The 'Time Zone Number' is '07' and the 'Time Zone Description' is 'Weekends & Holidays'. The table below shows the start and end times for each day of the week, along with checkboxes for each day. The 'Save' and 'Delete' buttons are highlighted in red.

Start Time (HH:MM)	End Time (HH:MM)	Day of Week	Su	Mo	Tu	We	Th	Fr	Sa	Ho
1s> 00:00	1e> 24:00	1d>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2s> 00:00	2e> 07:00	2d>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3s> 18:00	3e> 24:00	3d>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4s> 00:00	4e> 00:00	4d>	<input type="checkbox"/>							
5s> 00:00	5e> 00:00	5d>	<input type="checkbox"/>							
6s> 00:00	6e> 00:00	6d>	<input type="checkbox"/>							
7s> 00:00	7e> 00:00	7d>	<input type="checkbox"/>							
8s> 00:00	8e> 00:00	8d>	<input type="checkbox"/>							

Figure 2-5-10. Saving or Deleting an Existing Time Zone

If you click “**Save**” the system will **save** the record and return you to the **Time Zone Definition** screen, as shown at the beginning of the lesson in **Figure 2-5-3**.

If you choose to click “Delete” the system will prompt you with this pop-up confirmation message (Figure 2-5-11):

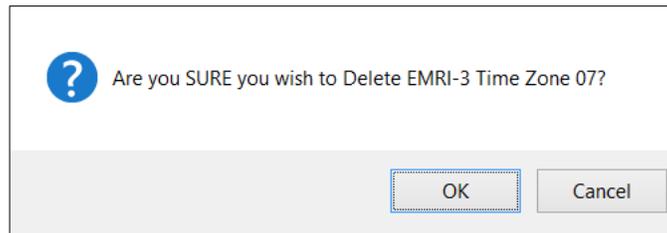


Figure 2-5-11. Delete Time Zone Confirmation

If you click “Cancel” the Time Zone will **not be deleted** and you will be returned to the *Time Zone Edit Screen*; if click “OK” you will be returned to the *Time Zone Definition* screen (see Figure 9-5-3).

IMPORTANT NOTE:
 To ensure that **Time Zone** changes take effect, the *Use New System Parameters* option in the **Report Utilities Menu** *must be executed* -OR- the system can be *rebooted* to effect the change (see [Chapter 2 - Preface: New System Parameters](#), on page 2).

Defining Holidays

You need to define holidays for the system to know which dates throughout the year make the “Holiday” zones “active.” The only places on the **Entry-Master** System that **Holidays** are actually used are in the **Time Zone** and **System Scheduler** definitions.

From the *Utilities Menu*, click on **Option 6 – Edit System Holiday File**:

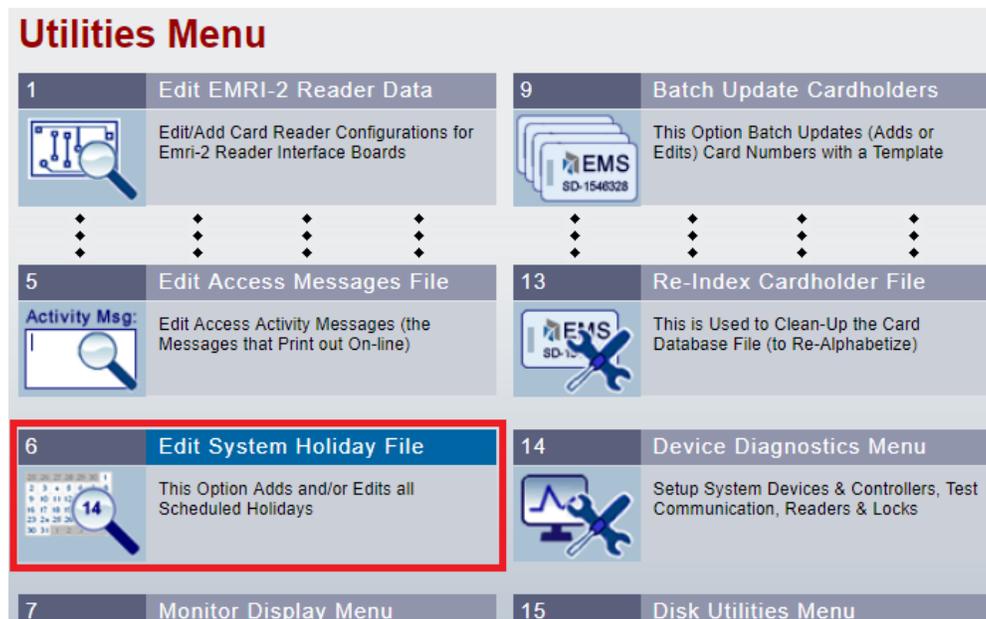


Figure 2-5-12. Select Edit System Holiday File

Click on **Option 6 – Edit System Holiday File** (see **Figure 2-5-13** below):

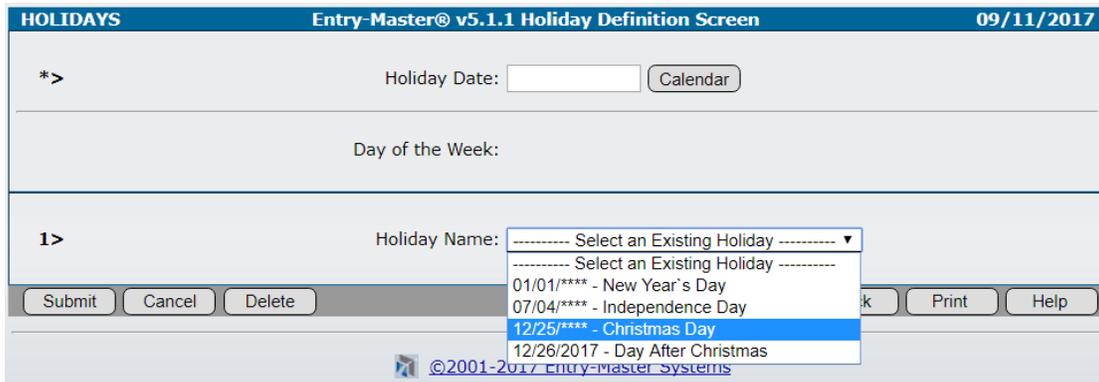


Figure 2-5-13. Holiday Definition Screen

The **Holiday Definition** screen has two methods for entering data:

1. There is an **Existing Holiday** field with a pulldown menu (see **Figure 2-5-13** above)
2. An input field for defining new Holiday Dates

The list of holidays can be found using the pulldown menu (see **Figure 9-5-13**). Once a new holiday has been entered it will appear in this list.

To enter a **new holiday** use the ***> Holiday Date** field at the top of the screen. For our example we will add Independence Day, July 4 for **2018**.

The easiest way to add a holiday is by clicking on the **“Calendar”** button. You may also type the date into the ***> Holiday Date** field (see **Figure 9-5-14** below):

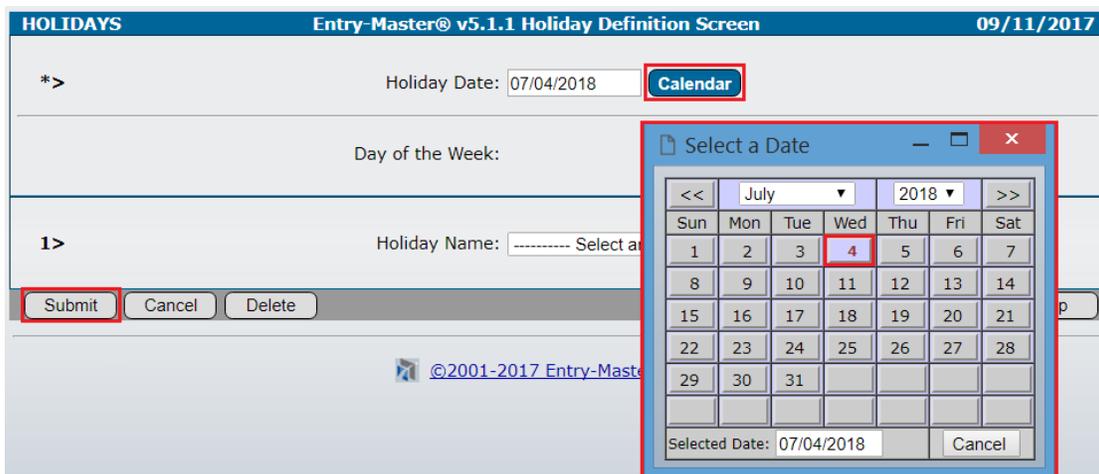


Figure 2-5-14. Selecting a Holiday Date with the Pop-up Calendar

Click the **“Submit”** button to enter the **Holiday Date** into the system. Upon submission the **Holiday Name** screen will appear (see **Figure 2-5-15** below). Type the name of the holiday into the field and press the **“Save”** button.

Figure 2-5-15. New Holiday Date Entered and Saved

You will be returned to the **Holiday Definition Screen** to enter new holidays, or edit/delete existing ones.

IMPORTANT NOTES:

The Holiday Definition Screen allows for “global” dates to be entered as holidays. Examples of a global date would be **New Year’s Day**, **Christmas Day** and **Independence Day**. These are fixed dates (i.e. Christmas Day is always **December 25th**), and so for these types of holidays, a “global year” may be specified for a holiday. The **Entry-Master** system comes with the three aforementioned holidays already programmed as global dates. For example, Christmas is entered into the holidays as **12/25/******, with the “****” meaning **any year**.

Also note that only the year can be replaced with the global asterisks; if the asterisks are used for the **Month** or **Day** portions of a **Holiday Date**, they will not function properly, and the holiday date will be invalid, will not function and possibly may cause adverse side-effects in system operation.

Finally, it should also be noted that if there is a global entry for a holiday, and an absolute date defined as a holiday (for example, if there is a **12/25/****** and a **12/25/2018** both programmed), then the date in question is a holiday; it doesn’t matter that the date is duplicated. However, it should be noted that even if the **12/25/2018** holiday were deleted, the date **12/25** of **every year**, in perpetuity, would be considered a holiday, by the fact that the global entry of **12/25/****** exists in the holiday database.

End of Time Zone and Holiday lesson.

Proceed to [Lesson 6](#) – *Defining Access Groups*.