Cassandra™

An Alarm Scheduler

for the NeXT ™ Computer

Version 1.5 (ShareWare)
Documentation

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Distribution: **General Release**

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Table of Contents

Section 0.0

Cassandra: An Introduction

Welcome to Cassandra. This is a program that I wrote three years ago on my old faithful Apple //c and found I could never live without. So now that I have a “slightly” bigger machine, I ported it over and added many new features. Enjoy!

What can Cassandra do? Well, it is an alarm scheduler. It can manage your time table, keep your appointments, act as a reminder service, or even as an alarm clock. It can tell you when anniversaries occur, whether they happen each week, month, year, or even ten years. It can handle alarm events that occur every day or week. It even has a built in snooze function that you can set to repeat for any interval for any period of time.

Future versions will have even spiffier Daily, Weekly and Monthly Overview windows, which will let you see your exact schedule at a glance. They will also let you print these schedules out, so that you can insert them in your schedule book (interim solution until NeXT develops a portable notebook NeXT).

Cassandra is an incredibly flexible program. It lurks quietly in the background while it is not being used, taking up barely any of the system’s resources and will pop out when an alarm goes off or if it is needed.

The first section will show you how to set up the program on your NeXT workstation and where to put all the files. The following sections will lead you through the program. The last sections are only for those interested in the mechanics of the program and are not essential in order to use it.

This version of Cassandra is distributed under the ShareWare policy. You are free to distribute (i.e., copy for friends) Cassandra as long as you keep the whole distribution package together and unmodified and you don’t charge for it. If you like using Cassandra, please pay for it. The payment and registration form is on the back opage of this document. Cassandra has taken four years and hundreds of person-hours to develop. If you really don’t feel like paying me, then go donate some money to a local charity to warm up your cold heart. :-)

Jiro Nakamura
October 27, 1990

Section 1.0

Setting up Cassandra

Setting up Cassandra is fairly easy. There are two main distribution routes set up for it. The first is through ftp to one of the NeXT ftp sites or off a bulletin-board. The second is directly from me on an optical disk. Read section 1.1.1 if you got it off the networks, section 1.1.2 if you got it from me.

Section 1.1.1

Off the network

You should have a file called *Cassandra15.dist.tar.Z* on your working directory. If it is called anything else, then double check. Type into your Shell or Terminal window:

```
zcat Cassandra15.dist.tar.Z | tar -xvf -
```

This should create a directory in your working directory called *dist*. Within this directory should be a copy of *Cassandra.app* the application and this manual. Sample sound files, event files, source code, and accessory programs may also be included depending on which release you have received.

Section 1.2

Putting the files where they belong

You will want to move the program *Cassandra.app* somewhere where the operating system can find it. This should either be in the folder /LocalApps or in your own ~/Apps folder.

/LocalApps are for site specific software, so if you don't own the NeXT you are installing Cassandra on, it is a good idea to put in in your own personal ~/Apps directory. The basic procedure is this:

If you do not have a ~/Apps directory, create one by using the Browser or by typing in the following command in Terminal:

```
mkdir ~/Apps
```

Copy Cassandra to the ~/Apps directory by dragging it through the browser or typing the following:

```
cp -r dist/Cassandra.app ~/Apps
```

If you own or manage the NeXT you are installing Cassandra on, then you may want to put it in the /LocalApps folder. You should know how to do this, in that case. Oh yes, you may have to be root in order to create the /LocalApps directory.

At the same time you may want to create /LocalLibrary/Sounds or ~/Library/Sounds directories to store the various alarm sounds you or others may have created. If any sounds came with the distribution package, place them in one of directories or else Cassandra will not be able to find them.

Everything should be set now. Double check from the Browser that Cassandra does indeed reside in the directory of choice and that it has the ambivalent clockface icon. If not, go back and double check.

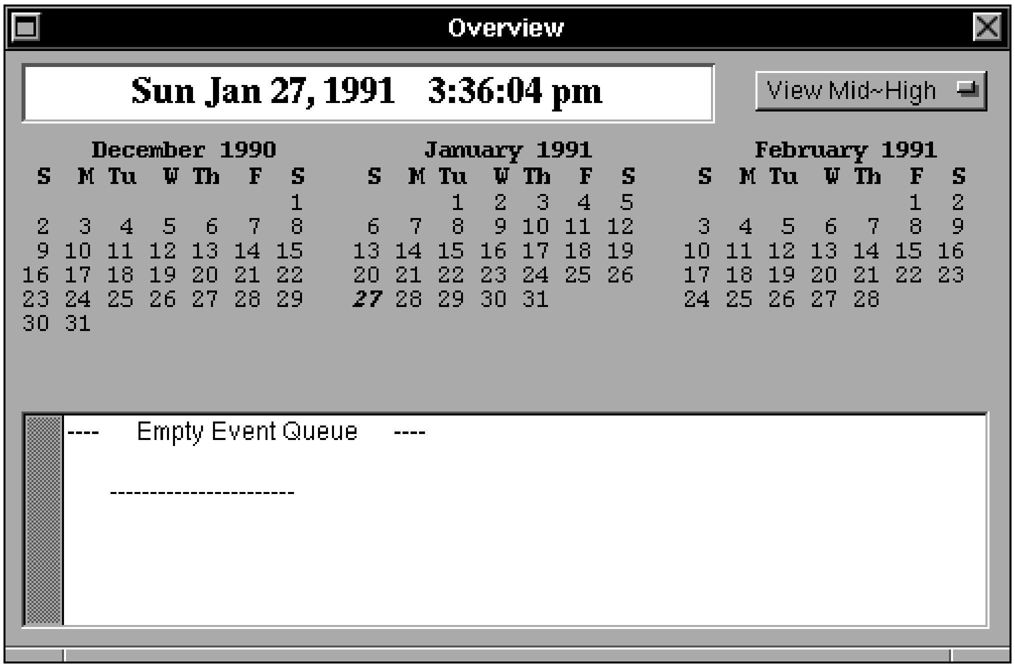
You may also wish to put Cassandra in the icon dock and make it autostart. That way, it'll always be there in the background from the very beginning. Cassandra will not alert you if you don't have it running in some form! If you have set Cassandra to be auto-launched from the dock, you may also want to select one of the Open-At-Launch options in Preferences so that you can have the windows available at startup. See the section on Preferences (4.4) for more details.

Section 2.0

Starting Up the Program

Double click on Cassandra's ambivalent clockface icon. It should flash on and the program should launch. The main menu of Cassandra should come up along with the Overview. If the Overview does not come up, the Open-Overview-At-Launch selection in Preferences may not be selected. In that case, manually select **Windows→Overview.**

The Overview (Cassandra's main window) is split into three main sections. At the very top is the date and time. Below that, in the middle, are month calendars for this month, next month, and last month. Below that is what is called the event queue. If this is the first time you are running Cassandra, it should read <Empty Event Queue>.



Section 3.0

Using Cassandra

We are now prepared to use Cassandra. Section 3.1 will introduce some key concepts and the following sections will explain how to use Cassandra's most important features. Section 4 and onward will explain more detailed aspects of Cassandra.

Section 3.1

Key Concepts

Cassandra's scheduling device centers around the notion of an *event*. What is an event? Simply put, an event is any type of scheduled occurrence. It could be your daily alarm to wake you up, a reminder to go to a board meeting or your wedding anniversary, etc.

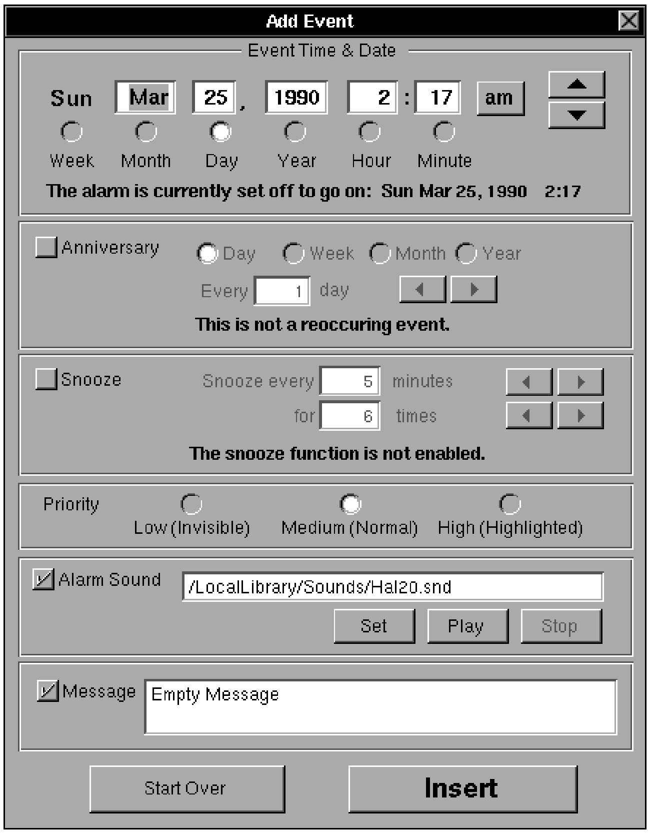
If we are going to be reminded that something is going to happen, we must first ask ourselves some important questions:

- When is it going to happen? (Date and time)
- What should I be reminded of? (A message)
- How should I be alerted of it? (A sound)
- Is this a recurring event?
  i.e., should I be reminded of it every week (like a board meeting), or every year (like an birthday?)
- Should there be a "snooze" feature?
  i.e., if it goes off, and I don't notice it, should it try again at a later time. How many times should it try and what should the interval between them be?
- Is it a high or low priority message?
  Some messages, like the ones that happen everyday, you don't want cluttering up your screen. If we make them low in priority, we never have to see them until the very time of their appointment. Other events may want very high priority on and we need some prior warning to their appearance, usually by highlighting them.

Section 3.2

Inserting an Event

To add an event, go to the main menu and select **ModifyEvent→Add Event**. The following panel will appear:



This panel lets us enter in all of our events. The very top section of the panel is for the event time and date. The second section is for recurring (or anniversary) events, the third for snooze, the fourth for priority, then sound and the last for the alarm message. **Start Over** reverts everything to their default values and **Insert** inserts the event into the queue. The close box is used to abort the session.

As you enter each entry into their respective forms, hit RETURN to jump to the next entry. Although you can also hit TAB, this will bypass many of the checks that Cassandra makes on your entries to make sure they are valid. To jump backwards, hit SHIFT-TAB.

Date & Time:

You can input the date and time of the event simply by selecting the appropriate radio button and clicking on the up/down button. Selecting the "week" radio button will let you go forward or backwards one week. You can also type in the date and time manually.

The date is in Month/Day/Year format. The month may be entered in by mouse or as a string "March", "Mar", "mar" or the digit "3." The year can be entered in full '1990' or abbreviated. The following abbreviations can be used:

0~69	-> are the years 2000~2069
70~99	-> are the years 1960~1999
100~	-> are the years 100 onward

If you are inputting in the time manually, there is a shorthand way to select am or pm without using the mouse. If you append an 'a' or a 'p' to the end of the hour, then Cassandra will ignore the am/pm button and use that instead. For example:

'7' in the hour form	-> is either 7am or 7pm depending on the am/pm button.
'7a' in the hour form	-> is always 7am regardless of the am/pm button.
'7p' in the hour form	-> is always 7pm regardless of the am/pm button.

Additionally, 'n' stands for "noon" and 'm' for midnight:

'12n' in the hour form	-> is twelve noon.
'12m' in the hour form	-> is twelve midnight.

The default values for the date and time are the present date and time. The program will check to see if you have typed in proper values and warn you of any potential errors. Each time you hit RETURN or click on the up/down buttons, a small line below the entry forms updates and shows you how Cassandra interprets your input. Use it to double-check your entries.

Anniversary Events:

The second section controls whether or not this is a recurring event. A recurring event is one that reoccurs every so often, like birthdays, anniversaries, doctor's appointments, etc.. If you only want the event to happen once, like a reminder to phone someone, ignore this and do not check the check-box.

If you do check the box, other features highlight and make themselves available. The row of radio buttons and the form beneath it control the frequency of recurrence.

If you had a dentist's appointment every second Monday, then you would select the **weekly** radio button and enter '2' into the **once every _ week(s)** form. You will notice that the second half of the **once every _** will change in accordance to your radio button selection.

Due to a design fault I made in the original Apple version, you cannot have recurring events with a value greater than 99 in the **once every _** form. This will be fixed in a future version with a convert program. This limitation is checked when you write events in.

Snooze

This is similar to the "snooze" function on an alarm clock. Basically, if you check this box, the alarm will keep on going off at set intervals for a set number of times until you acknowledge it.

Suppose you wish to be reminded of something, but you may not be around the cube to hear the alarm when it goes off. You want the alarm to go off every 10 minutes for an hour. Then, if you select **snooze** and enter '10' into **Every _ minutes** and '6' into **for _ time(s)**, the alarm will ring every ten minutes for an hour or until you acknowledge it.

Alarm Sound

This changes the sound that plays when the alarm goes off. The default sound is stored in preferences, see section 4.4.This sound can be any .snd resource. Either type in the full pathname with the .snd suffix into the form or select it in a browser window with Set.

If you want a system sound, you can type in its name (without a pathname AND without the .snd suffix) but it must be in one of the following three directories, or Cassandra will not be able to find it:

~/Library/Sounds	(user sound library)
/LocalLibrary/Sounds	(installation specific library)
/NextLibrary/Sounds	(NeXT sound library)

For example, if you are want the system "Bonk" sound to play, either type in or set "/NextLibrary/Sounds/Bonk.snd" or just type in "Bonk." If you have a special sound you want to play that isn't in one of the above three directories, then you MUST use the full pathname and suffix.

Cassandra checks whether or not the sound actually exists when you enter it into the form. Because of this, you may experience a slight delay after hitting RETURN. If it can't find the sound, Cassandra will raise an alert panel.

You can de-select the sound, in which case Cassandra will not play any sound when the event occurs.

Priority

Priority controls the visibility of events. Events with low priority will be invisible until the day they are scheduled. Events with high priority, on the other hand, will be emphasized in the window panels.

Making events low priority is useful for hiding them from cluttering up your screen. For example, I have a different alarm setting for each day of the week to go to different places, these are all weekly recurring events so I don't need to be reminded of them until the day they happen. You can change the visibility of events in the Overview and Week windows using the PopUp panel. See these respective sections for more details.

Message

This is, of course, the message that will be displayed when the alarm goes off. You should keep the message short (less than 80 characters) so that the characters don't have to wrap around strangely on the Overview, Today, and Event Log displays. If you disable the message box, no alarm panel will come up when the alarm sounds.

Start Over Button

If you hit this button, all values will revert to their defaults. The time and date will reset to the present time and date. The anniversary and snooze functions will disable. The sound will default to the default sound in Preferences, priority will be normal, and the message will clear.

Insert Button

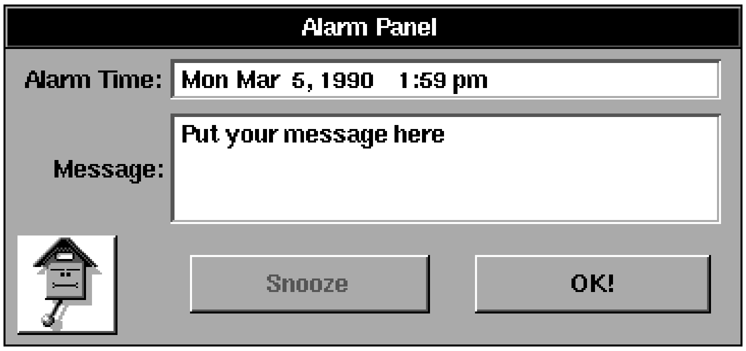
This will insert your event into the queue with the specified time and date. Hit this button when you are all through with typing in an event.

Power User's Tip: If you are inserting many events at the same time and don't want the panel to go away when you are finished, keep the ALTERNATE key down while hitting the Insert button.

Section 3.3

When an Event Goes Off

When the scheduled time for an event comes around, Cassandra will wake up and go into action. It will activate itself, the sound that you appointed for this event will start playing, and the Alarm Panel will come up (unless you've disabled the message when you added it to the queue):



You have three courses of action:

• Ignore it. If you enabled the snooze feature, it will start playing your alarm sound again after the allotted time.

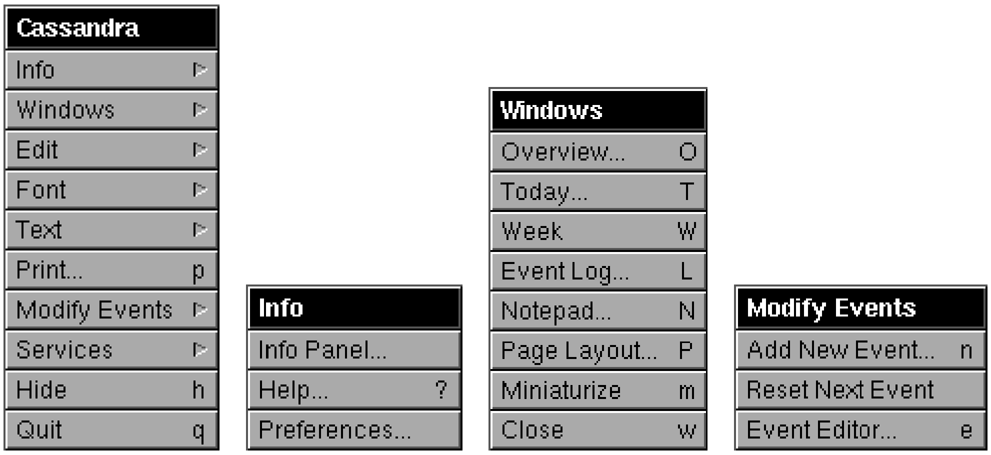
• Hit the **OK** button. This will disable all the snooze functions and the panel will disappear. It will also stop the sound if it is still playing. If it is a recurring event, it will place itself in the future at the appropriate date and time.

• If the sound is still playing, you can hit the **Snooze** button. This will stop the sound and hide the panel. It will, however, come back after the appropriate snooze interval. This button is disabled if the sound has already stopped (snooze is automatically called in that case) or if the event doesn't have the snooze function enabled.

Section 4.0

Other Features

This section discusses other, more detailed features of Cassandra. We will travel down the main menu, but skip the Event Editor which is discussed in Section 5.



Section 4.1

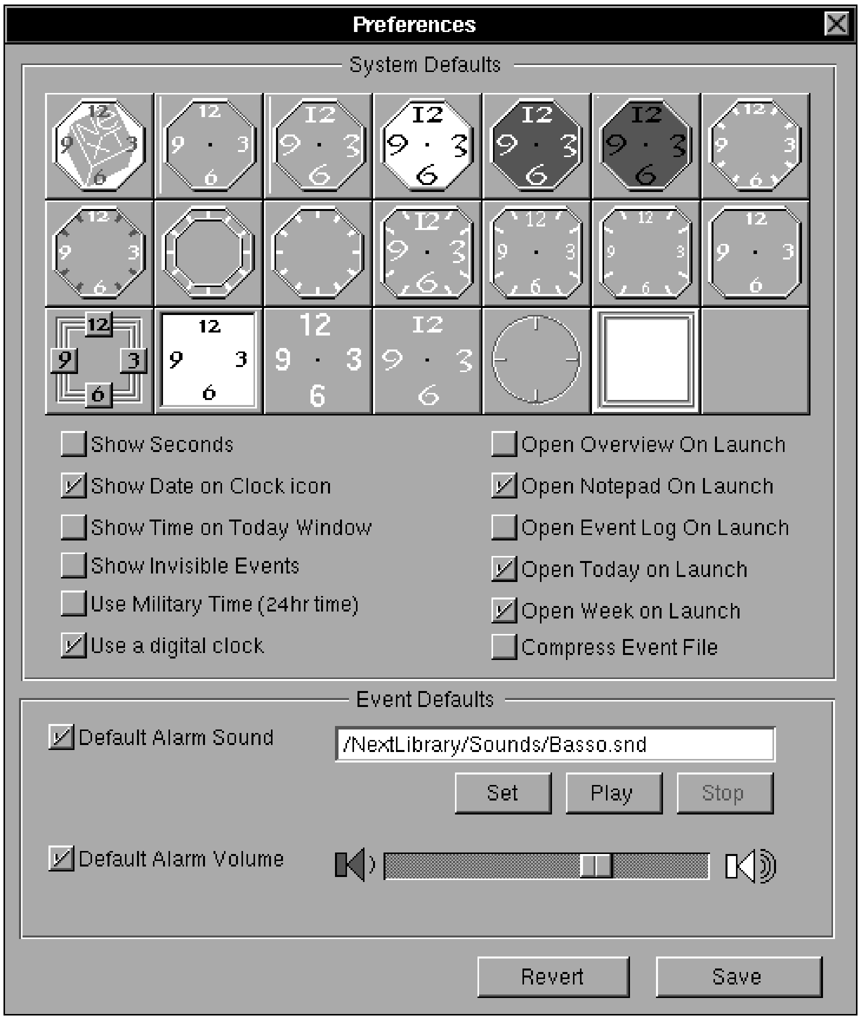
Info Panel ... and Help

Info Panel... brings up the Information Panel about Cassandra. This discusses the distribution policy, Credits, Disclaimers and Copyright and other icky, but necessary things in life.

Help... brings up the Help window which contains some of the information in this manual. The online help is short and succint, please refer to the real manual (this one) if you need real help. It also gives a history of Cassandra the program and Cassandra the person.

Section 4.2
Preferences...

Preferences... brings up the Preferences Panel. This is where you can change the defaults settings for Cassandra.



The very top of the panel has a bunch of clockfaces for the application icon. Select the one that you want to use. The last two clockfaces in the bottom right corner are especially suitable for "digital clocks." Some clockfaces are very fancy and don't look too well if you try to show the date on them. A digital clock looks something like this:

Below that are a couple of buttons and some other selectors. The "Open At Launch" series of buttons on the right hand side let you choose which windows you want open at launch. This can be useful if you put Cassandra in the icon dock and make it auto-launch.

The Show Seconds button lets you disable the seconds hand on the application icon and also the seconds updating on the Overview. Use this if you are annoyed by the seconds ticking or if you want to conserve CPU cycles.

Showing the date on the clock icon can be handy if you are apt to forgetting what day it is. It's only valid if you are using analog clocks. A future version of Cassandra will allow users to set the day permanently to Sunday so that they can watch football 365 days a year.

The 24hr time button lets you use 24hr time as opposed to am/pm time for all of Cassandra's features. Use this if you are more comfortable with 24hr time.

Compress Events is for folks tight on disk space. It will compress the event file after quitting and uncompress it before starting. This is useful if you have a system with many people on it who only log in intermittently. Normal compression ratios are about 10:1 (ie, a 30 kilobyte event file will become 3 kilobytes). This slows Cassandra's launching a bit, by the way.

The digital clock option is for those users who prefer ultra-modern to neo-classical. Cassandra will usually use the Clock code to display the time on the application icon, but you can also set it so that it uses a digital clock. Digital clocks are useful for about one reason: you can cram things in so that you can see the time/date of the the next event and its message in the application icon.

The Default Alarm Sound is the default that will appear in the Alarm Sound form when you hit Add Event. You can also set the volume of all Cassandra sounds. If you de-select the Alarm Volume button, alarms will play at system volume. If you select it, you can specify the volume with the Slider control. Hit the Play button above it if you want to hear how loud it will sound. This volume setting will not affect other applications.

When you are finished with selecting your preferences, click on the Save button to save them. If you make a mistake and want to revert to your previous selections, click on the Revert button.

Section 4.2.1

Defaults Database and Advanced Preferences

There are more user-selectable preferences, but they do not show up in the Preferences panel because they are not used or changed often and unwittingly changing them could mess Cassandra up pretty badly. These preferences are only selectable through the Defaults Database or command line options. These are advance features and require knowledge of the defaults database. Please see the manual pages *dread(1)*, *dwrite(1)*, and *dremove(1)*.

If you do a "*dread -o Cassandra*" you will get a listing of all of Cassandra's preferences. Some of them are controlled by the Preferences panel and will not be discussed. We will only discuss the options that are marked with an asterisk before their name:

```
 Cassandra ClockFaceNumber 13
 Cassandra ClockType 1
 Cassandra CompressEvents Yes
 Cassandra DefaultAlarmSound /NextLibrary/Sounds/Bonk.snd
 Cassandra DefaultAlarmVolume 0.75
*Cassandra Directory /user/jiro/.cassandra
 Cassandra EventLogFrame x680y97w336h200
 Cassandra EventLogOnLaunch No
 Cassandra HighPriority 90
 Cassandra LowPriority 10
 Cassandra MilitaryTime No
*Cassandra NXFont Helvetica
*Cassandra NXFontSize 13.0
 Cassandra NotepadFrame x13y77w425h200
 Cassandra NotepadOnLaunch Yes
 Cassandra OverviewFrame x216y382w517h399
 Cassandra OverviewOnLaunch Yes
 Cassandra PlayAlarm Yes
 Cassandra ShowDate Yes
 Cassandra ShowSeconds Yes
 Cassandra TodayFrame x788y655w265h177
 Cassandra TodayOnLaunch Yes
 Cassandra WeekFrame x117y436w870h349
 Cassandra WeekOnLaunch Yes
```

Cassandra stores its internal information for the event queue, event log,, and notepad in a directory which is specified by the *Directory* default. Originally, this is fixed as the *.cassandra* directory in the user's home directory, but can be changed.

It is also possible to change the font that Cassandra uses for its Overview event queue, Today, and other windows. These can be changed by changing *NXFont* and *NXFontSize*.

Section 4.3

Edit→ and Font→

Edit brings up the standard Edit submenu. This has cut, paste, copy, and select all. Copy and select all will work in most of the views in most of the windows as expected. This lets you copy and paste into other applications the information in Cassandra. Cut and paste only works in some of the views, most notably the Event Log and Notepad which are discussed below. You can also do spell checking of your Notepad window if you so desire (for whatever strange reason you may have)...

Font brings up the standard Font submenu. You can change the fonts in the Notepad and EventLog windows. The same goes for using rulers. In otherwords, if you can edit the window, you can edit the window's properties. If you want to change the font/size of standard windows, use the preferences.

Section 4.4

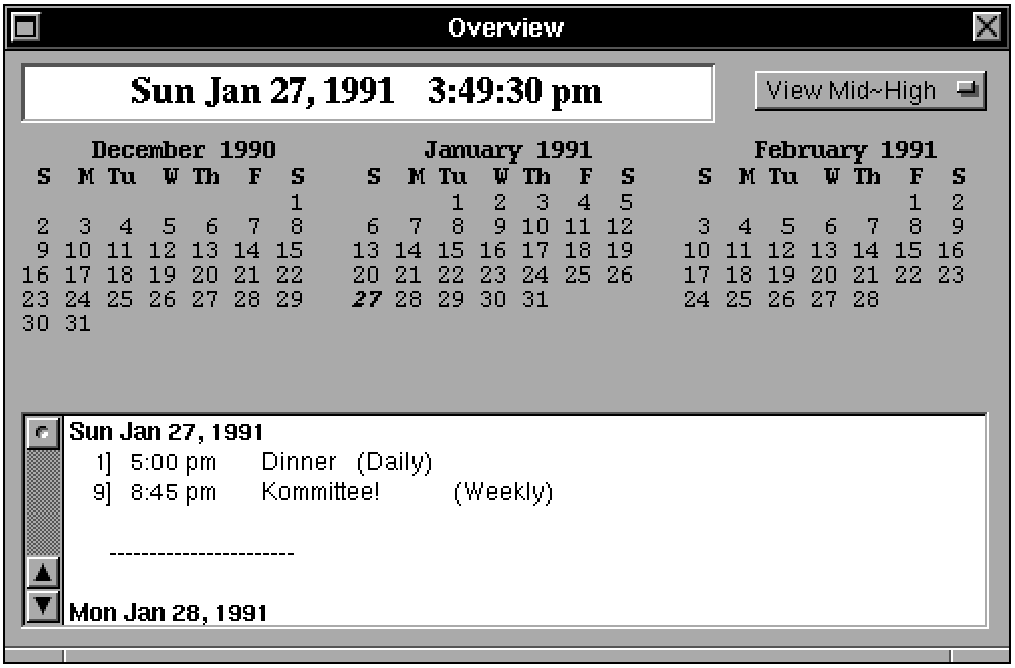
Windows→

Windows has a submenu with eight choices in it: **Overview...**, **Event Log..., Today..., Notepad..., Week..., Page Layout..., Miniaturize**, and **Close**.

Section 4.4.1

Overview...

This is Cassandra's main window:



At the very top are the present day and time. The middle section has month calendars for this month, last month, and next month. You can flip through the calendars by clicking on them. The left calendar goes back a month, the right one forward a month, and the center one returns it to the present month. The bottom section shows Event queue, the events for today (defined loosely as the day of the next event) are printed above a dotted line and the rest of the events are below it. The numbers to the right of the times behind the] bracket are the "Event Numbers." You use them when calling up the Event Editor (Section 5).

The PopUp panel on the top right controls which priority of events you wish to see.

Section 4.4.2

Today...

This shows a small window with all the events of today and tomorrow.

Section 4.4.3

Week Overview...

This shows a longish window with all the events for a single week on it. You can change to the next or preceding weeks by hitting on the arrow buttons. Changing back to the current week is a totally unintuitive click between the two arrow buttons – where it says “Week of: ________” (It’s a button in disguise). You can choose to view all the events, only medium or high priority ones, or only high priority events using the popup list ot the top left hand corner of the window.

Power Users’s Tool: Hold down the ALTERNATE key while clicking on the arrow buttons to step day-by-day rather than week-week by week.

Section 4.4.4

Event Log...

This brings up the Event Log. It is nothing fancy, so it is not shown here. The event log contains a log of all the past events. Low priority events are not logged. You can cut and paste out of this window freely and make editorial comments by typing into it.

Section 4.4.5

Notepad...

This is just a small notepad you can use for jotting down notes. You can cut and paste out of this freely. This window automatically saves itself when you close it or change pages. You can change the “page number” by either hitting one of the arrows or by typing it into the little form to the right of the arrows.

Section 4.4.6

Calculator...

This is your run of the mill $5 calculator. It can handle basic math, but doesn’t know operator precedence (that’s My Dear Aunt Sally to you non-techies). It should be all obvious and beyond explanation, except for the CP button. That stands for “CoPy.” It copies the current display into the pasteboard, so that you can paste the results of your calculations into other applications. You could do just the same thing using your mouse and Command-C, but it wouldn’t be yuppish, would it?

Section 4.4.7

Page Layout..., Miniaturize & Close

Page Layout... brings up the standard NeXT page layout panel.

Miniaturize miniaturizes the current key wind ow. Double-click on its mini-window icon to de-miniaturize it.

Close closes the current key window.

Section 4.5

Modify Event→

This brings up a submenu with three choices: **Add Event...**, **Reset Next Event**, and **Event Editor...**. **Add Event...** has been discussed already in Section 3.2. **Event Editor...** will be discussed in Section 5.

Reset Next Event is a special feature. It resets the very next event. Suppose you have your dentist's appointment at 3 o'clock and you're going out to lunch and don't want it to ring at 3 o'clock since no one is there. But you do want it to remind you again as a recurring event two weeks from now. If it is the next event on the queue, hit **Reset Next Event** and it will act just as if the event had come along and you had hit OK. It only works on the next event. If you want to do the same thing on any event, please use the **Reset Event** button in the Edit Event window.

Section 4.6

Quit

Quit quits Cassandra.

Section 5.0

The Event Editor

The Event Editor lets you go into the event queue and modify/delete past events. Because most of the time you may be working with the queue itself, it is necessary to get a working idea of how the queue is constructed. Section 5.1 introduces the queue and 5.2 shows how to use the Event Editor.

Section 5.1

An Introduction to the Event Queue

The Event Queue is what holds all the events in Cassandra together and organizes them in a nice neat fashion, i.e. ascending by date. It is most visible in the Overview window. The Overview window's perspective on the queue is accurate, but a bit false.

You may have noticed the Event Numbers in the Overview do not ascend numerically, although the dates themselves are in ascending order. For example, suppose the Overview window showed us the following queue:

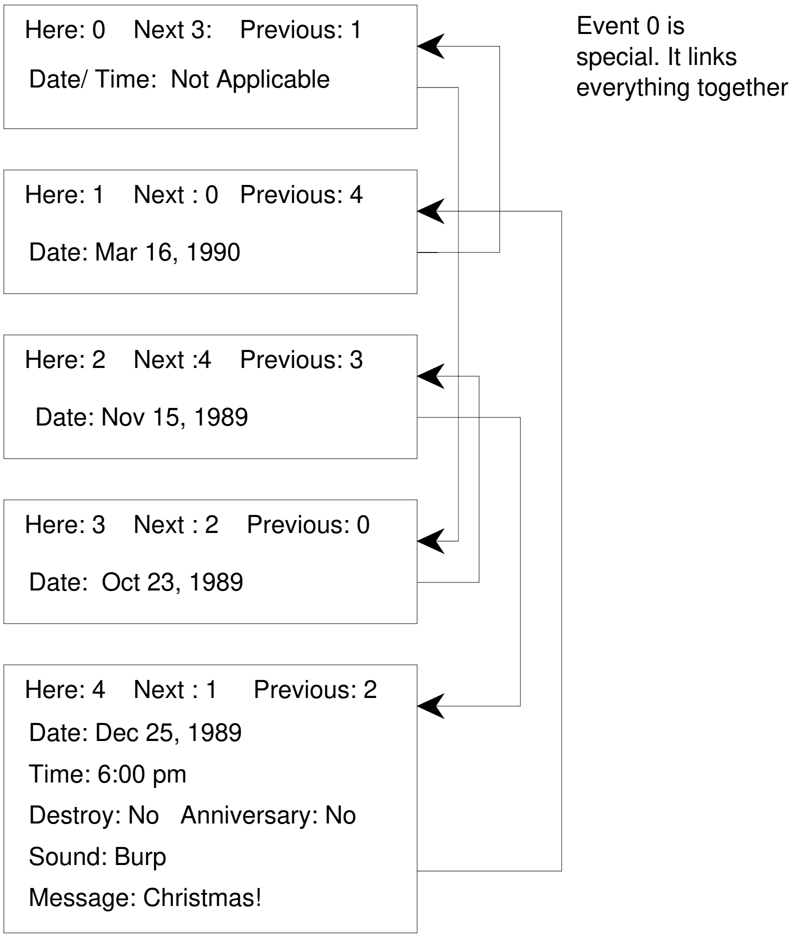
```
Mon  Oct 23, 1989
        3]   13:00 am     My birthday     (Yearly)

Wed  Nov 15, 1989
        2]   3:00 pm      Board meeting

Fri  Dec 15, 1989   6:00 pm
        4]   6:00 pm      Christmas!

Fri  Mar 16, 1990
        1]   10:00 am     Opus returns!       (Yearly)
```

Note how the dates are in ascending order, but the Event Numbers (behind the square right] bracket) are not. In fact, Cassandra is really storing this queue all in one file (usually ~/.cassandra/events) which would most probably look like the following figure:



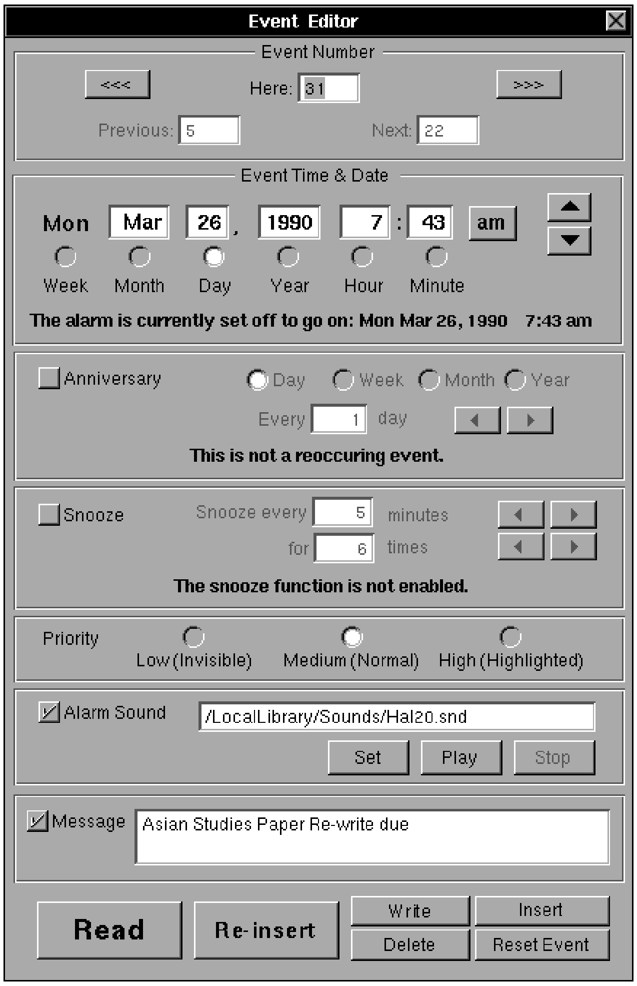
I have implemented the event queue as a doubly linked list. Each event has a pointer to the next event and the previous event. Every time you insert or delete something, pointers get modified but most of the queue remains the same. Keep in mind that the order of events in the queue does not reflect their order on the Overview, it is only by following pointers that we can reconstruct it. This is what the Overview window does when it displays the list, it follows each pointer until it hits 0, which is the head and tail of everything.

An event with Next and Previous pointers set to -1 is considered deleted. If we deleted event 2, its Here and Next pointers would get set to -1, Event 3's Next pointer would get set to 4 and Event 4's Previous 3 pointer would get set to 3. Deleted events are overwritten by inserted events.

Section 5.2

Using the Event Editor

Selecting **Event Editor** from the **Modify Events→** submenu brings up the following panel:



The center section is identical to the **Add Event** panel so please refer to Section 3.2 for that part. The different parts are the top section with the Event Numbers and the lower section with the various buttons.

If you look carefully, the top three forms correspond to the Here, Next, and Previous pointers in the discussion in Section 5.0. You are not allowed to modify the Next and Previous pointers.

The **>>>>>** button reads in the event pointed by the Next form, i.e. the next event. If you keep it down, you will transverse down the whole queue until you hit event 0, and then you will loop back to the first event.

The **<<<<<** button does exactly the opposite. It reads the event pointed to by the Previous form. Using these two buttons, we can go up and down the whole queue. Alternately, one could type in the event number manually and hit Read, but then again, what are computers for?

The Read button reads in the event in the Here form.

The Reinsert button takes a second look at the event and reinserts it in its proper place in the queue. It will avoid duplicating the record like Insert does or messing up the queue like Write could. This is the preferred way to put events back into the queue.

The Write button writes out the event. If you changed the Here form while modifying the event, it will warn you since this is very dangerous. If you modified the date or time, it will also warn you since you should Reinsert not Write such events back into the queue. If you do write it, it will throw Cassandra totally off.

The Insert button makes the panel act like the Insert Event panel. If the event already exists, it will be inserted again and you will have two copies of the same event. Silly right? The purpose of the Insert button is to allow easy duplication of similar records.

The Delete button deletes the record.

The Reset button acts like the Reset Next Event selection in Modify Events, but does it on the event you are on right now.

Section 6.0

Updates, Changes, and Bug Fixes

Initials in () are those of the users who suggested these fixes

Changes from Version 1.4x to 1.5

January 19, 1992

General Notes

Calculator massively cleaned up and improved. Preferences panel cleaned up and improved.

Bugs Fixed:

•Factorial works in Calculator
•Overlapping alarms handled properly
• Leap year bug handled properly
• Many many more

Features Added and Changes Made to the:

Whole Application

Changes from Version 1.4a to 1.4x

February 14, 1991

General Notes

Bugs Fixed:

In v1.4 and 1.4a

• WeekWindow would crash if it were opened and no events were in the queue. (DN, JH, RF, et al.)

In v1.4b

• Typing the full pathname of a sound in the Add Event window would not be properly validated (HG).
• The default fonts were ugly.
• Cassandra would not start up properly in 2.0 for new users, bugs bugs bugs. :-(

Features Added and Changes Made to the:

Whole Application

• Hide on Launch (DN).

Changes from Version 1.3 to 1.4

February 14, 1991

General Notes

In general, this is a bug-fix release that is so old, I'm relesing it as a separate one. The only new thing is the Priority popup's and the screensaver.

Bugs Fixed:

In v1.3

- Fixed major Event Log bug that caused lots of hassles for new and old users. (Thanks for your help everyone! PM, DR, BJ)
- Fixed alarm panel nuisance that also caused hassles for a lot of people (BJ, thanks)

Features Added and Changes Made to the:

Whole Application

- Added a screensaver hook.
- Allowed Notepad's page scrollers to be continuous.
- Put in a Priority PopUp in Overview and removed the Show Invisible button in Preferences. This is a much cleaner way to show event priorities.
- Fixed the CP button of Calculator.

Manual

- Fixd numerous bugs introduced by 1.3 and prior.
- Removed all references to the Crash Editor. It still exists, but I never use it and haven't heard anyone ask me how to use it, so I assume no one is using it, therefore it will become a secret function.

Coming up in future versions....

I can't hope to implement ANY of these features unless I have user support. The users who sent in their ShareWare payments for version v0.9 and the help from NeXT, Inc. were the main motivation for me to continue work on Cassandra for this version. Since NeXT is including the Date application in System 2.0, I do not know how much longer I will continue to support Cassandra as much as I have had in the past. ShareWare payments will help me get a bit more motivated. Fan mail also helps a lot too.

• Split Events into "Events" and "Reminders".

• Allow users to select what format (Daytimer (tm), etc.) they want for the print option.

• Make daily and monthly Overview windows with clickable parts, nice and organized schedule lines, etc.

• Totally rewrite the event database manager using a typed-tag system for extensibility and compatibility, make more options for recurring events (like every second Tuesday, etc.). HOWEVER, this means that compatibility between the new version and the old version will be lost and a one-way conversion program will have to be written... This will be done entirely in memory, so expect a tremendous increase in speed.
Actually, since I now have compression of the event database and rewrote it a little bit to allow for some extensibility, I don't know if I'm going to rewrite the whole thing after all. Need some more time than I have....

• Record sounds directly into Cassandra. This is REALLY ESSENTIAL, but I keep not having enough time to program it in. It's a pain mostly because of recurring events.... sigh.

• **SPEED, FUNCTIONALITY, AND AESTHETIC BEAUTY.**

Changes from Version 1.2 to 1.3

Dec 1, 1990

General Notes

This was released generally so that I could have a System 2.0 compliant application. No major changes were made, that's why I haven't changed the major revision number. I needed an online Calculator, got fed up with bc(1), so that's why there's a new calculator object. It doesn't do anything fancy, so please don't get on my case about it. I'm also getting busier and busier..... urrghh......

Bugs Fixed:

In v1.2

- Months that had six weeks had their sixth week chopped off. (AF)

Features Added and Changes Made to the:

Whole Application

- Added a rudimentary Week Overview panel. I needed this one so I added it, but found out I really loved it so I'm adding more frills to it as I go along.

- Added a braindamaged four-function + some calculator. Nothing earthshaking about it. Couldn't get the CP function to work in time for this release, so it is disabled. Sorry.

- Added rudmimentary print functionality to most main windows. Still not enough and still not in the proper format (I want it so that it'll print out pages I can stick in my DayTimer.™)

- Caused a drastic speed increase by using Mach memory streams instead of UNIX temp files for my queue displays. Folks, if you want speed, use all the little things that Mach and NeXT give you, it will really make a difference.

- Added compression and a bit more extensibility to the Event database, maybe I won't have to rewrite it after all...

- Renamed menu selections yet again, this time should be for keeps, unless NeXT changes their API or UI specs again.

- Recompiled for System 2.0. This gives me a lot of nice features such as rulers and spell checking in the Text panels. Hope you folks enjoy them too.

- Remade Cassandra ShareWare. This is to help justify putting so much effort into it with negative returns.

Changes from Version 1.1 to 1.2

August 13, 1990

General Notes

This took a long time to finish because I left the States halfway through it. I finished it off at Canon on their machines, but on my own time. It doesn't add anything really great except for the digital clock. I was trying to implement some niftier event handling routines – a lot of people wanted events like "Mon, Wed, Fri every 2 nd week", but I didn't have time to finish that off.

Features Added and Changes Made to the:

Whole Application

- The menu format has changed in order to match NeXT's system 2.0 interface guidelines (DG).

- The application icon can now display a digital clock along with some event info (IW).

- The Guru Editor has been renamed the Crash Editor so as to not confuse anyone about its functionality.

- The Overview panel's monthViews have been aligned horizontal with each other. I also changed a lot of the fonts to Times, including this manual's since I've found out that Serif-ed fonts look a lot nicer.

Changes from Version 1.0a to 1.1

April 1, 1990

General Notes

This is the official certified-by-NeXT-Inc. version. They wanted me to make it freely available to everyone, so it isn't ShareWare anymore. Source code is also included so that people can use it as a nifty programming example and write bigger and better programs.

Features Added and Changes Made to the:

Whole Application

- EasterWare means chocolate for everyone. Cassandra is now free and with source.

- Notepad can handle multiple pages.

- All windows now Auto-save themselves on close by default.

Changes from Version 0.9.2a to 1.0 and 1.0a

April 1, 1990

General Notes

Well, here it is: The first "Official" version of Cassandra. I was a bit hurried for time and couldn't implement a lot of the features that I wanted to, most importantly the rewriting of the Events database. That will have to wait. What I DID do, however, is rewrite all the screen routines so that they supported Rich Text Format. This allowed me to make the displays much more easier to read and allowed highlighting of special events, etc.. I also let the windows remember their positions between sessions, something a LOT of users had been asking for (but I hadn't found an efficient way to do it). I like how I do it in this version. :-)

Bugs Fixed:

In v1.0a

- The Date Up/Down buttons had somehow become interchanged. (RJ)
- The notorious 0 am bug had popped up in the display windows.

In v1.0

- Reconnected the previously unconnected ModifyEvents->ResetNextEvent menu selection. (Oops)
- Cassandra would sometimes crash if it tried to play a sound while another sound was playing.
- The last half second of an alarm sound would sometimes fade out or sound louder unexpectedly. This has supposedly been fixed. (FK)
- The volume setting in Preferences now increases logarithmically instead the mistaken linear growth. (FK)
- Overview now properly displays itself when opened. Sometimes it would "forget" to update the Date/Time field for a minute if the seconds were disabled. (RP)
- For a while, the author didn't bark when he was hit. He now barks again.

Features Added and Changes Made to the:

Whole Application

- Changed the display format of the Overview, Today, and Event Log windows so that they would display things in a much nicer, easier to read format. This was possible by changing everything to RTF format. (However, since NeXT's Text object doesn't fully support RTF, I can't do a lot of things that I would LOVE to do).
- Let the main windows (Overview, Today, Event Log, and Notepad) remember their positions and sizes between sessions. (RP, BJ, et al.)
- The Defaults Database settings *Notepad* and *EventLog* that referred to the Notepad and Event Log file have been renamed *NotepadFile* and *EventLogFile*.
- The default for *NotepadFile* and *EventLogFile* used to be *~/.cassandra.ntpd* and *~/.cassandra.log*. These have been renamed *~/.cassandra.ntpd.rtf* and *~/.cassandra.log.rtf.*
- The Alarm Panel can now be prevented from coming up by disabling the message. (Many thanks to IW who suggested this. Sorry I took so long to do it!)
- The current day is highlighted in the Overview window. (BJ, JH, IW, RP, and the whole universe).
- Due to Cornell raising their tuition 8%, the price of Cassandra has increased yet again. As always, previously registered owners do not have to repay me. Register now! (Sheesh, I sound like the U.S. army :-)

Changes from Version 0.9.1 to 0.9.2 and 0.9.2a

March 13, 1990 and March 19, 1990

General Notes

This is the version that was never to be. Some users saw the work I was doing on v1.0 and pressured me into releasing this. :-) It has major changes in the Add and Edit Event panels that make them much more user- and mouse-friendly. I also added a Today panel to see how to implement Day, Week, and Month panels properly.

Bugs Fixed:

- No bugs were reported in 0.9.1 (it WAS a bug-fix release, after all)

The following bugs in 0.9.2 were fixed in 0.9.2a

- Cassandra would crash if you hit <RETURN> on the Year Form in the Add/Edit Event Panels (BJ)
- Cassandra would crash on certain Snooze intervals (BJ)
- Cassandra did not switch to the next text field in the Snooze area as it should. (BJ)
- Volume was not restored after snoozes

Features Added and Changes Made to the:

Whole Application

- Made Cassandra a lot more mouse-friendly by letting users set the date/time/other stuff through mouse clicks alone. (JG)
- Implemented the "lock" so that two users or two instances of Cassandra can't read out of the same event file.
- Added a Today window that shows all the events for Today.
- Let users flip through the months on the Overview panel by clicking on the months.
- Renamed "Sleep" to "Snooze" (Just as it should be).

The following additions were made in v0.9.2a

- The Today window also includes tomorrow.
- You now have the option of keeping the Add Event Panel when inserting an event by holding down the COMMAND key while hitting Insert
- The appropriate forms are selected when you hit the Anniversary, Sound, Snooze buttons in the Add/Edit Event

Panels

Changes from Version 0.9 to 0.9.1

February 5, 1990

General Notes

This is more of a general bug-fix release than anything else.

Bugs Fixed:

• Fixed bug that would make Cassandra very CPU intensive if there were no events in the queue. (RP, IW)

• Fixed bug that would crash Cassandra if you typed in 0 for the hour. (RP)

• Fixed bug that reported 0 am instead of 13 am. (RP)

• Fixed bug that would highlighted wrong panel section if year was wrong.

Features Added and Changes Made to the:

Whole Application

• Cursor changes into the "system wait cursor" when: the queue updates, reading/saving the event log and notepad, and when you insert an event.

Changes from Version 0.8 to 0.9

January 22, 1990

General Notes

I retained as much of the "look and feel" of 0.8 as I could. I revised the sections that users found hard to understand or use. Overall, I just added a lot of minor improvements to a lot of places and no major ones.

Bugs Fixed:

• Fixed minor bug in the Add Event and Edit Event panels. It thought mistakenly that 1300 hours (24hr time) was 13am, rather than 13pm.

•®Weekly and daily events were handled improperly over the end of a year, large values, etc.. "Sleep" over day and month breaks also repaired.

• The month calendars now roll over properly with new months. (No overlap)

Features Added and Changes Made to the:

Whole Application

• Cassandra 0.9 is now ShareWare.

• Made windows and panels on the whole much smaller. People had complained they were too large. I was designing the screen for the elderly and sight impaired people with NeXT's, the silent majority... (BJ) Also, reduced the fonts size of the manual.

• Allowed the user to change the screen fonts via the defaults database.

• Put verify panels on both the Quit selection from the main menu and the Guru preference on the Preferences panel.

• Optimized all screen and alarm routines with super-high-tech hacks that let Cassandra stay in the background very quietly. (Stealth programming technology.)

• Users can now select where the .cassandra, .cassandra.log, and .cassandra.ntpd files are stored using the defaults database or command line options.

• Main menu now follows NeXT user interface layout prescriptions.

• Buttons are now labeled with their function, as prescribed by the NeXT user interface.

• Added a check for backlogged events when launched. Cassandra will ask if you want to ignore all events from yesterday back.

• Coordinated ticking of analog icon clock with overview digital one. Sometimes they would annoyingly get out of synch.

• The defaults database is now handled more efficiently and intuitively.

Windows and Panels

• Added the notepad so I could jot down implementation notes.

• Added the choice of having the seconds ticking on the main Overview display as well as on the clockface for the application icon.

• Added an "Open Overview on Launch" feature instead of having the Overview open automatically. Some users found it annoying. (BJ & IW) Also, added an "Open Notepad" and "Open Event Log."

- Added a **Reset button** to the Event Editor, so now you can reset or cancel any event at will.
- Added a time/date line in the Add and Edit Event windows, to verify entry of dates by users.
- Added **Save** and **Revert** buttons to the Preferences panel.
- Added highlighting (rudimentary) of high priority events.
- Added Save and Close buttons to the window menu. All windows respond to close. Preferences, Event Log, and Notepad respond to save.
- Added shorthand notation for am/pm and dates.
- Added miniwindow icons for Notepad, Event Log, and Overview.
- Made the Add Event Panel a window, so now it has a close box. Removed the **Abort** button. (IW)
- Checks inserted events for proper dates and times and warns if date is in the past. (BJ)
- Overview is now resizable. (JHR)
- Log window, Notepad, and Preferences now follow NeXT guidelines on changing their close button icon when modified and saved.
- Add Event and Edit Event check to see if the sound exists when entering.
- Windows check themselves on close or quit and ask the user if she or he wants to save them.
- Preferences is now expanded and smarter and properly handles the global characteristics of most of Cassandra. The rest can be accessed through the defaults database. (Section 4.4.1)
- Put it a logical way of spacing out events in the Overview so it wasn't so cluttered up. Also, spaced events out in the log so they wouldn't get cluttered up too.
- The story of Kassandra is (slightly) less sexist. Sorry folks, the Greeks were sexist...

Section 7.0

Copyrights, Disclaimers, Credits, Trademarks, and other fun stuff

Copyright: (in marvelous 8 point)

Disclaimer: (in 8 point too)

In the event (no pun intended) that Cassandra or associated programs damages the hardware or software or hinders the user in anyway possible including but not only earthquakes, floods, electrical storms, fires, volcanoes, Klingons, dogs, cats, Black Knights, or Photon torpedoes, the author and all associates of him are not liable for anything. The author works for himself and solely himself. Cornell University is not represented or involved in any way for his actions, spiritual, mental, physical, metaphysical, metamental, or metaspiritual.

The program is distributed "as is" because it cannot be distributed "as it is not," except if it were VaporWare. This program's suitability for any specified purpose is pure supposition and marketing hype. If it does not live up to its unsaid or said promises, then that is the user's fault for being so gullible. The author is not bound to fix bugs if any exist (Bugs? In MY PROGRAM? NAAAH), nor to provide updates, nor provide any user support, even though he most probably will, this means he doesn't have to.

Credits:

Many thanks to the following people:

- Philip Mimaki & Wayne K. (original Apple beta testers)
- Robert Ringrose (NeXT 0.7 alpha tester)
- Edward Jung (a true Hacker and NeXT guru)
- Bryce Jasmer (NeXT 0.8 beta tester and source of many suggestions)
- John H. Reppy (lots of great programming advice and support)
- Roger Jagoda ((used to be) NeXT tech. support at Cornell)
- The following great people at NeXT:
  - Ali Ozer
  - James Higa
  - David Grady
  - Peter Karnig
  - Curtis Sasaki
  - Ron Weissman
- The following folks at Canon
  - Sakamoto-san
  - Kawamura-san
  - Arthur Kyle
  - Munekuni-san
- Cornell for stressing me out so much.
- All the folks at Risley.

Trademarks:

ShareWare Concept:

This version of Cassandra is ShareWare. What does that mean? Under my interpretation, it means that you are free to copy and distribute it as much as you want. **This is not public domain software**, I retain all the rights. If you use Cassandra for more than a reasonable "testing" period (no more than - say - one month), you have purchased Cassandra and are now morally (and legally) obliged to pay me for it. But morals and lawyers (yuck) aside, it'd be great if you paid.

You are most probably asking yourself, "Why should I pay? There's no way he's going to find out." True, true... there is no way.... But consider this. I am a foreign undergraduate slaving away at Cornell. I don't have much money and I program as much for fun as to put food on my table. You also get many tangible benefits from paying. You get information on updates and bug-fixes. You get to phone me at all unreasonable hours of the day. You get information on other programs that I will write after this one, etc. etc....

If you like Cassandra, use it and are feeling in a generous mood, please fill out and send in the registration and payment form on the next page along with a check or money order. If you have any questions or comments on Cassandra, send e-mail (NeXTMail) to Jiro Nakamura at:

jiro@shaman.com	(Internet)
...uunet!shaman!jiro	(UUCP)

Section 8.0

Cassandra Registration and Payment Form

Please fill out this form and send it with a check for "Jiro Nakamura" to:

Jiro Nakamura
301 Maple Ave, D-3
Ithaca, NY 14850
USA

if you want the latest version of Cassandra, include a 3.5" diskette and a self-enclosed, self-addressed, envelope. Don't forget the SASE or I'll keep the diskette!!!!!

Name: ____________________________________

Institution: ____________________________________

Address: ____________________________________

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Email: ____________________________________

Phone #: ___________________ **Fax #:** __________________

Comments: ____

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