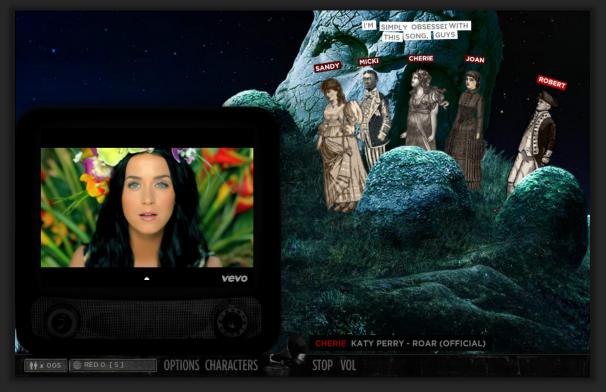
SCREENSHOTS







BUGFIXES

- THE K-TRICK. If your name was starting with a "K", you could turn invisible to others by changing your character to the King character. It would let users spy on each other with impunity: since the spy was invisible, blocking was not possible. Other letter/character combinations were also found. This bug used to be caused by passing the user info string to the anti-profanity content filter as a whole, without first splitting it up with "//" separator. It would result in the character name of the user containing symbols ("#", "%" etc.) as seen by the clients of other users, which, in turn, would result in other clients trying to load a nonexistent character after unloading an existent one.
- BROKEN TEXT. If your text message had a "<" at the beginning, it would not be seen by others after sending it. Instead, others would see empty speech bubbles repeatedly coming out of your mouth, without ever stopping. Saying something else would not help, your messages would be seen to you, but to you only. Confused users had to refresh page or change character to make it stop. While being relatively rare to occur spontaneously, the effects of this bug were highly popular among spammers. This bug used to be caused by "<" interfering with the internal XML format of messages.</p>



WINDOW & FULL SCREEN

■ WINDOW SIZE LIMITATIONS. Opening the Universe in a browser would produce black bands on both sides of the browser's window if the display resolution was higher than about 2000 pixels in width and the window was maximized. The footer would not catch up either. The new Universe puts limitations on the maximum windows size as well as the minimum size. These sizes are 1920×1920 and 610×610 pixels respectively. The initial size of the window is 1280×768.



The '07 Universe as it appears in a browser running in a maximized window on a 2560×1600 display

■ FULL SCREEN. With the "Full Screen" and "Always Open in Full Screen" options in the Options menu, the user can toggle the full screen mode or tell the Universe to enter full screen automatically every time the Universe is opened. While in full screen mode, the user can alternatively exit the mode by pressing the Esc key. If the display resolution is higher than 1920×1920, the two options are omitted from the menu.

CHAT BOX IMPROVEMENTS

- AUTOFOCUSING. If you were one of those people who had to keep the keyboard in sight while typing, you would be recurrently annoyed by the chat box in the '2007 Universe not catching your input. Doing anything outside the chat box or switching between windows would remove the focus from the chat box, and if you were trying to respond quickly to something that was going on around you, you would find yourself having to click the chat box to light it up and then retype a good part of your message. Even users with touch type skills would be occasionally irritated by this as it was not too easy to always remember to make sure that the chat box is lit up before starting to type. The new chat box, however, captures the typing and obtains focus automatically whenever the user starts typing with a letter or digit. And not just a letter that belongs to English, but virtually any letter from all the supported languages.
- CHARACTER REMAINS STILL WHILE EDITING TEXT. If you were typing a message and wanted to alter anything in the previously typed text or add new text, you would intuitively try to use the left arrow key to move the cursor backwards in order to make the changes. In the '2007 Universe, this would often effect in turning away from your interlocutor and then walking elsewhere for no apparent reason while in the middle of a conversation. This is no longer the case with the new chat box.
- CHAT BOX IS NOT BLOCKED BY OTHER UI ELEMENTS. With the new chat box, it is possible for the user to resize the window to the smallest possible size without the chat box getting blocked by other UI elements that are located on the footer. This is to be appreciated by users who would have other windows opened alongside.
- **FULL-FLEDGED SPELL CHECKER.** This is covered in the Spell Checker section.

MISCELLANEOUS IMPROVEMENTS & FEATURES

- No JUGGING ON CHARACTERS. Either with or without rendering quality set to "HIGH", characters in the '2007 Universe would appear with jugged edges and jugged inner graphics. It was especially noticeable while the character was moving. In the new Universe, characters, name boxes, and speech bubbles appear anti-aliased.
- PERMANENT BLOCKING. In the new Universe, a misbehaving user does not get unblocked after he or she re-enters the Universe. Blocked IPs are stored in a shared object in an encoded form.
- LAST USED CHARACTER IS NOT FORGOTTEN. By default, the new Universe restores the last used character when the user launches the application. This behavior can be changed by unchecking "Remember My Character" in the Options menu.
- SHARING URLS AND EMAILS WITH EASE. When a user says a URL or an email address in the new Universe, it becomes a clickable link. The text of an overly long link is shortened to avoid line breaking.

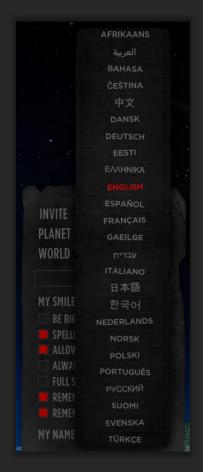


Internationalization & Retina Displays

The new Universe increases the number of potential users by dozens of millions through adding support for 24 more languages, including Japanese, Korean, Chinese, and two languages with right-to-left writing system, Hebrew and Arabic. The choice of European languages was influenced by the probable number of Apple users in each of the countries.

The chat box, each of the characters, and the hierarchy of the Universe were all touched by the internationalization. A user can interact in English with a user on the left and, at the same time, in Korean with another user on the right, or the user can travel to the world intended specifically for Korean-speaking visitors. Messages in left-to-right and right-to-left writing systems can follow one another and are displayed correctly regardless of the current world.

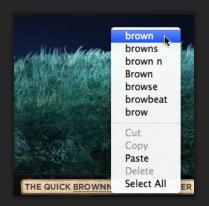
With the aim of ensuring text readability on high-resolution displays, such as Retina, the new Universe is using a larger font size for both the chat box and speech bubbles. Therefore, the chat box is higher and wider and characters are slightly larger to maintain the proportions.



Taking into consideration high-resolution displays and to convey all the details in graphemes, the text size in the Japanese, Korean, and Chinese worlds is significantly larger compared to the worlds of the Latin-based languages. The text size in the Hebrew and Arabic worlds is larger too, but not as much.

SPELL CHECKER

The chat box in the new Universe enjoys a spell checker, which supports 5 languages: English, Spanish, Portuguese, French, and Italian. Misspelled words are underlined and, when the user right-clicks on an underlined word, suggested replacements appear in a system context menu. Common internet slang words are included for all the dictionaries. The cursor is automatically moved to the end of the typed text after the text gets edited with a suggestion.



VIDEO PLAYBACK & BROADCASTING

In the new Universe, users can browse videos, play videos, and broadcast videos to surrounding users. This was made possible by integrating with the YouTube video service (AS3 API).

The TV appears automatically when the user starts playing a video and disappears when the video has finished playing or was stopped. When a video starts playing or when the user hovers the pointer over the phonograph icon while a video is being played, the title of the video appears. The TV, the



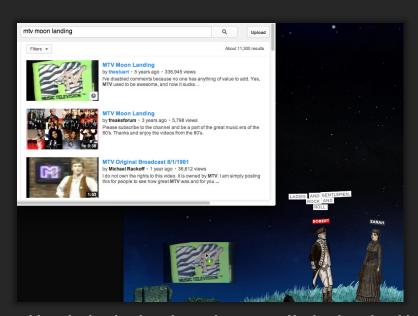
Options menu, and the Characters menu do not overlap each other.

By typing "PLAY" in the chat box and then a video search query, the user can browse for the relevant videos or start playing the most relevant one by hitting the Enter key. The search query can be in any of the supported languages. The last played video as well as



the last used search query are not forgotten. The last played video can be replayed with "REPLAY". When the user types just "PLAY" followed by a space, the video browser appears containing the results for the last used search query for the user to try a related video.

When the user wants to play a video he or she found in a web browser, it can be done by copypasting the URL of the video into the chat box or by dragging the URL into the Universe's window. Or more easily, a video can be started by dragging in the thumbnail of the video from YouTube search results or Google search results.



Whenever the user is about to play a video via the chat box, he or she can specify the time the video should start from by adding "FROM" to the text and then typing the starting time in either MM:SS fashion or just as seconds.

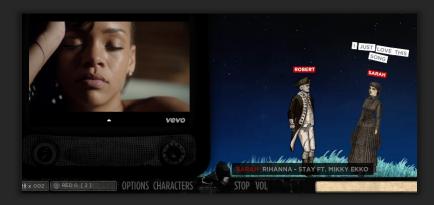
The video playback help tips, that appear when the user hovers the pointer over the phonograph icon while no video is being played, summarize most of the ways to start playing a video:

DRACIN A VIDEO THUMBNAIL OR A URL, PASTE A URL, OR TYPE PLAY STEAMBOAT WILLIE REPLAY REPLAY FROM 0:30 REPLAY MINE «VIDEO URL» FROM 0:30 PLAY STEAMBOAT WILLIE FROM 4:30 REPLAY FROM 270 STOP. VOL

Listening to a music track or watching a video is not a solitary experience. A user who is playing a video also broadcasts that video to any nearby users. Users who happen to be in the vicinity of a broadcasting user and who do not play any videos at the time pick up the broadcasted video. Videos are played synchronously with a precision close to or less than 1.5 seconds. The closer a receiving user is located to the broadcasting user, the higher is the volume at which the broadcasted video is played for the receiving user. If a receiving user leaves a certain radius, the TV disappears but the video continues playing in the background for a maximum of 15 seconds for the purpose of quick renewal if the two users get closer again.

To indicate that the video is played at its original volume, the name box of the broadcasting user gets

fully saturated when a receiving user enters the full-volume radius; the broadcasting user sees receiving users in the same way. In addition to the title of a video being received, the phonograph icon's pop-up also tells who the broadcasting user is.



To preclude spamming, a user cannot interrupt a video being played by a nearby user unless that video was started by the user who wants to play another video. Blocked users cannot broadcast videos and a video that is being received is stopped automatically if the broadcasting user gets blocked.

An infinite selection of music tracks, music videos, comedy videos, movie clips, internet personality blogs, news, celebrity videos, documentaries, movie trailers, and millions of other videos become available as a new and engaging means of interaction. Nearly 100% of iTunes' top rated music is usually available on YouTube on any given day, as well as countless numbers of full-length episodes of popular TV shows and cartoons.

LINKS & NOTES

PREVIEW VERSIONS OF THE ADOBE AIR APPS THAT ARE CURRENTLY AVAILABLE FOR THE DESKTOP PLATFORM:

Mac: https://s3.amazonaws.com/reduniverseapp/Universe-Mac.zip Win: https://s3.amazonaws.com/reduniverseapp/Universe-Win.zip

A PREVIEW VERSION OF THE WEB PAGE THAT PEOPLE WOULD BE SHARING ON FACEBOOK AND TWITTER VIA THE BUILT-IN SHARING OPTIONS:

http://207.210.201.38/aj5gth2xmt1v/



 A PREVIEW OF THE '2007 UNIVERSE WEB SITE THAT WOULD BE RUNNING IN PARALLEL: http://207.210.201.38/fanuniverse/

How to let multiple instances of an AIR app run on a single machine:
Mac: After making a copy of Red Universe.app, in Red Universe.app/Contents/Resources/META-INF/AIR folder, open application.xml file, and alter the value of the <id> element.
Win: In Red Universe.app\META-INF\AIR folder, same as above.

 For various purposes, the app implements the user dialog, which can be previewed by entering the following into the chat box:
!SHOWDIALOG

THE APP RELIES SOLELY ON THE SOURCE CODE LOCATED IN THE PUBLICLY AVAILABLE SWF FILES.