Claims

1. An apparatus comprising a plurality of independent physical computer systems arranged to cooperate to implement a virtual computer system,

the virtual computer system being arranged to communicate with multiple video display devices each of which has at least one screen, the video display devices having predefined relationships with a plurality of users whereby each of the users is associated with a respective sub-set of the display devices, and at least one of the respective sub-sets of display devices comprises a plurality of display devices;

the virtual computer system being arranged to communicate with a plurality of databases storing media content, and to deliver the media content selectively to the video display devices,

the virtual computer system being arranged to perform, for each said user, a respective process referred to as a cloudclone,

each cloudclone including:

respective threads for each of the corresponding sub-set of video display devices, which manage the transfer of media content to the corresponding sub-set of video display devices;

one or more applications which obtain media content from at least one of the databases; and

an inter device message bus which transfers content from the one or more applications selectively to the threads.

2. An apparatus according to claim 1 for which, when for one or more of said users there are a plurality of said display devices in the corresponding sub-sets of display devices, each of the corresponding cloudclones run a respective computing thread for each of the display devices in the respective sub-set of display devices, each of the threads mimicking processes running on the corresponding display device.

3. An apparatus according to claim 1 in which each of the cloudclones is performed by a respective sub-set of the plurality of independent computer systems which are associated pairwise by key data contained in the cloudclone, and which include computer systems which communicate with the corresponding sub-set of display devices.

4. An apparatus according to claim 1 in which the key data for each cloudclone associates the respective sub-set of the independent computer systems as a respective distributed-hash-table ring.

5. An apparatus according to claim 1 in which the virtual computer system is arranged to operate as a plurality of layers, comprising:

a media cloud infrastructure layer;

a media service platform, relying upon the media cloud infrastructure layer, and comprising a library of tools;

a media application layer, relying upon the media service platform, and providing services visible to the users.

6. An apparatus according to any preceding claim which is operative to modify any of said cloudclones to add a new display device to the corresponding sub-set of display devices, by initiating a corresponding thread within the cloudclone.

7. An apparatus according to any preceding claim which is operative, when the message bus of a cloudclone is streaming content to a first of the corresponding sub-set of display devices, to perform a first session migration operation of modifying the operation of the message bus to begin to stream the content to a second of the sub-set of display devices.

8. An apparatus according to claim 7 in which during the first session migration operation, the streaming of the content to the first display device is interrupted;

the apparatus further being operative to perform a second session migration operation in which the apparatus ceases streaming the content to the second display device, and recommences transmission to the first display device.

9. An apparatus according to claim 7 which is operative to simultaneously stream multiple sessions to the first display device for simultaneous display in respective regions of the screen of the first display device, and to transfer a selected one of the session to the second device in the first session migration operation.

10. An apparatus according to claim 9 in which the second display device is configured to display on its screen an image including a plurality of regions, the regions corresponding to the respective sessions on the first display device, and the selection is by selection of the corresponding region of the screen.

11. An apparatus according to claim 10 in which the image is obtained by image capture from the screen of the first display device.

12. An apparatus according to claim 10 in which the image is generated by the virtual computer system based on data in the cloudclone.

13. An apparatus according to any of claims 7-12 in which the virtual computing system receives a trigger for one of the session migration operations in the form of a signal indicative of motion of one of the display devices.

14. An apparatus according to any preceding claim wherein each cloudclone includes one or more applications,

each application being associated with one or more of the corresponding sub-set of display devices, mimicking an application running on the one or more display devices, and controlling the presentation of content on the one or more display devices.

15. An apparatus according to any preceding claim in which the cloudclone is operative to access predefined social data which for each of first ones of the users defines a corresponding set of second ones of the users;

the apparatus being operative based on actions by each first user to modify media content delivered to at least one of the display devices associated with the corresponding set of second users.

16. An apparatus according to claim 15 in which is operative to modify the cloudclones of the second users to receive a video stream which is selected by the first user and simultaneously streamed to the first user.

17. An apparatus according to claim 15 in which is operative to modify the cloudclones of the second users to receive a video stream which is pre-selected by the first user.

18. An apparatus according to claim 15 which is operative to receive from each first user a selection of images from content streamed to the first user, and to make the selected images available to the corresponding set of second users.

19. An apparatus according to any of claims 15-18 which is operative to receive text input from the first user, and display the text input to the second users.

20. A method for performance by a plurality of independent computer systems arranged to cooperate to implement a virtual computer system, to deliver media content to multiple video display devices each of which has at least one screen, the video display devices having predefined relationships with a plurality of users whereby each of the users is associated with a respective sub-set of the display devices, and at least one of the respective sub-sets of display devices comprises a plurality of display devices;

the method including performing, for each said user, a respective process referred to as a cloudclone;

each cloudclone including:

respective threads for each of the corresponding sub-set of video display devices, which manage the transfer of media content to the corresponding sub-set of video display devices;

one or more applications which obtain media content from at least one content database; and

an interdevice message bus which transfers content from the one or more applications selectively to the threads.

21. A method according to claim 20 further including modifying the message bus thereby causing video which is being streamed to a first of the corresponding sub-set of display devices to be streamed to a second of the corresponding sub-set of display devices.