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(54) **VIDEO CONTROLLED VIRTUAL TALK GROUPS**

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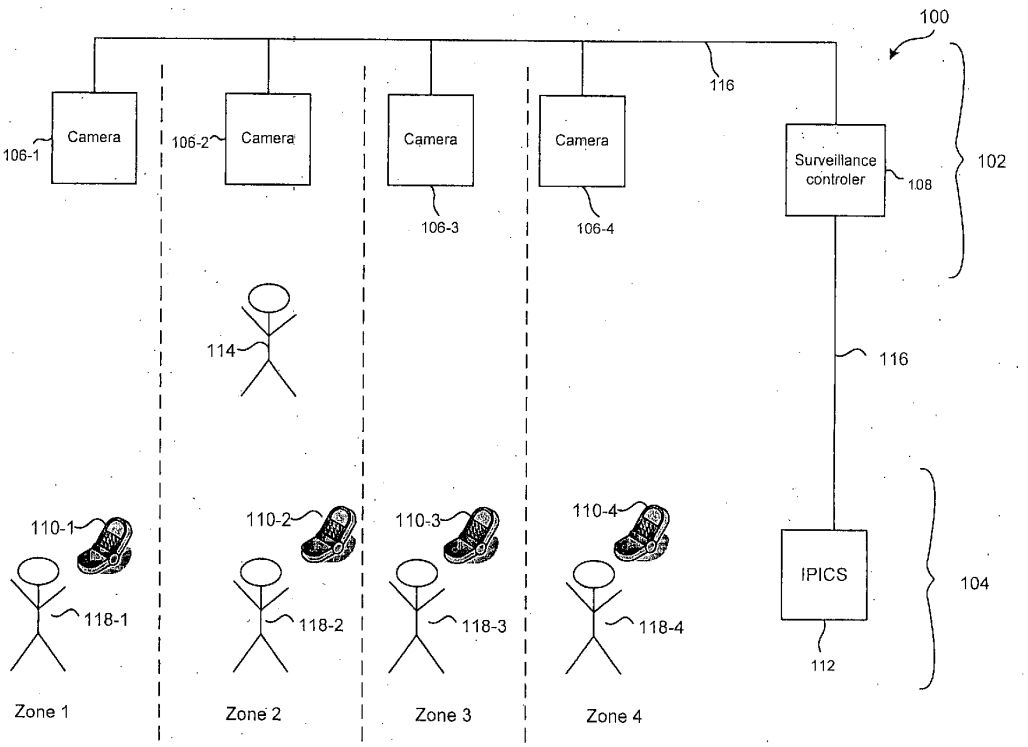
(57) **ABSTRACT**

In one particular embodiment, surveillance information is determined from a surveillance system. The surveillance information provides information on an event being monitored by the surveillance system. It is determined if a virtual talk group should be created for the event. If so, the virtual talk group is created such that a plurality of users in the virtual talk group can communicate with each other in the virtual talk group.



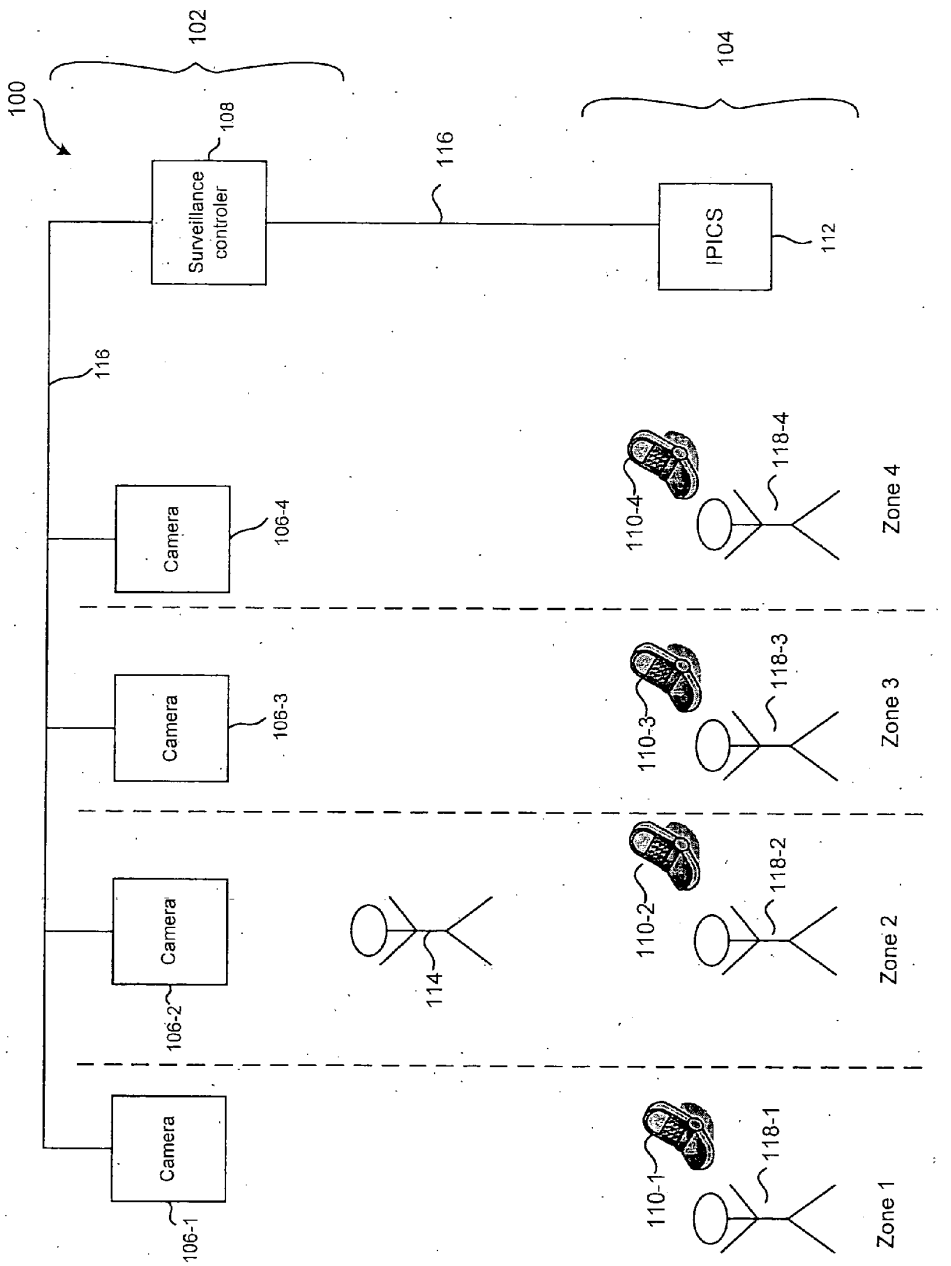

100
102
104
108
Surveillance controler
116
IPICS
112
Camera
106-4
106-3
106-2
106-1
110-4
110-3
110-2
110-1
118-4
118-3
118-2
118-1
114
Zone 4
Zone 3
Zone 2
Zone 1

Fig. 1

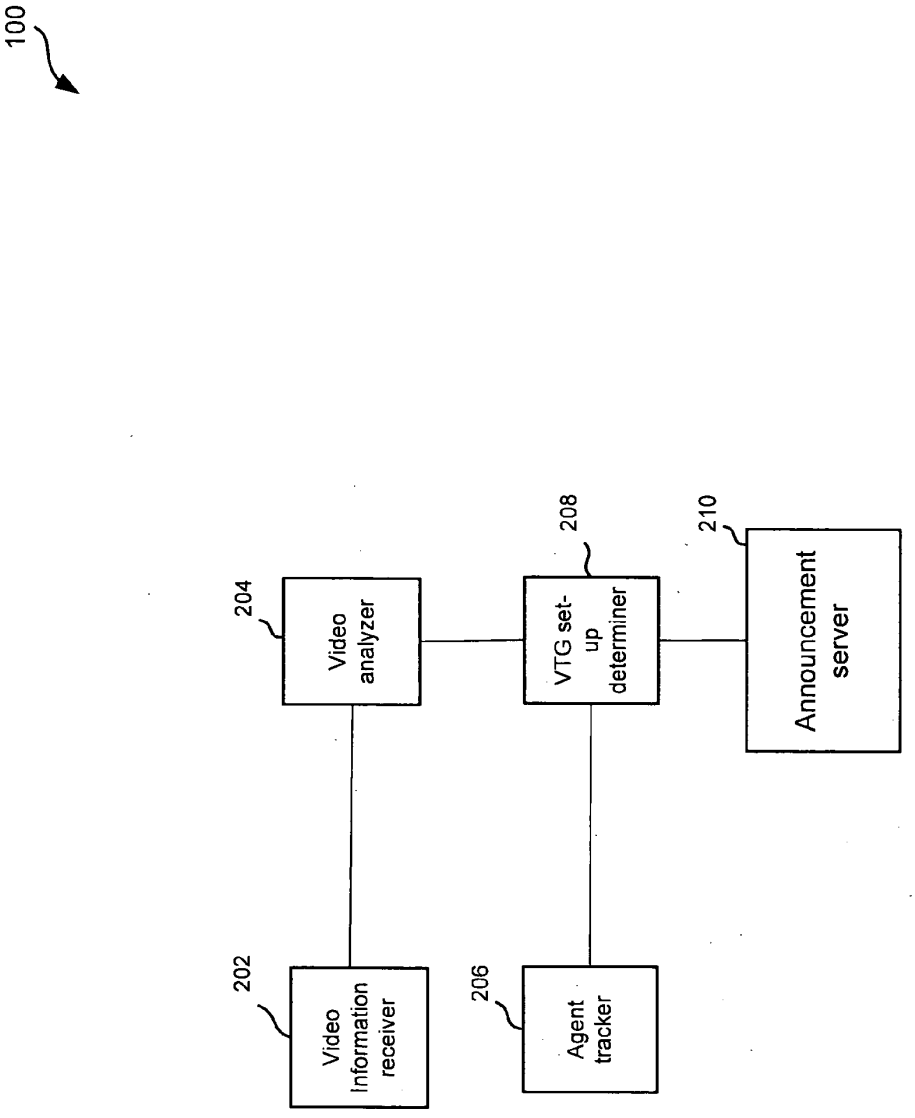

100
204
Video analyzer
208
VTG set-up determiner
210
Announcement server
202
Video Information receiver
206
Agent tracker

Fig. 2

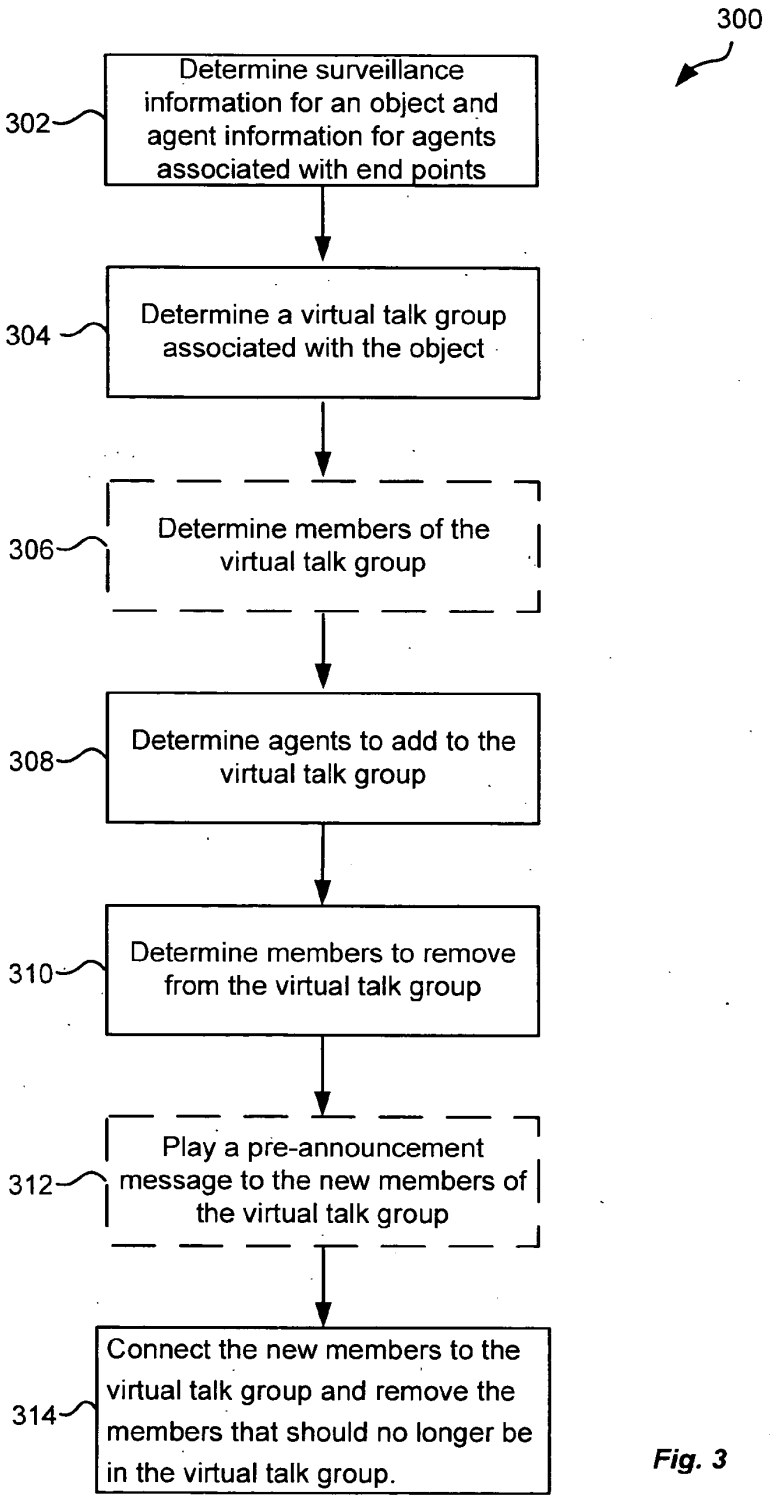

300
Determine surveillance information for an object and agent information for agents associated with end points
302
Determine a virtual talk group associated with the object
304
Determine members of the virtual talk group
306
Determine agents to add to the virtual talk group
308
Determine members to remove from the virtual talk group
310
Play a pre-announcement message to the new members of the virtual talk group
312
Connect the new members to the virtual talk group and remove the members that should no longer be in the virtual talk group.
314

Fig. 3

VIDEO CONTROLLED VIRTUAL TALK GROUPS

TECHNICAL FIELD

[0001] Particular embodiments of the present invention generally relate to telecommunications and more specifically to using video surveillance information to manage virtual talk groups.

BACKGROUND

[0002] Video surveillance systems are deployed to combat security threats. For example, a video surveillance system may track an object, such as an individual, who may be roaming around a premise. An image of the object is then transmitted from cameras to a control center.

[0003] In the control center, a dispatcher may monitor the object on the surveillance system and communicate with other personnel/agents that are on the premises to tell them where the object is. For example, a dispatcher may contact various security personnel who are closest to the object and tell them where the object is moving and where to go. This is a manual process that may take valuable time in determining which agents to contact. Further, the dispatcher also has to determine where the object is moving to guide the agents. As an object is moving around to different areas, it becomes even harder coordinating different agents that may be in different areas.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] FIG. **1** depicts an example system for managing virtual talk groups using surveillance information.

[0005] FIG. **2** depicts a more detailed example of the system in FIG. **1**.

[0006] FIG. **3** depicts a simplified example of a method for connecting users to a virtual talk group.

DESCRIPTION OF EXAMPLE EMBODIMENTS

Overview

[0007] In one particular embodiment, surveillance information is determined from a surveillance system. The surveillance information provides information on an event being monitored by the surveillance system. It is determined if a virtual talk group should be created for the event. If so, the virtual talk group is created such that a plurality of users in the virtual talk group can communicate with each other in the virtual talk group.

Description of Example Embodiments

[0008] FIG. **1** depicts an example system for managing virtual talk groups using surveillance information. As shown, a video surveillance system **102** and communication system **104** are provided. Video surveillance system **102** includes one or more cameras **106** and a video surveillance controller **108**. Communication system **104** includes one or more end points **110** and an IP interoperability and collaboration system (IPICS) **112**

[0009] Cameras **106** may be any devices that can provide video information of an object **114**. Video information may be any information about an object that is recorded and is not limited to just video. For example, video, images, audio, etc. of object **114** may be sent back to video surveillance controller **108**.

[0010] Cameras **106** may be organized into zones that each camera monitors. For example, zones **1-4** may be monitored as shown in FIG. **1**.

[0011] Although cameras **106** are described, it will be understood that cameras **106** may be any information collection devices that may provide video information to video surveillance controller **108**. For example, cameras **106** may be audio recording devices that record sounds emitted from object **114**. Further, cameras **106** may include infrared lasers that record when a beam is broken. A person skilled in the art will appreciate other devices that may be used. For discussion purposes, cameras are discussed but it will be recognized that cameras may be any information collection devices, or combination thereof. Further, although video information is discussed, it will be recognized that any type of information may be provided by cameras **106**.

[0012] Cameras **106** send the video information to video surveillance controller **108** through a network **116**. Network **116** may be any network, such as a local area network (LAN), wide area network (WAN), etc. Network **116** may be a wireless or wire-line network that may send analog and/or internet protocol (IP) information. For example, the communications may be over an IP network; however, other communication may be used including over proprietary communication links.

[0013] Video surveillance controller **108** then uses the video information to determine the surveillance information to provide to IPICS **112**. The surveillance information may be analytic information determined for object **114**. For example, the surveillance information may be a location, facial features, clothing colors, backpack, luggage, or any other related information for object **114**. Each camera **106** may monitor various zones or areas. A person skilled in the art will appreciate surveillance systems and how they operate. As object **114** moves through each zone, it appears in video transmitted by different cameras **106** video surveillance controller **108** over network **116**. Video surveillance controller **108** employs known video analytics algorithms to extract the features of the object **114** and determines the location information for object **114**. For example, if object **114** moves from zone **2** to zone **3**, video surveillance controller **108** using video analytics algorithms may determine that object **114** is in zone **3** because an image of object **114** has been transmitted by camera **106-3**, which is in zone **3**, and also may be moving towards zone **4**. In one particular embodiment, the surveillance system may detect when the object **114** drops any sub-object such as his backpack.

[0014] Communication system **104** includes a plurality of end points **110** that can communicate with IPICS **112**. End points **110** may be any communication devices, such as cellular phones, personal digital assistants (PDAs), push-to-talk devices, laptop computers, devices with instant message (IM) clients, etc.

[0015] End points **110** may be associated with various users **118**. Users **118** may be security agents/personnel for a premises being monitored using video surveillance system **102**. As used, agents, users, and personnel may refer to the same entity/entities. In one particular embodiment, users **118** may be situated in various zones. For example, each user may be assigned to monitor a specific zone, such as user **118-1** is in zone **1**, user **118-2** is in zone **2**, etc. However, users may also roam thus requiring a determination of a location where users **118** are located.

[0016] IPICS **112** may be any network device configured to manage communications with end points **110**. IPICS **112** may communicate with end points **110** through any network, such as a local area network, wide area network, cellular network, the Internet, an intranet, extranet, public switch telephone network (PSTN), or any other wireless or wireline communication network. For example, the communications may be over an IP network; however, other communication may be used including over proprietary communication links.

[0017] IPICS **112** is configured to create and manage virtual talk groups (VTGs). A virtual talk group may be any group in which members of the group may communicate with each other. For example, a virtual talk group may be formed with three members using devices **110-1**, **110-2**, and **110-3**. Users using end points **110-1**, **110-2**, and **110-3** may communicate with each other in the virtual talk group. Because in this example end point **110-4** is not included in the virtual talk group, a user associated with that end point cannot communicate in the created virtual talk group. Other users **118** (not shown) may also be added by IPICS **112** and included in the specific VTG.

[0018] Particular embodiments of the present invention determine if an event in the surveillance information requires creation of a virtual talk group. For example, a person leaving an object or passing an object to someone else, violation of e.g., traffic light, or carrying e.g., a gun in a place where it is prohibited, etc. may be events that cause creation of a virtual talk group. Although object **114** is used as triggering creation of a virtual talk group, it will be recognized that any event may trigger creation of the virtual talk group object (animate or inanimate) may be monitored. For example, IPICS **112** creates a virtual talk group that is used by users to communicate with each other about object **114**. As conditions change (e.g., object **114** moves to different locations), different users **118** may need to be communicated with while other users **118** may not be needed anymore (e.g., because they are too far away, etc.). Particular embodiments automatically manage a virtual talk group associated with object **114** and add or remove users **118** as needed based on certain conditions and pre-programmed policies.

[0019] Accordingly, IPICS **112** receives the surveillance information from video surveillance controller **108** determined based on the video analytics and is configured to dynamically determine members for a virtual talk group. If a virtual talk group already exists for object **114**, then IPICS **112** may decide to add members to the virtual talk group, remove members, or keep the virtual talk group the same. If a virtual talk group has not been created for object **114**, then IPICS **112** may create a new one. For example, as the video surveillance controller **108** and the associated video analytics algorithm determines that the object **114** left his/her backpack and is moving away from it, IPICS system **112** in collaboration with video surveillance controller **108** may decide to create a VTG that includes the dispatcher (not shown) and users **118** from the zone. Further, it will be understood that multiple virtual talk groups may be created for object **114**. For example, object **114** may leave something in a prior zone, such as a package, and a virtual talk group may be created for the package that is in one location and a virtual talk group may be created for a person that continues to move around the premises.

[0020] In one particular embodiment, the surveillance information includes location information for object **114** and/or the direction object **114** is moving. Other information may also be appreciated. IPICS **112** may then determine which members to include in a virtual talk group based on the location information. Agent information may also be used. Agent information may be information about users **118** or end points **110**, such as the location of end points **110**. For example, if an object is in zone **2**, users **118** that are closest to zone **2** may be included in the virtual talk group. In one example, the three users **118** using end points **110** that are closest, i.e., the three users **118** associated with end points **110-1**, **110-2**, and **110-3** may be included in the virtual talk group because they are closest to zone **2**. As object **114** changes location, members may be added to or removed from the virtual talk group.

[0021] A dispatcher (not shown) may also be included in the virtual talk group. Thus, the members of the virtual talk group may communicate with the dispatcher and with each other to discuss further actions. By automatically adjusting the members in the virtual talk group according to the video analytics information and agent information, IPICS **112** facilitates communication among the members that are deemed to be the most relevant to effectively perform actions related to object **114**. This automatically helps focus the right resources on the current event and alleviates confusion by removing other users that are not required to be in communication with the dispatcher. Thus, only relevant users **118** for a specific operation are included. This is performed automatically using IPICS **112** in accordance with the pre-programmed policies.

[0022] FIG. **2** depicts a more detailed example of the system in FIG. **1**. As shown, a video information receiver **202**, a video analyzer **204**, an agent tracker **206**, a VTG set-up determiner **208**, and an announcement server **210** are provided. Although these entities are described as being part of video surveillance controller **108** and IPICS **112**, it will be understood that functions performed by any of the entities may be performed in either video surveillance controller **108**, IPICS **112**, or any other device. For example, a separate device other than video surveillance controller **108** and IPICS **112** may be used to perform functions described in particular embodiments of the present invention.

[0023] Video information receiver **202** receives the video information from cameras **106**. The video information is received over network **116**.

[0024] Video analyzer **204** is configured to analyze the video information, such as video signals and generates the relevant object related information. In one particular embodiment, video analytics algorithms are used to analyze video signals that may be provided by a surveillance system. An application programming interface (API) may be used to access component reports of the location and other related information of object **114** that is received at video information receiver **202**. A person skilled in the art will appreciate the video analytics algorithms that may be used. For example, analytics may be use to determine where an object is moving from and to. In one example, the video analytics algorithms may track object **114** and determine it has moved from zone **2** to zone **3** using video information received from camera **106-2** and camera **106-3**. If multiple objects are being tracked and analyzed, the video analytics algorithms may distinguish object **114** from the other objects. Thus, as object **114** moves throughout system **100**, video analytics

algorithms are used to distinguish the same object moving through images of video from different cameras **106**. Video analyzer **204** then sends the surveillance information to VTG set-up determiner **208**.

[0025] VTG set-up determiner **208** determines if a virtual talk group should be created based on pre-programmed policies if one has not been created before. If a virtual talk group should be created, VTG set-up determiner **208** determines which users **118** should be members of the virtual talk group based on pre-programmed policies. VTG set-up determiner **208** may use the surveillance information and agent information from agent tracker **206** to dynamically determine if a VTG needs to be established and if yes, decide on who the members of the relevant VTG should be. The agent information may be any information about users **118** of end points **110**. For example, the agent information is the location of agents in system **100**. Also, the agent information may be information other than location, such as roles, skills or capabilities of the agents with regard to equipment, network performance, security level, security experience, assignments to zones, etc.

[0026] Agent tracker **206** may continuously monitor the location of end points **110**. In one example, global positioning satellite (GPS) information may be used to track where end points **110** are. Also, other methods of determining the location of end points **110** may be used, such as information obtained from analyzing the video stream and identifying the location of the agents within each monitored zone. It is assumed that users **118** are associated with each end point **110**. Agent tracker **206** sends the agent information to VTG set-up determiner **208**.

[0027] VTG set-up determiner **208** then uses the surveillance information and the agent information to determine which members to include in a virtual talk group for object **114**. In one particular embodiment, VTG set-up determiner **208** determines a virtual talk group that has already been created for object **114**. VTG set-up determiner **208** identifies the current members of the virtual talk group. Then, any members to add or remove from the virtual talk group are dynamically determined. If a virtual talk group has not already been created, then VTG set-up determiner **208** creates a new virtual talk group.

[0028] Various policies may be used to determine which members should be included in the virtual talk group based on the surveillance information and agent information. A proximity radius may be configured. For example, the radius covered by zones pictured in FIG. **1** may be used and any agent in that zone may be included in the virtual talk group. In another particular embodiment, the closest users, such as the closest three agents, may be included in the virtual talk group with the dispatcher. Information other than location, such as roles, skills or capabilities of the agents with regard to equipment, network performance, security level, security experience, etc. may also be applied to a policy to determine the members of the virtual talk group. The policies may be dynamically applied by VTG set-up determiner **208**.

[0029] End points **110** for users are then connected to the virtual talk group. Thus, the users using these end points **110** can now talk amongst themselves in the virtual talk group. Further, as mentioned above, a dispatcher or any other relevant person may also be included in the virtual talk group. A dispatcher may then communicate information to the users on what actions they should take. In one particular embodiment, the users may use push to talk mechanisms to talk in the virtual talk group. For example, when one user wants to talk to the others, a push to talk mechanism is selected and the user can speak in the virtual talk group.

[0030] In one particular embodiment, a pre-announcement message may be provided to members that are being added to the virtual talk group. For example, announcement server **210** may be used to send an announcement to the new members. The announcement may be determined automatically from the surveillance information and/or agent information. For example, video analytics algorithms may be used to analyze the video information and provide relevant information about object **114**. In one example, the message may be: "Please pay attention to the gentleman wearing the blue hat who is carrying a green backpack. If he attempts to pass the backpack to someone else, please stop both subjects." Further, a dispatcher or a current member of the virtual talk group may record a message, which announcement server **210** can play to new members of the virtual talk group. In other examples, the recorded message may be based on presence information, network capabilities, pictures of object **114**, etc. For example, a picture of object **114** may be sent to the new members of the virtual talk group before they are added.

[0031] In one particular embodiment, a virtual talk group may be set up that includes all the new members and announcement server **210**. Announcement server **210** then plays the announcement in the virtual talk group for the new members. After the announcement is played, VTG set-up determiner **208** drops the new members from the virtual talk group with announcement server **210** and connects the new members to the virtual talk group associated with object **114**. Consequently, the new members may communicate with any other members in the virtual talk group associated with object **114**.

[0032] FIG. **3** depicts a simplified example of a method for connecting users to a virtual talk group Step **302** determines surveillance information for object **114** and agent information for users associated with end points **110**. The surveillance information may be information on the location of object **114** the direction it is moving, visual features of the object, etc., and the agent information may be location information for end points **110**.

[0033] Step **304** automatically determines a virtual talk group associated with object **114**. A virtual talk group may already have been created for object **114** or a new one may be created.

[0034] Step **306** determines members of the virtual talk group. For example, if the virtual talk group already existed, then the current members are determined. If the virtual talk group had not existed, this step may be skipped.

[0035] Step **308** determines users to add to the virtual talk group. As described above, policies may be applied to the agent information and surveillance information to determine which users to add to the virtual talk group.

[0036] Step **310** then determines members to remove from the virtual talk group. This is only if the virtual talk group already existed. For example, certain members may no longer be relevant to monitoring object **114** and thus should be removed.

[0037] Step **312** is an optional step that plays a pre-announcement message to the new members of the virtual talk group. This pre-announcement message may give some information on object **114** for the new members.

[0038] Once the pre-announcement is sent, step **314** automatically connects the new members to the virtual talk group, and also removes the members that should no longer be in the virtual talk group.

[0039] In one example, according to particular embodiments of the present invention, an object **114** may be an intruder being monitored by cameras **106**. As the intruder moves in system **100**, different cameras **106** may take video of the intruder. For example, an intruder may move from zone **1** to zone **2** to zone **3**, etc. As the video is taken, it is analyzed and it is determined that there is an intruder in the zones. The location of the intruder is determined and sent to IPICS **112** over the network **116**.

[0040] IPICS **112** then determines which agents are in the local vicinity of the intruder or otherwise required per pre-programmed policy to join the VTG associated with this event. GPS information for end points **110** that are being carried by each agent may be used to determine which agents are closest to the intruder.

[0041] In one case, this may be the first instance of seeing the intruder and thus a new virtual talk group is created with the closest members. A pre-announcement may be played indicating that the intruder is wearing a green shirt and also carrying an object. When the virtual talk group is created, the agents may be able to communicate amongst themselves in addition to other users who participate in this VTG, such as a dispatcher.

[0042] In another example, a virtual talk group may have already been created for the intruder but the intruder has moved into a different area. In this case, the video information is analyzed to determine the new location for the intruder. IPICS **112** then determines which agents should now be part of the VTG. For example, different agents may be closer to the intruder. Thus, the agents that are closest (e.g., the closest three) are added to the virtual talk group if they are not already a member. Further, if it is determined that an agent is not one of the closest three, then that agent is removed from the VTG. This eliminates confusion as to which agents are being told to do which actions. This also more accurately provides information to the best agents that can take action against the intruder. The dispatcher may then dispatch instructions to the agents in the virtual talk group. In one particular embodiment, the video analytics algorithm detects that the intruder is armed with a gun. As a result, a policy triggers the addition of other agents who are qualified to deal with the new threat.

[0043] The above process may be continuously repeated as object **114** is monitored. IPICS **112** is configured to dynamically update the virtual talk group for object **114** as conditions change.

[0044] Although the invention has been described with respect to specific particular embodiments thereof, these particular embodiments are merely illustrative, and not restrictive of the invention.

[0045] Any suitable programming language can be used to implement the routines of particular embodiments of the present invention including C, C++, Java, assembly language, etc. Different programming techniques can be employed such as procedural or object oriented. The routines can execute on a single processing device or multiple processors. Although the steps, operations, or computations may be presented in a specific order, this order may be changed in different particular embodiments. In some particular embodiments, multiple steps shown as sequential in this specification can be performed at the same time. The sequence of operations described herein can be interrupted, suspended, or otherwise controlled by another process, such as an operating system, kernel, etc. The routines can operate in an operating system environment or as stand-alone routines occupying all, or a substantial part, of the system processing. Functions can be performed in hardware, software, or a combination of both. Unless otherwise stated, functions may also be performed manually, in whole or in part.

[0046] In the description herein, numerous specific details are provided, such as examples of components and/or methods, to provide a thorough understanding of particular embodiments of the present invention. One skilled in the relevant art will recognize, however, that an particular embodiment of the invention can be practiced without one or more of the specific details, or with other apparatus, systems, assemblies, methods, components, materials, parts, and/or the like. In other instances, well-known structures, materials, or operations are not specifically shown or described in detail to avoid obscuring aspects of particular embodiments of the present invention.

[0047] A "computer-readable medium" for purposes of particular embodiments of the present invention may be any medium that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, system or device. The computer readable medium can be, by way of example only but not by limitation, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, system, device, propagation medium, or computer memory.

[0048] Particular embodiments of the present invention can be implemented in the form of control logic in software or hardware or a combination of both. The control logic may be encoded in one or more tangible media for execution to direct an information processing device to perform a set of steps disclosed in particular embodiments of the present invention. Based on the disclosure and teachings provided herein, a person of ordinary skill in the art will appreciate other ways and/or methods to implement the present invention.

[0049] A "processor" or "process" includes any human, hardware and/or software system, mechanism or component that processes data, signals or other information. A processor can include a system with a general-purpose central processing unit, multiple processing units, dedicated circuitry for achieving functionality, or other systems. Processing need not be limited to a geographic location, or have temporal limitations. For example, a processor can perform its functions in "real time," "offline," in a "batch mode," etc. Portions of processing can be performed at different times and at different locations, by different (or the same) processing systems.

[0050] Reference throughout this specification to "one particular embodiment", "an particular embodiment", or "a specific particular embodiment" means that a particular feature, structure, or characteristic described in connection with the particular embodiment is included in at least one particular embodiment of the present invention and not necessarily in all particular embodiments. Thus, respective appearances of the phrases "in one particular embodiment", "in an particular embodiment", or "in a specific particular embodiment" in various places throughout this specification

are not necessarily referring to the same particular embodiment. Furthermore, the particular features, structures, or characteristics of any specific particular embodiment of the present invention may be combined in any suitable manner with one or more other particular embodiments. It is to be understood that other variations and modifications of the particular embodiments of the present invention described and illustrated herein are possible in light of the teachings herein and are to be considered as part of the spirit and scope of the present invention.

[0051] Particular embodiments of the invention may be implemented by using a programmed general purpose digital computer, by using application specific integrated circuits, programmable logic devices, field programmable gate arrays, optical, chemical, biological, quantum or nanoengineered systems, components and mechanisms may be used. In general, the functions of particular embodiments of the present invention can be achieved by any means as is known in the art. Distributed, or networked systems, components and circuits can be used. Communication, or transfer, of data may be wired, wireless, or by any other means.

[0052] It will also be appreciated that one or more of the elements depicted in the drawings/figures can also be implemented in a more separated or integrated manner, or even removed or rendered as inoperable in certain cases, as is useful in accordance with a particular application. It is also within the spirit and scope of the present invention to implement a program or code that can be stored in a machine-readable medium to permit a computer to perform any of the methods described above.

[0053] Additionally, any signal arrows in the drawings/Figures should be considered only as exemplary, and not limiting, unless otherwise specifically noted. Furthermore, the term "or" as used herein is generally intended to mean "and/or" unless otherwise indicated. Combinations of components or steps will also be considered as being noted, where terminology is foreseen as rendering the ability to separate or combine is unclear.

[0054] As used in the description herein and throughout the claims that follow, "a", "an", and "the" includes plural references unless the context clearly dictates otherwise. Also, as used in the description herein and throughout the claims that follow, the meaning of "in" includes "in" and "on" unless the context clearly dictates otherwise.

[0055] The foregoing description of illustrated particular embodiments of the present invention, including what is described in the Abstract, is not intended to be exhaustive or to limit the invention to the precise forms disclosed herein. While specific particular embodiments of, and examples for, the invention are described herein for illustrative purposes only, various equivalent modifications are possible within the spirit and scope of the present invention, as those skilled in the relevant art will recognize and appreciate. As indicated, these modifications may be made to the present invention in light of the foregoing description of illustrated particular embodiments of the present invention and are to be included within the spirit and scope of the present invention.

[0056] Thus, while the present invention has been described herein with reference to particular embodiments thereof, a latitude of modification, various changes and substitutions are interided in the foregoing disclosures, and it will be appreciated that in some instances some features of particular embodiments of the invention will be employed without a corresponding use of other features without departing from the scope and spirit of the invention as set forth. Therefore, many modifications may be made to adapt a particular situation or material to the essential scope and spirit of the present invention. It is intended that the invention not be limited to the particular terms used in following claims and/or to the particular embodiment disclosed as the best mode contemplated for carrying out this invention, but that the invention will include any and all particular embodiments and equivalents falling within the scope of the appended claims.

We claim:

1. A method comprising:
- determining surveillance information from a surveillance system, the surveillance information providing information on an event being monitored by the surveillance system;
- automatically determining that a virtual talk group should be created for the event; and
- automatically creating the virtual talk group such that a plurality of users in the virtual talk group can communicate with each other in the virtual talk group.

2. The method of claim **1**, further comprising:
- receiving additional surveillance information from a surveillance system, the surveillance information providing additional information on the event being monitored by the surveillance system;
- determining a user to add to a virtual talk group for the event based on the surveillance information; and
- adding the user to the virtual talk group, wherein the user is able to communicate with other users of the virtual talk group.

3. The method of claim **2**, further comprising facilitating sending an announcement to the added user, the announcement based on the surveillance information.

4. The method of claim **3**, further comprising:
- creating a second virtual talk group for sending the announcement to the added user; and
- disconnecting the added user from the second virtual talk group after the announcement.

5. The method of claim **2**, wherein determining a user to add to a virtual talk group comprises:
- determining user information for a plurality of users associated with a plurality of end devices; and
- determining the user to add based on a pre-programmed policy using the user information and the surveillance information.

6. The method of claim **5**, wherein the user information comprises location information determined for each of the plurality of end devices,
- wherein the surveillance information includes location information for the object.

7. The method of claim **5**, wherein the user information comprises a profile of one or more users.

8. The method of claim **1**, further comprising:
- receiving additional surveillance information from a surveillance system, the surveillance information providing additional information on the event being monitored by the surveillance system;
- determining the virtual talk group that had been already created for the event; and
- determining any existing members to remove from the virtual talk group based on the surveillance information.

9. An apparatus comprising:

a surveillance information determiner configured to determine surveillance information from a surveillance system, the surveillance information providing information on an event being monitored by the surveillance system;

a virtual talk group set-up determiner configured to automatically determine that a virtual talk group should be created for the event and automatically create the virtual talk group such that a plurality of users in the virtual talk group can communicate with each other in the virtual talk group.

10. The apparatus of claim **9**, wherein the virtual talk group set-up determiner is configured to:

receive additional surveillance information from a surveillance system, the surveillance information providing additional information on the event being monitored by the surveillance system;

determine a user to add to a virtual talk group for the event based on the surveillance information; and

add the user to the virtual talk group, wherein the user is able to communicate with other users of the virtual talk group.

11. The apparatus of claim **10**, wherein the virtual talk group set-up determiner is configured to facilitate sending an announcement to the added user, the announcement based on the surveillance information.

12. The apparatus of claim **11**, wherein the virtual talk group set-up determiner is configured to:

create a second virtual talk group for sending the announcement to the added user; and

disconnect the added user from the second virtual talk group after the announcement.

13. The apparatus of claim **10**, wherein the virtual talk group set-up determiner is configured to:

determine user information for a plurality of users associated with a plurality of end devices; and

determine the user to add based on a pre-programmed policy using the user information and the surveillance information.

14. The apparatus of claim **13**, wherein the user information comprises location information determined for each of the plurality of end devices,

wherein the surveillance information includes location information for the object.

15. The apparatus of claim **14**, wherein the user information comprises a profile of one or more users.

16. The apparatus of claim **9**, wherein the virtual talk group set-up determiner is configured to:

receive additional surveillance information from a surveillance system, the surveillance information providing additional information on the event being monitored by the surveillance system;

determine the virtual talk group that had been already created for the event; and

determine any existing members to remove from the virtual talk group based on the surveillance information.

17. An apparatus comprising:

means for determining surveillance information from a surveillance system, the surveillance information providing information on an event being monitored by the surveillance system;

means for automatically determining that a virtual talk group should be created for the event; and

means for automatically creating the virtual talk group such that a plurality of users in the virtual talk group can communicate with each other in the virtual talk group.

18. The apparatus of claim **17**, further comprising:

means for receiving additional surveillance information from a surveillance system, the surveillance information providing additional information on the event being monitored by the surveillance system;

means for determining a user to add to a virtual talk group for the event based on the surveillance information; and

means for adding the user to the virtual talk group, wherein the user is able to communicate with other users of the virtual talk group.

19. The apparatus of claim **18**, further comprising means for facilitating sending an announcement to the added user, the announcement based on the surveillance information.

20. The method of claim **19**, further comprising:

means for creating a second virtual talk group for sending the announcement to the added user; and

means for disconnecting the added user from the second virtual talk group after the announcement.

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