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INTELLIGENT MEETING GRAPH

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ABSTRACT

Presented herein is a calendaring/collaboration application that displays a meeting graph with pin representation used to represent meeting attendee and room availability in order to facilitate meeting scheduling when multiple locations and time-zones are involved. The application will also suggest best available timeslots based on attendee and room locations.

DETAILED DESCRIPTION

A large percentage of meetings in an organization are scheduled meetings. These scheduled meetings may involve participants in multiple locations in the same country, or multiple countries spread across multiple time-zones. A large number of scheduled meetings within a given organization may involve participants in several locations, including multiple time-zones and with remote participants. As a result, an individual scheduling a meeting faces three main challenges:

- (1) Difficulty determining where participants are located to avoid scheduling meetings at inconvenient times for certain participants.
- (2) Participant(s) may have travel to a different location with a different time-zone after the meeting is scheduled.
- (3) Remote participants may need to find an available conference room when it is time to attend the meeting.

Meeting scheduling becomes more problematic as the number of participant's time-zones and locations increases. As a result, an individual scheduling a meeting can receive large numbers of meeting declines, a need to reschedule the meeting, late meeting

starts, etc. which all contribute to losses in productivity (e.g., loss of meeting minutes). Also, user availability becomes inaccurate due to the time of day or becomes difficult to manage when there are a lot of participants in the meeting.

In view of the above, proposed herein are techniques that utilize participant segmentation based on time-zone and location, coupled with scheduling. The techniques presented herein reduce many of the currently manual procedures in the meeting scheduling process, thereby enhance the end-user experience and adding value to conventional scheduling systems.

In particular, an intelligent meeting graph of participants (aka participant segmentation) is generated based on the participants invited to the meeting (i.e., a rich map with the spread of the participants across multiple location and time-zones), with pin representation on the map for each participant. The same pin representation can be followed for available conference room(s) in similar locations, distinguished with a different colored pin on the map. Time zone offset for each location is indicated as well.

With so much data, it can be fairly challenging for an individual scheduling a meeting to make decisions. As such, in accordance with embodiments presented herein, automated suggestions may be generated based on the meeting graph of participants, including suggestions for meeting times which are not off hours and are likely candidates that could work for all participants. If there are no good candidate meeting times, alternative suggestions may be provided in the form of no schedule availability or schedule availability, which includes a majority of the participants and/or important stakeholders. As a result of the use of such an intelligent meeting graph, the meeting scheduling experience is simplified when dealing with remote participants across several time-zones and locations.

As noted above, a second issue to solve is the problem when the meeting participants move to different location(s) after the meeting has been initially scheduled. Failing to do account for such movement would make the initial suggestions useless. As such, the techniques presented herein solve this problem by re-computing the intelligent meeting graph whenever the time zone and/or location of the meeting participants change close to the meeting day. This information may be passed along to the meeting organizer to determine whether or not conducting the meeting is still feasible even with the modified

conditions. The information passed along to the meeting organizer may also include information regarding any other issues that need to be accounted for as a result of the change, thereby increasing the chance of meeting participation and making it an effective meeting experience. The timezone updates are sent from a client that has knowledge of location (emitted during scheduling and every time a person changes a timezone or periodically every "x" hours). In this way, the solution works regardless of proxy or VPN connections.

As noted, the third challenge involves improving meeting conversion success at the meeting start time. Conference room suggestions not just for the organizer, but also for participants in remote locations are suggested, allowing the capability to reserve a conference room in remote locations. When it's time for the meeting, the remote participants do not need to find a conference room at the last minute. Also, these suggestions can be used alongside user and room availability to improve schedule suggestions, thereby increasing the percentage of meeting acceptances.

Figure 1, below, illustrates an example meeting graph that is computed when the organizer initially sets up the meeting, thereby making it easy to determine where participants are located to avoid scheduling meetings at odd times for certain participants.



Figure 1: Meeting graph, computed when meeting is setup by the organizer

Figure 1

Figure 2, below, illustrates the dynamic nature of the meeting graph that is obtained by triggering a re-computation when one or more participants travel to a different location with a different time-zone after the meeting is originally scheduled. In this example, participant "Sriram" traveled from Bangalore(BLR) to Naples(APF), thereby causing the meeting graph to update. This would trigger an update to the organizer indicating potentially better meeting times as there are fewer time zones to deal with compared to when the meeting was originally scheduled.



Figure 2: Meeting graph, re-computed when participant changes location

Figure 2

In both Figures 1 and 2, the location of conference rooms and the users are indicated, which helps reserve conference rooms closer to the participant locations (if available). As such, the remote participants do not have to worry about finding a conference room when it is time to attend the meeting.