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## **Virtual Phone Number Associated With A Physical Location**

### **ABSTRACT**

This disclosure describes a virtual phone number that is associated with a particular location. The virtual number is in turn associated with a list of authorized devices that, when at the particular location, each receive a call placed to the virtual phone number simultaneously. Call forwarding is performed by a server that, with user permission, utilizes the device location and a geofence associated with the location to determine the devices to ring.

### **KEYWORDS**

- Virtual number
- Virtual landline
- Geofence
- Landline phone
- Call forwarding

### **BACKGROUND**

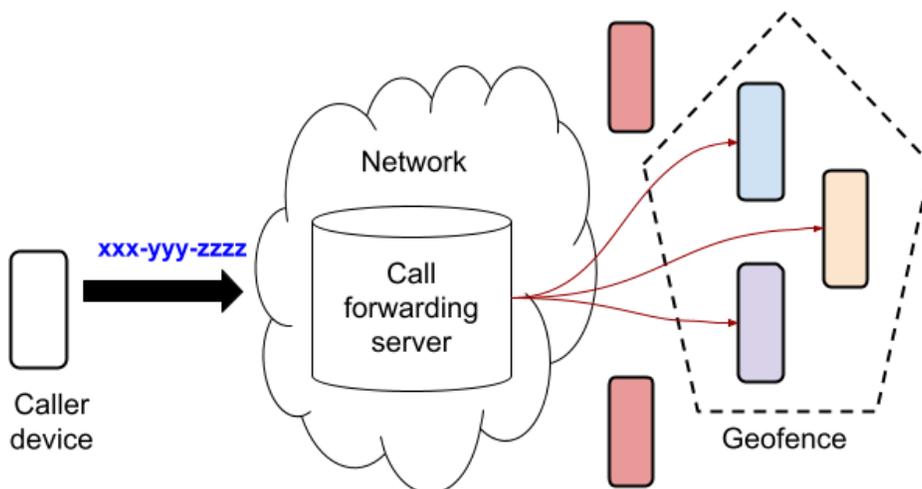
When landline (wired) telephones are deployed at a location, e.g., residence, office premises, etc., a call can be placed to a single telephone number that is associated with multiple physical devices (phone instruments) that ring simultaneously in response to the placed call. The call can be answered using any of the multiple devices. Any user located near any of the devices can answer the call based on convenience. Calling a landline number with multiple physical telephones coupled to the line results in the simultaneous ringing of the telephones in a location such as a home, providing the option to those near one of the telephones to answer the call.

However, with increased use of cellular phones, many locations do not have landline telephones. When trying to reach someone at a particular location without a landline telephone

connection, a series of calls may have to be placed to every individual that is likely to be at that location (e.g., a residence) at that point in time. Additionally, some users may not carry their cellular phones with them from room to room while at their residence.

**DESCRIPTION**

This disclosure describes the use of a virtual phone number that is associated with a particular location. A virtual number is associated with the location. The virtual number is in turn associated with a list of authorized mobile phone numbers (e.g., of residents at the location) that simultaneously receive the call placed to the virtual number, provided the authorized mobile phones are located within a predefined geo-fence at the time of the call.



**Fig. 1: Calls placed to a virtual number are forwarded to multiple devices**

Fig. 1 depicts an example use of a virtual phone number, per techniques of this disclosure. As depicted in Fig. 1, a caller may place a call using a caller device to a virtual phone number (“xxx-yyy-zzzz”) associated with a particular geolocation. The call is received via a network. The call is automatically forwarded (e.g., by a call forwarding server) to multiple mobile phones (or other devices) previously associated with the virtual phone number and currently located within a predefined geofence associated with the location. As seen in Fig. 1,

three devices that are within the geofence (at the geolocation associated with the virtual phone number) receive the call, while two devices outside the geofence, while being associated with the virtual phone number, do not receive the call. The multiple devices ring simultaneously enabling users located within the predefined geofence to answer the placed call.

With user permission, location determination of the devices associated with the virtual phone number can be performed using location features of the individual devices. In some implementations, location determination of the devices can be based on a common network that the devices are connected to such as a common WiFi network associated with the geolocation, e.g., a home WiFi router.

Associating a virtual phone number with a physical location as described herein can provide users associated with a particular location such as a residence with an improved call experience by enabling them to answer via any device, e.g., a landline telephone or a mobile device, that is near them. The virtual phone number can be utilized at residences, vacation homes, businesses without landline connectivity, etc.

Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein may enable collection of user information (e.g., information about a user's telephone number, a user's preferences, or a user's current location), and if the user is sent content or communications from a server. In addition, certain data may be treated in one or more ways before it is stored or used, so that personally identifiable information is removed. For example, a user's identity may be treated so that no personally identifiable information can be determined for the user. Thus, the user may have control over what information is collected about the user, how that information is used, and what information is provided to the user.

## CONCLUSION

This disclosure describes a virtual phone number that is associated with a particular location. The virtual number is in turn associated with a list of authorized devices that, when at the particular location, each receive a call placed to the virtual phone number simultaneously. Call forwarding is performed by a server that, with user permission, utilizes the device location and a geofence associated with the location to determine the devices to ring.