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User interface for configuring multiple devices

ABSTRACT

A user interface (UI) to configure device settings for multiple user devices associated with a common user identity is described. The UI enables a user to configure device settings for devices currently associated with the user as well as for future devices. Elements in the UI can be repeated, e.g., in a tabular or matrix arrangement, for each user device associated with a user identity, as well as for devices that become associated with the user identity in the future. The UI enables the user to specify settings for different user devices. The UI enables the specification of settings that take effect when contextual conditions such as time and location are met.

KEYWORDS

- Settings panel
- Device settings
- Context aware settings
- Device configuration
- Settings UI
- Configuration UI
- User preferences

BACKGROUND

Computing devices can be personalized by their users by suitable adjustment of device settings. Such adjustments can be made via a user interface, e.g., a settings panel or other type of user interface. Many users own or operate more than one computing device.
When a new device is acquired, it needs to be configured. This can sometimes be accomplished by copying the settings for another device owned by the user. Current settings user interfaces are designed to specify settings only for a particular device and do not permit users to specify settings for more than one device at a time. This makes it difficult for the user to apply coherent settings across multiple devices.

DESCRIPTION

A user interface (UI), associated behaviors, and system services are described herein for use in computing devices that are associated with a common user identity. The user interface enables a user to specify settings for multiple devices, including devices that may become associated with the user identity at a later time.

![User interface to configure settings for current and future devices](image)

**Fig. 1: User interface to configure settings for current and future devices**

Fig. 1 illustrates an example user interface (100) to configure device settings (110) for multiple user devices associated with a common user identity. Fig. 1 (a) illustrates a user
interface overview that enables a user to configure device settings for a current device (130), an additional device owned by the user (120) and for future devices (140). The UI utilizes standard UI elements such as checkboxes to specify settings for various applications and services, e.g., “location tracking,” “battery saver,” “camera access,” etc.

For convenience, user interface elements in the settings dialog can be presented in a tabular or matrix arrangement for all user devices associated with a user identity, including current and future devices. The UI enables the user to specify similar or different values for the same setting for different user devices.

The tabular arrangement can be presented during a presentation of a default settings dialog, or can be invoked by the user, e.g., by an additional gesture such as a long press, revealing detailed per-device settings. The detailed per-device settings dialog (160) includes current values for all devices associated with the user (via a user identifier such as a username, email id, etc.), and allows the user to edit settings for all devices associated with the user. A special annotation can be utilized to indicate that a device setting value was acquired via a “future devices” setting previously specified by the user.

An application program interface (API) enables an operating system to store device settings explicitly for every device of the user. The UI and API enable the specification of settings to take effect under contextual conditions other than device identity, e.g., location, time, etc. when users permit determination of the contextual conditions for this purpose.

Fig. 1(b) illustrates a zoomed view (160) of the UI that pertains to a particular setting, e.g., location tracking. In this illustrative example, the setting for device 1 can be specified based on a time of day (170) and/or via a geofence (180). For example, a zoomed-in detailed view can depict a geographical map that enables a user to both view and specify values for the
setting for different geographic locations.

Per techniques of this disclosure, the UI enables specification of user preferences on devices that can support the same value for different points along an axis of variability, e.g., the same value for a particular setting across multiple devices associated with the user.

The UI supports specification of user preferences across multiple axes of variability such as settings that vary across multiple devices, multiple locations where the devices are used, multiple time periods, etc. The UI thus enables the user to provide specifications for current and future devices as well as for current and future contexts by providing values for settings that apply in a location different from a location where the user is currently situated.

Further to the descriptions above, a user is provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein enable collection of user information (e.g., information about a user’s social network, social actions or activities, profession, 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 is 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 is treated so that no personally identifiable information can be determined for the user, or a user’s geographic location is generalized where location information is obtained (such as to a city, ZIP code, or state level), so that a particular location of a user cannot be determined. Thus, the user has control over what information is collected about the user, how that information is used, and what information is provided to the user.

CONCLUSION

A user interface (UI) to configure device settings for multiple user devices associated with a common user identity is described. The UI enables a user to configure device settings for
devices currently associated with the user as well as for future devices. Elements in the UI can be repeated, e.g., in a tabular or matrix arrangement, for each user device associated with a user identity, as well as for devices that become associated with the user identity in the future. The UI enables the user to specify settings for different user devices. The UI enables the specification of settings that take effect when contextual conditions such as time and location are met.

REFERENCES