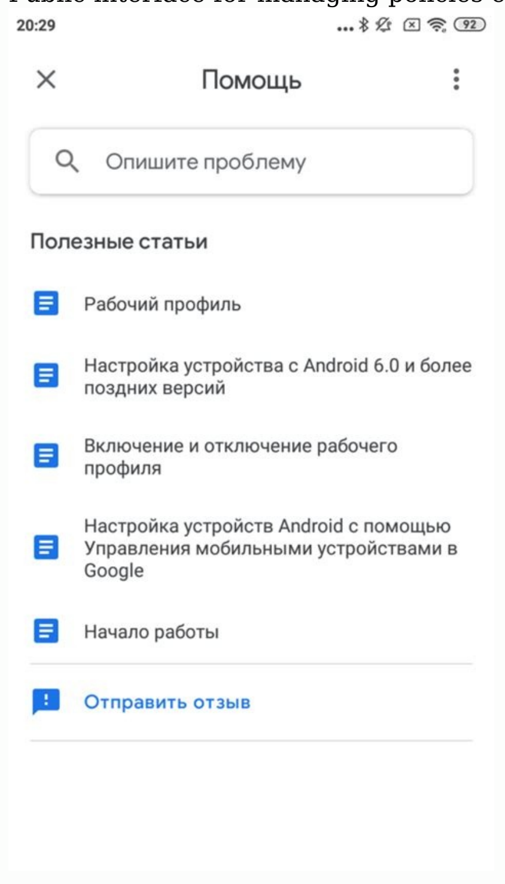
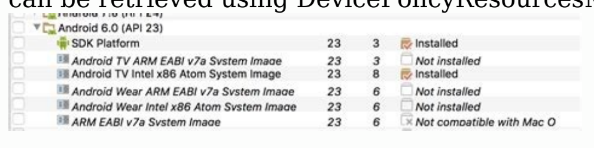
Device policy manager android example

What is android device policy.

Public interface for managing policies enforced on a device. Most clients of this class must be registered with the system as a device administrator. Additionally, a device administrator may be registered as either a profile or device owner.

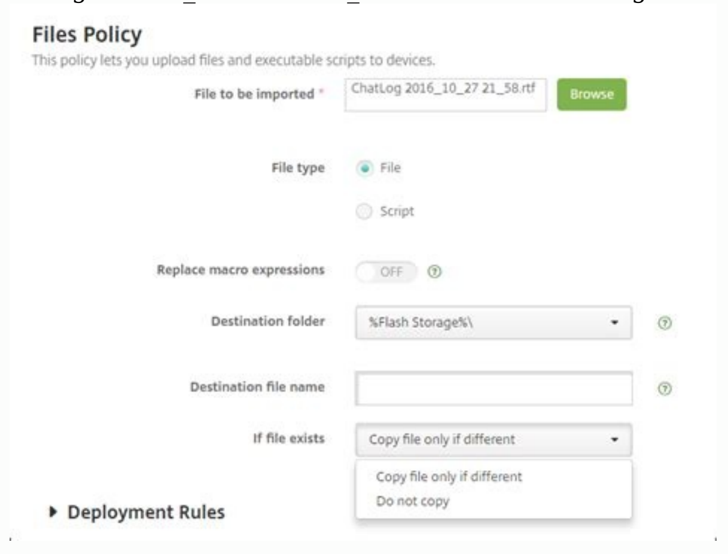

20:29
Помощь
Опишите проблему
Полезные статьи
Рабочий профиль
Настройка устройства с Android 6.0 и более поздних версий
Включение и отключение рабочего профиля
Настройка устройств Android с помощью Управления мобильными устройствами в Google
Начало работы
Отправить отзыв

A given method is accessible to all device administrators unless the documentation for that method specifies that it is restricted to either device or profile owners. Any application calling an api may only pass as an argument a device administrator component it owns. Otherwise, a SecurityException will be thrown. class DevicePolicyManager.InstallSystemUpdateCallback Callback used in DevicePolicyManager.installSystemUpdate(ComponentName, Uri, Executor, InstallSystemUpdateCallback) to indicate that there was an error while trying to install an update. interface DevicePolicyManager.OnClearApplicationUserDataListener Callback used in DevicePolicyManager.clearApplicationUserData(ComponentName, String, Executor, OnClearApplicationUserDataListener) to indicate that the clearing of an application's user data is done. String ACTION_ADD_DEVICE_ADMIN Activity action: ask the user to add a new device administrator to the system. String ACTION_ADMIN_POLICY_COMPLIANCE Activity action: Starts the administrator to show policy compliance for the provisioning. String ACTION_APPLICATION_DELEGATION_SCOPES_CHANGED Broadcast Action: Sent after application delegation scopes are changed. String ACTION_CHECK_POLICY_COMPLIANCE Activity action: launch the DPC to check policy compliance. String ACTION_DEVICE_ADMIN_SERVICE Service action: Action for a service that device owner and profile owner can optionally own. String ACTION_DEVICE_FINANCING_STATE_CHANGED Broadcast Action: Broadcast sent to indicate that the device financing state has changed. String ACTION_DEVICE_OWNER_CHANGED Broadcast action: sent when the device owner is set, changed or cleared. String ACTION_DEVICE_POLICY_RESOURCE_UPDATED Broadcast action: notify system apps (e.g. settings, SysUI, etc) that the device management resources with IDs EXTRA_RESOURCE_IDS has been updated, the updated resources can be retrieved using DevicePolicyResourcesManager#getDrawable and DevicePolicyResourcesManager#getString.



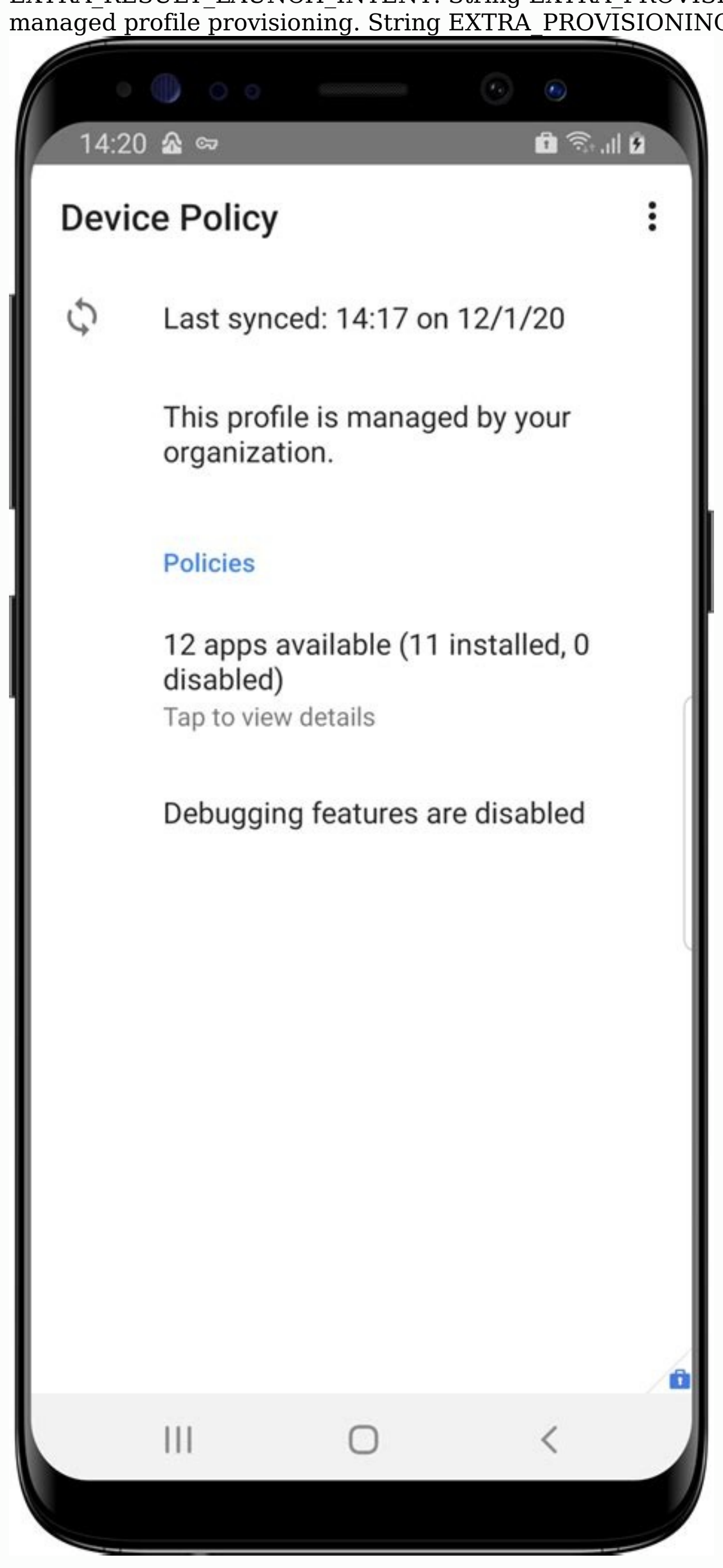
Android 6.0 (API 23)			
SDK Platform	23	3	Installed
Android TV ARM EABI v7a System Image	23	3	Not installed
Android TV Intel x86 Atom System Image	23	8	Installed
Android Wear ARM EABI v7a System Image	23	6	Not installed
Android Wear Intel x86 Atom System Image	23	6	Not installed
ARM EABI v7a System Image	23	6	Not compatible with Mac O

String ACTION_GET_PROVISIONING_MODE Activity action: Starts the administrator to get the mode for the provisioning. String ACTION_MANAGED_PROFILE_PROVISIONED Broadcast Action: This broadcast is sent to indicate that provisioning of a managed profile has completed successfully. String ACTION_PROFILE_OWNER_CHANGED Broadcast action: sent when the profile owner is set, changed or cleared. String ACTION_PROVISIONING_SUCCESSFUL Activity action: This activity action is sent to indicate that provisioning of a managed profile or managed device has completed successfully. String ACTION_PROVISION_MANAGED_DEVICE This constant was deprecated in API level 31. to support Build.VERSION_CODES.S and later, admin apps must implement activities with intent filters for the ACTION_GET_PROVISIONING_MODE and ACTION_ADMIN_POLICY_COMPLIANCE intent actions; using ACTION_PROVISION_MANAGED_DEVICE to start provisioning will cause the provisioning to fail; to additionally support pre-Build.VERSION_CODES.S, admin apps must also continue to use this constant.
String ACTION_PROVISION_MANAGED_PROFILE Activity action: Starts the provisioning flow which sets up a managed profile. String ACTION_SET_NEW_PARENT_PROFILE_PASSWORD Activity action: have the user enter a new password for the parent profile. String ACTION_SET_NEW_PASSWORD Activity action: have the user enter a new password. String ACTION_START_ENCRYPTION Activity action: begin the process of encrypting data on the device. String ACTION_SYSTEM_UPDATE_POLICY_CHANGED Broadcast action: notify that a new local system update policy has been set by the device owner. String DELEGATION_APP_RESTRICTIONS Delegation of application restrictions management. String DELEGATION_BLOCK_UNINSTALL Delegation of application uninstall block. String DELEGATION_CERT_INSTALL Delegation of certificate installation and management. String DELEGATION_CERT_SELECTION Grants access to selection of KeyChain certificates on behalf of requesting apps. String DELEGATION_ENABLE_SYSTEM_APP Delegation for enabling system apps. String DELEGATION_INSTALL_EXISTING_PACKAGE Delegation for installing existing packages. String DELEGATION_KEEP_UNINSTALLED_PACKAGES Delegation of management of uninstalled packages. String DELEGATION_NETWORK_LOGGING Grants access to setNetworkLoggingEnabled(ComponentName, boolean), isNetworkLoggingEnabled(ComponentName) and retrieveNetworkLogs(ComponentName, long). String DELEGATION_PACKAGE_ACCESS Delegation of package access state. String DELEGATION_PERMISSION_GRANT Delegation of permission policy and permission grant state.
String DELEGATION_SECURITY_LOGGING Grants access to setSecurityLoggingEnabled(ComponentName, boolean), isSecurityLoggingEnabled(ComponentName), retrieveSecurityLogs(ComponentName), and retrievePreRebootSecurityLogs(ComponentName). int ENCRYPTION_STATUS_ACTIVATING This constant was deprecated in API level 34. This result code has never actually been used, so there is no reason for apps to check for it. int ENCRYPTION_STATUS_ACTIVE Result code for setStorageEncryption(ComponentName, boolean) and getStorageEncryptionStatus(): indicating that encryption is active. int ENCRYPTION_STATUS_ACTIVE_DEFAULT_KEY Result code for getStorageEncryptionStatus(): indicating that encryption is active, but the encryption key is not cryptographically protected by the user's credentials. int ENCRYPTION_STATUS_ACTIVE_PER_USER Result code for getStorageEncryptionStatus(): indicating that encryption is active and the encryption key is tied to the user or profile. int ENCRYPTION_STATUS_INACTIVE Result code for setStorageEncryption(ComponentName, boolean) and getStorageEncryptionStatus(): indicating that encryption is supported, but is not currently active. int ENCRYPTION_STATUS_UNSUPPORTED Result code for setStorageEncryption(ComponentName, boolean) and getStorageEncryptionStatus(): indicating that encryption is not supported. String EXTRA_ADD_EXPLANATION An optional CharSequence providing additional explanation for why the admin is being added. String EXTRA_DELEGATION_SCOPES An ArrayList corresponding to the delegation scopes given to an app in the ACTION_APPLICATION_DELEGATION_SCOPES_CHANGED broadcast. String EXTRA_DEVICE_ADMIN The ComponentName of the administrator component. String EXTRA_DEVICE_PASSWORD_REQUIREMENT_ONLY A boolean extra for ACTION_SET_NEW_PARENT_PROFILE_PASSWORD requesting that only device password requirement is enforced during the parent profile password enrolment flow. String EXTRA_PASSWORD_COMPLEXITY An integer indicating the complexity level of the new password an app would like the user to set when launching the action ACTION_SET_NEW_PASSWORD.



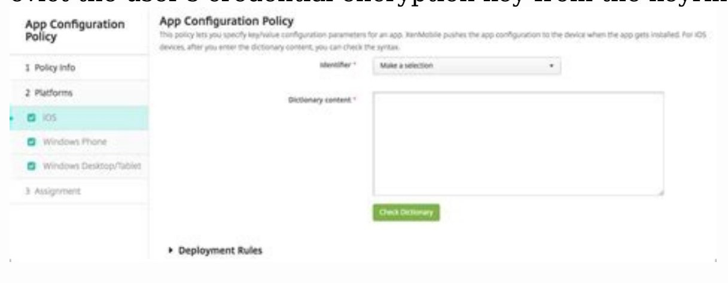
Files Policy
This policy lets you upload files and executable scripts to devices.
File to be imported *: ChatLog 2016_10_27 21_58.rtf
File type: File / Script
Replace macro expressions: OFF
Destination folder: %Flash Storage%\
Destination file name:
If file exists: Copy file only if different
Copy file only if different
Do not copy
Deployment Rules

String EXTRA_PROVISIONING_ACCOUNT_TO_MIGRATE An Account extra holding the account to migrate during managed profile provisioning. String EXTRA_PROVISIONING_ADMIN_EXTRAS_BUNDLE A Parcelable extra of type PersistableBundle that allows a mobile device management application or NFC programmer application which starts managed provisioning to pass data to the management application instance after provisioning. String EXTRA_PROVISIONING_ALLOWED_PROVISIONING_MODES An ArrayList of Integer extra specifying the allowed provisioning modes. String EXTRA_PROVISIONING_ALLOW_OFFLINE A boolean extra indicating whether offline provisioning is allowed. String EXTRA_PROVISIONING_DEVICE_ADMIN_COMPONENT_NAME A ComponentName extra indicating the device admin receiver of the mobile device management application that will be set as the profile owner or device owner and active admin.
String EXTRA_PROVISIONING_DEVICE_ADMIN_MINIMUM_VERSION_CODE An int extra holding a minimum required version code for the device admin package. String EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_CHECKSUM A String extra holding the URL-safe base64 encoded SHA-256 hash of the file at download location specified in EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION. String EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_COOKIE_HEADER A String extra holding a http cookie header which should be used in the http request to the url specified in EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION. String EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION A String extra holding a url that specifies the download location of the device admin package. String EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_NAME This constant was deprecated in API level 23. Use EXTRA_PROVISIONING_DEVICE_ADMIN_COMPONENT_NAME. This extra is still supported, but only if there is only one device admin receiver in the package that requires the permission Manifest.permission.BIND_DEVICE_ADMIN. String EXTRA_PROVISIONING_DEVICE_ADMIN_SIGNATURE_CHECKSUM A String extra holding the URL-safe base64 encoded SHA-256 checksum of any signature of the android package archive at the download location specified in EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION.
String EXTRA_PROVISIONING_DISCLAIMERS A Bundle[] extra consisting of list of disclaimer headers and disclaimer contents.
String EXTRA_PROVISIONING_DISCLAIMER_CONTENT A Uri extra pointing to disclaimer content. String EXTRA_PROVISIONING_DISCLAIMER_HEADER A String extra of localized disclaimer header. String EXTRA_PROVISIONING_EMAIL_ADDRESS This constant was deprecated in API level 26. From Build.VERSION_CODES.O, never used while provisioning the device. String EXTRA_PROVISIONING_IMEI A string extra holding the IMEI (International Mobile Equipment Identity) of the device. String EXTRA_PROVISIONING_KEEP_ACCOUNT_ON_MIGRATION Boolean extra to indicate that the migrated account should be kept. String EXTRA_PROVISIONING_KEEP_SCREEN_ON This constant was deprecated in API level 34. from Build.VERSION_CODES.UPSIDE_DOWN_CAKE, the flag wouldn't be functional. The screen is kept on throughout the provisioning flow. String EXTRA_PROVISIONING_LEAVE_ALL_SYSTEM_APPS_ENABLED A Boolean extra that can be used by the mobile device management application to skip the disabling of system apps during provisioning when set to true.
String EXTRA_PROVISIONING_LOCALE A String extra holding the Locale that the device will be set to. String EXTRA_PROVISIONING_LOCAL_TIME A Long extra holding the wall clock time (in milliseconds) to be set on the device's AlarmManager. String EXTRA_PROVISIONING_LOGO_URI This constant was deprecated in API level 33. Logo customization is no longer supported in the provisioning flow. String EXTRA_PROVISIONING_MAIN_COLOR This constant was deprecated in API level 31. Color customization is no longer supported in the provisioning flow. String EXTRA_PROVISIONING_MODE An intent extra holding the provisioning mode returned by the administrator. String EXTRA_PROVISIONING_SENSORS_PERMISSION_GRANT_OPT_OUT A boolean extra indicating the admin of a fully-managed device opts out of controlling permission grants for sensor-related permissions, see setPermissionGrantState(android.content.ComponentName, java.lang.String, java.lang.String, int). String EXTRA_PROVISIONING_SERIAL_NUMBER A string extra holding the serial number of the device. String EXTRA_PROVISIONING_SHOULD_LAUNCH_RESULT_INTENT A boolean extra that determines whether the provisioning flow should launch the resulting launch intent, if one is supplied by the device policy management role holder via EXTRA_RESULT_LAUNCH_INTENT. String EXTRA_PROVISIONING_SKIP_EDUCATION_SCREENS A boolean extra indicating if the education screens from the provisioning flow should be skipped. String EXTRA_PROVISIONING_SKIP_ENCRYPTION A boolean extra indicating whether device encryption can be skipped as part of device owner or managed profile provisioning. String EXTRA_PROVISIONING_SKIP_USER_CONSENT This constant was deprecated in API level 31. this extra is no longer relevant as device owners cannot create managed profiles String EXTRA_PROVISIONING_TIME_ZONE A String extra holding the time zone AlarmManager that the device will be set to.



14:20
Device Policy
Last synced: 14:17 on 12/1/20
This profile is managed by your organization.
Policies
12 apps available (11 installed, 0 disabled)
Tap to view details
Debugging features are disabled

String EXTRA_PROVISIONING_USE_MOBILE_DATA A boolean extra indicating if mobile data should be used during the provisioning flow for downloading the admin app. String EXTRA_PROVISIONING_WIFI_ANONYMOUS_IDENTITY The anonymous identity of the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_PROVISIONING_WIFI_CA_CERTIFICATE The CA certificate of the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_PROVISIONING_WIFI_DOMAIN The domain of the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_PROVISIONING_WIFI_EAP_METHOD The EAP method of the wifi network in EXTRA_PROVISIONING_WIFI_SSID and could be one of PEAP, TLS, TTLS, PWD, SIM, AKA or AKA_PRIME.
String EXTRA_PROVISIONING_WIFI_HIDDEN A boolean extra indicating whether the wifi network in EXTRA_PROVISIONING_WIFI_SSID is hidden or not. String EXTRA_PROVISIONING_WIFI_IDENTITY The identity of the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_PROVISIONING_WIFI_PAC_URL A String extra holding the proxy auto-config (PAC) URL for the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_PROVISIONING_WIFI_PASSWORD A String extra holding the password of the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_PROVISIONING_WIFI_PHASE2_AUTH The phase 2 authentication of the wifi network in EXTRA_PROVISIONING_WIFI_SSID and could be one of NONE, PAP, MSCHAP, MSCHAPV2, GTC, SIM, AKA or AKA_PRIME. String EXTRA_PROVISIONING_WIFI_PROXY_BYPASS A String extra holding the proxy bypass for the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_PROVISIONING_WIFI_PROXY_HOST A String extra holding the proxy host for the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_PROVISIONING_WIFI_PROXY_PORT An int extra holding the proxy port for the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_PROVISIONING_WIFI_SECURITY_TYPE A String extra indicating the security type of the wifi network in EXTRA_PROVISIONING_WIFI_SSID and could be one of NONE, WPA, WEP or EAP. String EXTRA_PROVISIONING_WIFI_SSID A String extra holding the ssid of the wifi network that should be used during nfc device owner provisioning for downloading the mobile device management application. String EXTRA_PROVISIONING_WIFI_USER_CERTIFICATE The user certificate of the wifi network in EXTRA_PROVISIONING_WIFI_SSID. String EXTRA_RESOURCE_IDS An integer array extra for ACTION_DEVICE_POLICY_RESOURCE_UPDATED to indicate which resource IDs (see ERROR(DevicePolicyResources.Drawables/android.app.admin.DevicePolicyResources.Drawables DevicePolicyResources.Drawables) and ERROR(DevicePolicyResources.Strings/android.app.admin.DevicePolicyResources.Strings DevicePolicyResources.Strings)) have been updated. String EXTRA_RESOURCE_TYPE An int extra for ACTION_DEVICE_POLICY_RESOURCE_UPDATED to indicate the type of the resource being updated, the type can be EXTRA_RESOURCE_TYPE_DRAWABLE or EXTRA_RESOURCE_TYPE_STRING int EXTRA_RESOURCE_TYPE_DRAWABLE A int value for EXTRA_RESOURCE_TYPE to indicate that a resource of type Drawable is being updated. int EXTRA_RESOURCE_TYPE_STRING A int value for EXTRA_RESOURCE_TYPE to indicate that a resource of type String is being updated. String EXTRA_RESULT_LAUNCH_INTENT An Intent result extra specifying the Intent to be launched after provisioning is finalized. int FLAG_EVICT_CREDENTIAL_ENCRYPTION_KEY Flag for lockNow(int): also evict the user's credential encryption key from the keyring.



App Configuration Policy
1 Policy Info
2 Platforms
iOS
Windows Phone
Windows Desktop/Tablet
3 Assignment
App Configuration Policy
Identifier *: Make a selection
Dictionary content *:
Check Dictionary
Deployment Rules

int FLAG_MANAGED_CAN_ACCESS_PARENT Flag used by addCrossProfileIntentFilter(ComponentName, IntentFilter, int) to allow activities in the managed profile to access intents sent from the parent profile. int FLAG_PARENT_CAN_ACCESS_MANAGED Flag used by addCrossProfileIntentFilter(ComponentName, IntentFilter, int) to allow activities in the parent profile to access intents sent from the managed profile. int ID_TYPE_BASE_INFO Specifies that the device should attest its manufacturer details. int ID_TYPE_IMEI Specifies that the device should attest its IMEI. int ID_TYPE_INDIVIDUAL_ATTESTATION Specifies that the device should attest using an individual attestation certificate. int ID_TYPE_MEID Specifies that the device should attest its MEID. int ID_TYPE_SERIAL Specifies that the device should attest its serial number.
int INSTALLKEY_REQUEST_CREDENTIALS_ACCESS Specifies that the calling app should be granted access to the installed credentials immediately. int INSTALLKEY_SET_USER_SELECTABLE Specifies that a user can select the key via the Certificate Selection prompt. int KEYGUARD_DISABLE_BIOMETRICS Disable all biometric authentication on keyguard secure screens (e.g. PIN/Pattern/Password). int KEYGUARD_DISABLE_FACE Disable face authentication on keyguard secure screens (e.g. PIN/Pattern/Password). int KEYGUARD_DISABLE_FEATURES_ALL Disable all current and future keyguard customizations. int KEYGUARD_DISABLE_FEATURES_NONE Widgets are enabled in keyguard int KEYGUARD_DISABLE_FINGERPRINT Disable fingerprint authentication on keyguard secure screens (e.g. PIN/Pattern/Password). int KEYGUARD_DISABLE_IRIS Disable iris authentication on keyguard secure screens (e.g. PIN/Pattern/Password). int KEYGUARD_DISABLE_REMOTE_INPUT This constant was deprecated in API level 33. This flag was added in version Build.VERSION_CODES.N, but it never had any effect. int KEYGUARD_DISABLE_SECURE_CAMERA Disable the camera on secure keyguard screens (e.g. PIN/Pattern/Password) int KEYGUARD_DISABLE_SECURE_NOTIFICATIONS Disable showing all notifications on secure keyguard screens (e.g. PIN/Pattern/Password) int KEYGUARD_DISABLE_SHORTCUTS_ALL Disable all keyguard shortcuts. int KEYGUARD_DISABLE_TRUST_AGENTS Disable trust agents on secure keyguard screens (e.g. PIN/Pattern/Password). int KEYGUARD_DISABLE_UNREDACTED_NOTIFICATIONS Only allow redacted notifications on secure keyguard screens (e.g. PIN/Pattern/Password) int KEYGUARD_DISABLE_WIDGETS_ALL Disable all keyguard widgets. int LEAVE_ALL_SYSTEM_APPS_ENABLED Flag used by createAndManageUser(ComponentName, String, ComponentName, PersistableBundle, int) to specify that the newly created user should skip the disabling of system apps during provisioning. int LOCK_TASK_FEATURE_BLOCK_ACTIVITY_START_IN_TASK Enable blocking of non-allowlisted activities from being started into a locked task. int LOCK_TASK_FEATURE_GLOBAL_ACTIONS Enable the global actions dialog during LockTask mode. int LOCK_TASK_FEATURE_HOME Enable the Home button during LockTask mode. int LOCK_TASK_FEATURE_KEYGUARD Enable the keyguard during LockTask mode. int LOCK_TASK_FEATURE_NONE Disable all configurable SystemUI features during LockTask mode.
int LOCK_TASK_FEATURE_NOTIFICATIONS Enable notifications during LockTask mode. int LOCK_TASK_FEATURE_OVERVIEW Enable the Overview button and the Overview screen during LockTask mode. int LOCK_TASK_FEATURE_SYSTEM_INFO Enable the system info area in the status bar during LockTask mode. int MAKE_USER_EPHEMERAL

Flag used by createAndManageUser(ComponentName, String, ComponentName, PersistableBundle, int) to specify that the user should be created ephemeral. String MIME_TYPE_PROVISIONING_NFC This MIME type is used for starting the device owner provisioning. int MTE_DISABLED Require that MTE be disabled on the device. int MTE_ENABLED Require that MTE be enabled on the device, if supported. int MTE_NOT_CONTROLLED_BY_POLICY Allow the user to choose whether to enable MTE on the device. int NEARBY_STREAMING_DISABLED Indicates that nearby streaming is disabled. int NEARBY_STREAMING_ENABLED Indicates that nearby streaming is enabled. int NEARBY_STREAMING_NOT_CONTROLLED_BY_POLICY Indicates that nearby streaming is not controlled by policy, which means nearby streaming is allowed. int NEARBY_STREAMING_SAME_MANAGED_ACCOUNT_ONLY Indicates that nearby streaming is enabled only to devices offering a comparable level of security, with the same authenticated managed account.

int OPERATION_SAFETY_REASON_DRIVING_DISTRACTION Indicates that a UnsafeStateException was thrown because the operation would distract the driver of the vehicle. int PASSWORD_COMPLEXITY_HIGH Constant for getPasswordComplexity() and setRequiredPasswordComplexity(int). int PASSWORD_COMPLEXITY_LOW Constant for getPasswordComplexity() and setRequiredPasswordComplexity(int). int PASSWORD_COMPLEXITY_MEDIUM Constant for getPasswordComplexity() and setRequiredPasswordComplexity(int). int PASSWORD_COMPLEXITY_NONE Constant for getPasswordComplexity() and setRequiredPasswordComplexity(int): no password. int PASSWORD_QUALITY_ALPHABETIC Constant for setPasswordQuality(ComponentName, int): the user must have entered a password containing at least alphabetic (or other symbol) characters.

int PASSWORD_QUALITY_ALPHANUMERIC Constant for setPasswordQuality(ComponentName, int): the user must have entered a password containing at least both> numeric and alphabetic (or other symbol) characters. int PASSWORD_QUALITY_BIOMETRIC_WEAK Constant for setPasswordQuality(ComponentName, int): the policy allows for low-security biometric recognition technology. int PASSWORD_QUALITY_COMPLEX Constant for setPasswordQuality(ComponentName, int): allows the admin to set precisely how many characters of various types the password should contain to satisfy the policy. int PASSWORD_QUALITY_NUMERIC Constant for setPasswordQuality(ComponentName, int): the user must have entered a password containing at least numeric characters. int PASSWORD_QUALITY_NUMERIC_COMPLEX Constant for setPasswordQuality(ComponentName, int): the user must have entered a password containing at least numeric characters with no repeating (4444) or ordered (1234, 4321, 2468) sequences.

int PASSWORD_QUALITY_SOMETHING Constant for setPasswordQuality(ComponentName, int): the policy requires some kind of password or pattern, but doesn't care what it is. int PASSWORD_QUALITY_UNSPECIFIED Constant for setPasswordQuality(ComponentName, int): the policy has no requirements for the password. int PERMISSION_GRANT_STATE_DEFAULT Runtime permission state: The user can manage the permission through the UI. int PERMISSION_GRANT_STATE_DENIED Runtime permission state: The permission is denied to the app and the user cannot manage the permission through the UI. int PERMISSION_GRANT_STATE_GRANTED Runtime permission state: The permission is granted to the app and the user cannot manage the permission through the UI. int PERMISSION_POLICY_AUTO_DENY Permission policy to always deny new permission requests for runtime permissions. int PERMISSION_POLICY_AUTO_GRANT Permission policy to always grant new permission requests for runtime permissions. int PERMISSION_POLICY_PROMPT Permission policy to prompt user for new permission requests for runtime permissions. int PERSONAL_APPS_NOT_SUSPENDED Return value for getPersonalAppsSuspendedReasons(ComponentName) when personal apps are not suspended. int PERSONAL_APPS_SUSPENDED_EXPLICITLY Flag for getPersonalAppsSuspendedReasons(ComponentName) return value. int PERSONAL_APPS_SUSPENDED_PROFILE_TIMEOUT Flag for getPersonalAppsSuspendedReasons(ComponentName) return value. String POLICY_DISABLE_CAMERA Constant to indicate the feature of disabling the camera. String POLICY_DISABLE_SCREEN_CAPTURE Constant to indicate the feature of disabling screen captures. int PRIVATE_DNS_MODE_OFF Specifies that Private DNS was turned off completely. int PRIVATE_DNS_MODE_OPPORTUNISTIC Specifies that the device owner requested opportunistic DNS over TLS int PRIVATE_DNS_MODE_PROVIDER_HOSTNAME Specifies that the device owner configured a specific host to use for Private DNS. int PRIVATE_DNS_MODE_UNKNOWN Specifies that the Private DNS setting is in an unknown state. int PRIVATE_DNS_SET_ERROR_FAILURE_SETTING General failure to set the Private DNS mode, not due to one of the reasons listed above. int PRIVATE_DNS_SET_ERROR_HOST_NOT_SERVING If the privateDnsHost provided was of a valid hostname but that host was found to not support DNS-over-TLS. int PRIVATE_DNS_SET_NO_ERROR The selected mode has been set successfully. int PROVISIONING_MODE_FULLY_MANAGED_DEVICE The provisioning mode for fully managed device. int PROVISIONING_MODE_MANAGED_PROFILE The provisioning mode for managed profile. int PROVISIONING_MODE_MANAGED_PROFILE_ON_PERSONAL_DEVICE The provisioning mode for a managed profile on a personal device. int RESET_PASSWORD_DO_NOT_ASK_CREDENTIALS_ON_BOOT Flag for resetPasswordWithToken(ComponentName, String, byte, int) and resetPassword(String, int): don't ask for user credentials on device boot. int RESET_PASSWORD_REQUIRE_ENTRY Flag for resetPasswordWithToken(ComponentName, String, byte, int) and resetPassword(String, int): don't allow other admins to change the password again until the user has entered it. int SKIP_SETUP_WIZARD Flag used by createAndManageUser(ComponentName, String, ComponentName, PersistableBundle, int) to skip setup wizard after creating a new user.

int WIFI_SECURITY_ENTERPRISE_192 Constant for getMinimumRequiredWifiSecurityLevel() and setMinimumRequiredWifiSecurityLevel(int): enterprise 192 bit network. int WIFI_SECURITY_ENTERPRISE_EAP Constant for getMinimumRequiredWifiSecurityLevel() and setMinimumRequiredWifiSecurityLevel(int): enterprise EAP network.

int WIFI_SECURITY_OPEN Constant for getMinimumRequiredWifiSecurityLevel() and setMinimumRequiredWifiSecurityLevel(int): no minimum security level. int WIFI_SECURITY_PERSONAL Constant for getMinimumRequiredWifiSecurityLevel() and setMinimumRequiredWifiSecurityLevel(int): personal network such as WEP, WPA2-PSK. int WIPE_EUICC Flag for wipeData(int): also erase the device's eUICC data.

int WIPE_EXTERNAL_STORAGE Flag for wipeData(int): also erase the device's external storage (such as SD cards). int WIPE_RESET_PROTECTION_DATA Flag for wipeData(int): also erase the factory reset protection data. int WIPE_SILENTLY Flag for wipeData(int): won't show reason for wiping to the user.

void acknowledgeDeviceCompliant() Called by a profile owner of an organization-owned managed profile to acknowledge that the device is compliant and the user can turn the profile off if needed according to the maximum time off policy.

void addCrossProfileIntentFilter(ComponentName admin, IntentFilter filter, int flags) Called by the profile owner of a managed profile so that some intents sent in the managed profile can also be resolved in the parent, or vice versa. boolean addCrossProfileWidgetProvider(ComponentName admin, String packageName) Called by the profile owner of a managed profile or a holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_PROFILE_INTERACTION to enable widget providers from a given package to be available in the parent profile. int addOverrideApn(ComponentName admin, ApnSetting apnSetting) Called by device owner or managed profile owner to add an override APN. void addPersistentPreferredActivity(ComponentName admin, IntentFilter filter, ComponentName activity) Called by a profile owner or device owner or holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_LOCK_TASK. void addUserRestriction(ComponentName admin, String key) Called by a profile owner, device owner or a holder of any permission that is associated with a user restriction to set a user restriction specified by the key. void addUserRestrictionGlobally(String key) Called by a profile owner, device owner or a holder of any permission that is associated with a user restriction to set a user restriction specified by the provided key globally on all users. boolean bindDeviceAdminServiceAsUser(ComponentName admin, Intent serviceIntent, ServiceConnection conn, int flags, UserHandle targetUser) Called by a device owner to bind to a service from a secondary managed user or vice versa. boolean bindDeviceAdminServiceAsUser(ComponentName admin, Intent serviceIntent, ServiceConnection conn, Context.BindServiceFlags flags, UserHandle targetUser) See bindDeviceAdminServiceAsUser(android.content.ComponentName, android.content.Intent, android.content.ServiceConnection, int, android.os.UserHandle). boolean canAdminGrantSensorsPermissions() Returns true if the caller is running on a device where an admin can grant permissions related to device sensors. boolean canUsbDataSignalingBeDisabled() Returns whether enabling or disabling USB data signaling is supported on the device. void clearApplicationUserData(ComponentName admin, String packageName, Executor executor, DevicePolicyManager.OnClearApplicationUserDataListener listener) Called by the device owner or profile owner to clear application user data of a given package. void clearCrossProfileIntentFilters(ComponentName admin) Called by a profile owner of a managed profile to remove the cross-profile intent filters that go from the managed profile to the parent, or from the parent to the managed profile. void clearDeviceOwnerApp(String packageName) This method was deprecated in API level 26. This method is expected to be used for testing purposes only. The device owner will lose control of the device and its data after calling it. In order to protect any sensitive data that remains on the device, it is advised that the device owner factory resets the device instead of calling this method. See wipeData(int). void clearPackagePersistentPreferredActivities(ComponentName admin, String packageName) Called by a profile owner or device owner or holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_LOCK_TASK to remove all persistent intent handler preferences associated with the given package that were set by addPersistentPreferredActivity(ComponentName, IntentFilter, ComponentName). void clearProfileOwner(ComponentName admin) This method was deprecated in API level 26. This method is expected to be used for testing purposes only. The profile owner will lose control of the user and its data after calling it. In order to protect any sensitive data that remains on this user, it is advised that the profile owner deletes it instead of calling this method. See wipeData(int). boolean clearResetPasswordToken(ComponentName admin) Called by a profile, device owner or holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_RESET_PASSWORD to revoke the current password reset token. void clearUserRestriction(ComponentName admin, String key) Called by a profile owner, device owner or a holder of any permission that is associated with a user restriction to clear a user restriction specified by the key.

Intent createAdminSupportIntent(String restriction) Called by any app to display a support dialog when a feature was disabled by an admin. UserHandle createAndManageUser(ComponentName admin, String name, ComponentName profileOwner, PersistableBundle adminExtras, int flags) Called by a device owner to create a user with the specified name and a given component of the calling package as profile owner. int enableSystemApp(ComponentName admin, Intent intent) Re-enable system apps by intent that were disabled by default when the user was initialized. void enableSystemApp(ComponentName admin, String packageName) Re-enable a system app that was disabled by default when the user was initialized. AttestedKeyPair generateKeyPair(ComponentName admin, String algorithm, KeyGenParameterSpec keySpec, int idAttestationFlags) This API can be called by the following to generate a new private/public key pair: If the device supports key generation via secure hardware, this method is useful for creating a key in KeyChain that never left the secure hardware. String[] getAccountTypesWithManagementDisabled() Gets the array of accounts for which account management is disabled by the profile owner or device owner.

List getActiveAdmins() Return a list of all currently active device administrators' component names. Set getAffiliationIds(ComponentName admin) Returns the set of affiliation ids previously set via setAffiliationIds(ComponentName, Set), or an empty set if none have been set. Set getAlwaysOnVpnLockdownWhitelist(ComponentName admin) Called by device or profile owner to query the set of packages that are allowed to access the network directly when always-on VPN is in lockdown mode but not connected. String getAlwaysOnVpnPackage(ComponentName admin) Called by a device or profile owner to read the name of the package administering an always-on VPN connection for the current user. Bundle getApplicationRestrictions(ComponentName admin, String packageName) Retrieves the application restrictions for a given target application running in the calling user. String getApplicationRestrictionsManagingPackage(ComponentName admin) This method was deprecated in API level 26. From Build.VERSION_CODES.O. Use getDelegatePackages(ComponentName, String) with the DELEGATION_APP_RESTRICTIONS scope instead. boolean getAutoTimeEnabled(ComponentName admin) Returns true if auto time is enabled on the device. boolean getAutoTimeRequired() This method was deprecated in API level 30. From Build.VERSION_CODES.R. Use getAutoTimeEnabled(ComponentName) boolean getAutoTimeZoneEnabled(ComponentName admin) Returns true if auto time zone is enabled on the device. List getBindDeviceAdminTargetUsers(ComponentName admin) Returns the list of target users that the calling device owner or owner of secondary user can use when calling bindDeviceAdminServiceAsUser(ComponentName, Intent, ServiceConnection, BindServiceFlags, UserHandle). boolean getBluetoothContactSharingDisabled(ComponentName admin) Called by a profile owner of a managed profile to determine whether or not Bluetooth devices cannot access enterprise contacts. boolean getCameraDisabled(ComponentName admin) Determine whether or not the device's cameras have been disabled for this user, either by the calling admin, if specified, or all admins. String getCertInstallerPackage(ComponentName admin) This method was deprecated in API level 26. From Build.VERSION_CODES.O. Use getDelegatePackages(ComponentName, String) with the DELEGATION_CERT_INSTALL scope instead. PackagePolicy getCredentialManagerPolicy() Called by a device owner or profile owner of a managed profile to retrieve the credential manager policy. Set getCrossProfileCalendarPackages(ComponentName admin) This method was deprecated in API level 34. Use setCrossProfilePackages(android.content.ComponentName, java.util.Set). boolean getCrossProfileCallerIdDisabled(ComponentName admin) This method was deprecated in API level 34. starting with Build.VERSION_CODES.UPSIDE_DOWN_CAKE, use getManagedProfileCallerIdAccessPolicy() instead boolean getCrossProfileContactsSearchDisabled(ComponentName admin) This method was deprecated in API level 34. From Build.VERSION_CODES.UPSIDE_DOWN_CAKE use getManagedProfileContactsAccessPolicy() Set getCrossProfilePackages(ComponentName admin) Returns the set of package names that the admin has previously set as allowed to request user consent for cross-profile communication, via setCrossProfilePackages(android.content.ComponentName, java.util.Set). List getCrossProfileWidgetProviders(ComponentName admin) Called by the profile owner of a managed profile or a holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_PROFILE_INTERACTION to query providers from which packages are available in the parent profile. int getCurrentFailedPasswordAttempts() Retrieve the number of times the user has failed at entering a password since that last successful password entry. List getDelegatePackages(ComponentName admin, String delegationScope) Called by a profile owner or device owner to retrieve a list of delegate packages that were granted a delegation scope. List getDelegatedScopes(ComponentName admin, String delegatedPackage) Called by a profile owner or device owner to retrieve a list of the scopes given to a delegate package. CharSequence getDeviceOwnerLockScreenInfo() String getDevicePolicyManagementRoleHolderPackage() Returns the package name of the device policy management role holder. CharSequence getEndUserSessionMessage(ComponentName admin) Returns the user session end message. String getEnrollmentSpecificId() Returns an enrollment-specific identifier of this device, which is guaranteed to be the same value for the same device, enrolled into the same organization by the same managing app.

FactoryResetProtectionPolicy getFactoryResetProtectionPolicy(ComponentName admin) Callable by device owner or profile owner of an organization-owned device, to retrieve the current factory reset protection (FRP) policy set previously by setFactoryResetProtectionPolicy(ComponentName, FactoryResetProtectionPolicy).

String getGlobalPrivateDnsHost(ComponentName admin) Returns the system-wide Private DNS host. int getGlobalPrivateDnsMode(ComponentName admin) Returns the system-wide Private DNS mode. List getInstalledCaCerts(ComponentName admin) Returns all CA certificates that are currently trusted, excluding system CA certificates. List getKeepUninstalledPackages(ComponentName admin) Get the list of apps to keep around as APKs even if no user has currently installed it. Map> getKeyPairGrants(String alias) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to query which apps have access to a given KeyChain key. int getKeyguardDisabledFeatures(ComponentName admin) Determine whether or not features have been disabled in keyguard either by the calling admin, if specified, or all admins that set restrictions on this user and its participating profiles. int getLockTaskFeatures(ComponentName admin) Gets which system features are enabled for LockTask mode. String[] getLockTaskPackages(ComponentName admin) Returns the list of packages allowed to start the lock task mode. CharSequence getLongSupportMessage(ComponentName admin) Called by a device admin to get the long support message. PackagePolicy getManagedProfileCallerIdAccessPolicy() Called by a profile owner of a managed profile to retrieve the caller id policy. PackagePolicy getManagedProfileContactsAccessPolicy() Called by a profile owner of a managed profile to determine the current policy applied to managed profile contacts.

long getManagedProfileMaximumTimeOff(ComponentName admin) Called by a profile owner of an organization-owned managed profile to get maximum time the profile is allowed to be turned off. ManagedSubscriptionsPolicy getManagedSubscriptionsPolicy() Returns the current ManagedSubscriptionsPolicy. int getMaximumFailedPasswordsForWipe(ComponentName admin) Retrieve the current maximum number of login attempts that are allowed before the device or profile is wiped, for a particular admin or all admins that set restrictions on this user and its participating profiles. long getMaximumTimeToLock(ComponentName admin) Retrieve the current maximum time to unlock for a particular admin or all admins that set restrictions on this user and its participating profiles. List getMeteredDataDisabledPackages(ComponentName admin) Called by a device or profile owner to retrieve the list of packages which are restricted by the admin from using metered data. int getMinimumRequiredWifiSecurityLevel() Returns the current Wi-Fi minimum security level. int getMtePolicy() Called by a device owner, profile owner of an organization-owned device to get the Memory Tagging Extension (MTE) policy Learn more about MTE int getNearbyAppStreamingPolicy() Returns the current runtime nearby app streaming policy set by the device or profile owner. int getNearbyNotificationStreamingPolicy() Returns the current runtime nearby notification streaming policy set by the device or profile owner. int getOrganizationColor(ComponentName admin) This method was deprecated in API level 31. From Build.VERSION_CODES.R, the organization color is never used as the background color of the confirm credentials screen. CharSequence getOrganizationName(ComponentName admin) Called by the device owner (since API 26) or profile owner (since API 24) or holders of the permission to retrieve the name of the organization under management. List getOverrideApns(ComponentName admin) Called by device owner or managed profile owner to get all override APNs inserted by device owner or managed profile owner previously using addOverrideApn(ComponentName, ApnSetting). DevicePolicyManager getParentProfileInstance(ComponentName admin) Called by the profile owner of a managed profile to obtain a DevicePolicyManager whose calls act on the parent profile. int getPasswordComplexity() Returns how complex the current user's screen lock is. long getPasswordExpiration(ComponentName admin) Get the current password expiration time for a particular admin or all admins that set restrictions on this user and its participating profiles. long getPasswordExpirationTimeout(ComponentName admin) Get the password expiration timeout for the given admin. int getPasswordHistoryLength(ComponentName admin) Retrieve the current password history length for a particular admin or all admins that set restrictions on this user and its participating profiles. int getPasswordMaximumLength(int quality) Return the maximum password length that the device supports for a particular password quality. int getPasswordMinimumLength(ComponentName admin) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. int getPasswordMinimumLetters(ComponentName admin) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details.

int getPasswordMinimumLowerCase(ComponentName admin) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details.

int getPasswordMinimumNonLetter(ComponentName admin) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. int getPasswordMinimumNumeric(ComponentName admin) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. int getPasswordMinimumSymbols(ComponentName admin) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. int getPasswordMinimumUpperCase(ComponentName admin) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. int getPasswordQuality(ComponentName admin) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details.

SystemUpdateInfo getPendingSystemUpdate(ComponentName admin) Called by device or profile owners to get information about a pending system update. int getPermissionGrantState(ComponentName admin, String packageName, String permission) Returns the current grant state of a runtime permission for a specific application. int getPermissionPolicy(ComponentName admin) Returns the current runtime permission policy set by the device or profile owner. List getPermittedAccessibilityServices(ComponentName admin) Returns the list of permitted accessibility services set by this device or profile owner. List getPermittedCrossProfileNotificationListeners(ComponentName admin) Returns the list of packages installed on the primary user that allowed to use a NotificationListenerService to receive notifications from this managed profile, as set by the profile owner. List getPermittedInputMethods(ComponentName admin) Returns the list of permitted input methods set by this device or profile owner. int getPersonalAppsSuspendedReasons(ComponentName admin) Called by profile owner of an organization-owned managed profile to check whether personal apps are suspended. List getPreferentialNetworkServiceConfigs() Get preferential network configuration int getRequiredPasswordComplexity() Gets the password complexity requirement set by setRequiredPasswordComplexity(int), for the current user. long getRequiredStrongAuthTimeout(ComponentName admin) Determine for how long the user will be able to use secondary, non strong auth for authentication, since last strong method authentication (password, pin or pattern) was used. DevicePolicyResourcesManager getResources() Returns a DevicePolicyResourcesManager containing the required APIs to set, reset, and get device policy related resources. boolean getScreenCaptureDisabled(ComponentName admin) Determine whether or not screen capture has been disabled by the calling admin, if specified, or all admins. List getSecondaryUsers(ComponentName admin) Called by a device owner to list all secondary users on the device. CharSequence getShortSupportMessage(ComponentName admin) Called by a device admin or holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_SUPPORT_MESSAGE to get the short support message. CharSequence getStartUserSessionMessage(ComponentName admin) Returns the user session start message. boolean getStorageEncryption(ComponentName admin) This method was deprecated in API level 30. This method only returns the value set by setStorageEncryption(ComponentName, boolean). It does not actually reflect the storage encryption status. Use getStorageEncryptionStatus() for that. Called by an application that is administering the device to determine the requested setting for secure storage. int getStorageEncryptionStatus() Called by an application that is administering the device to determine the current encryption status of the device. SystemUpdatePolicy getSystemUpdatePolicy() Retrieve a local system update policy set previously by setSystemUpdatePolicy(ComponentName, SystemUpdatePolicy).

PersistableBundle getTransferOwnershipBundle() Returns the data passed from the current administrator to the new administrator during an ownership transfer. List getTrustAgentConfiguration(ComponentName admin, ComponentName agent) Gets configuration for the given trust agent based on aggregating all calls to setTrustAgentConfiguration(android.content.ComponentName, android.content.ComponentName, android.os.PersistableBundle) for all device admins. List getUserControlDisabledPackages(ComponentName admin) Returns the list of packages over which user control is disabled by a device or profile owner or holders of the permission Manifest.permission.MANAGE_DEVICE_POLICY_APPS_CONTROL. Bundle getUserRestrictions(ComponentName admin) Called by an admin to get user restrictions set by themselves with addUserRestriction(android.content.ComponentName, java.lang.String). Bundle getUserRestrictionsGlobally() Called by a profile or device owner to get global user restrictions set with addUserRestrictionGlobally(java.lang.String).

String getWifiMacAddress(ComponentName admin) Called by a device owner or profile owner on organization-owned device to get the MAC address of the Wi-Fi device. WifiSsidPolicy getWifiSsidPolicy() Returns the current Wi-Fi SSID policy. boolean grantKeyPairToApp(ComponentName admin, String alias, String packageName) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to grant an application access to an already-installed (or generated) KeyChain key. boolean grantKeyPairToWifiAuth(String alias) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to allow using a KeyChain key pair for authentication to Wifi networks. boolean hasCaCertInstalled(ComponentName admin, byte[] certBuffer) Returns whether this certificate is installed as a trusted CA. boolean hasGrantedPolicy(ComponentName admin, int usesPolicy) Returns true if an administrator has been granted a particular device policy. boolean hasKeyPair(String alias) This API can be called by the following to query whether a certificate and private key are installed under a given alias: If called by the credential management app, the alias must exist in the credential management app's AppUriAuthenticationPolicy. boolean hasLockdownAdminConfiguredNetworks(ComponentName admin) Called by a device owner or a profile owner of an organization-owned managed profile to determine whether the user is prevented from modifying networks configured by the admin.

boolean installCaCert(ComponentName admin, byte[] certBuffer) Installs the given certificate as a user CA. boolean installExistingPackage(ComponentName admin, String packageName) Install an existing package that has been installed in another user, or has been kept after removal via setKeepUninstalledPackages(ComponentName, List). boolean installKeyPair(ComponentName admin, PrivateKey privKey, Certificate[] certs, String alias, int flags) This API can be called by the following to install a certificate chain and corresponding private key for the leaf certificate: All apps within the profile will be able to access the certificate chain and use the private key, given direct user approval (if the user is allowed to select the private key). boolean installKeyPair(ComponentName admin, PrivateKey privKey, Certificate[] certs, String alias, boolean requestAccess) This API can be called by the following to install a certificate chain and corresponding private key for the leaf certificate: All apps within the profile will be able to access the certificate chain and use the private key, given direct user approval.

boolean installKeyPair(ComponentName admin, PrivateKey privKey, Certificate cert, String alias) This API can be called by the following to install a certificate and corresponding private key: All apps within the profile will be able to access the certificate and use the private key, given direct user approval. void installSystemUpdate(ComponentName admin, Uri updateFilePath, Executor executor, DevicePolicyManager.InstallSystemUpdateCallback callback) Called by device owner or profile owner of an organization-owned managed profile to install a system update from the given file.

boolean isActivePasswordSufficient() Determines whether the calling user's current password meets policy requirements (e.g. quality, minimum length). boolean isActivePasswordSufficientForDeviceRequirement() Called by profile owner of a managed profile to determine whether the current device password meets policy requirements set explicitly device-wide. boolean isAdminActive(ComponentName admin) Return true if the given administrator component is currently active (enabled) in the system. boolean isAffiliatedUser() Returns whether this user is affiliated with the device. boolean isAlwaysOnVpnLockdownEnabled(ComponentName admin) Called by device or profile owner to query whether current always-on VPN is configured in lockdown mode. boolean isApplicationHidden(ComponentName admin, String packageName) Determine if a package is hidden. boolean isBackupServiceEnabled(ComponentName admin) Return whether the backup service is enabled by the device owner or profile owner for the current user, as previously set by setBackupServiceEnabled(android.content.ComponentName, boolean). boolean isCallerApplicationRestrictionsManagingPackage() This method was deprecated in API level 26. From Build.VERSION_CODES.O. Use getDelegatedScopes(ComponentName, String) instead. boolean isCommonCriteriaModeEnabled(ComponentName admin) Returns whether Common Criteria mode is currently enabled. boolean isComplianceAcknowledgementRequired() Called by a profile owner of an organization-owned managed profile to query whether it needs to acknowledge device compliance to allow the user to turn the profile off if needed according to the maximum profile time off policy.

boolean isDeviceFinanced() Returns true if this device is marked as a financed device. boolean isDeviceIdAttestationSupported() Returns true if the device supports attestation of device identifiers in addition to key attestation. boolean isDeviceOwnerApp(String packageName) Used to determine if a particular package has been registered as a Device Owner app. boolean isEphemeralUser(ComponentName admin) Checks if the profile owner is running in an ephemeral user. boolean isKeyPairGrantedToWifiAuth(String alias) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to query whether a KeyChain key pair can be used for authentication to Wifi networks. boolean isLockTaskPermitted(String pkg) This function lets the caller know whether the given component is allowed to start the lock task mode. boolean isLogoutEnabled() Returns whether logout is enabled by a device owner. boolean isManagedProfile(ComponentName admin) Return if this user is a managed profile of another user. boolean isMasterVolumeMuted(ComponentName admin) Called by profile or device owners to check whether the global volume mute is on or off. boolean isNetworkLoggingEnabled(ComponentName admin) Return whether network logging is enabled by a device owner or profile owner of a managed profile. boolean isOrganizationOwnedDeviceWithManagedProfile() Apps can use this method to find out if the device was provisioned as organization-owend device with a managed profile. boolean isOverrideApnEnabled(ComponentName admin) Called by device owner to check if override APNs are currently enabled. boolean isPackageSuspended(ComponentName admin, String packageName) Determine if a package is suspended. boolean isPreferentialNetworkServiceEnabled() Indicates whether preferential network service is enabled. boolean isProfileOwnerApp(String packageName) Used to determine if a particular package is registered as the profile owner for the user. boolean isProvisioningAllowed(String action) Returns whether it is possible for the caller to initiate provisioning of a managed profile or device, setting itself as the device or profile owner. boolean isResetPasswordTokenActive(ComponentName admin) Called by a profile, device owner or a holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_RESET_PASSWORD to check if the current reset password token is active. boolean isSafeOperation(int reason) Checks if it's safe to run operations that can be affected by the given reason. boolean isSecurityLoggingEnabled(ComponentName admin) Return whether security logging is enabled or not by the admin. boolean isStatusBarDisabled() Returns whether the status bar is disabled/enabled, see setStatusBarDisabled(ComponentName, boolean). boolean isUninstallBlocked(ComponentName admin, String packageName) Check whether the user has been blocked by device policy from uninstalling a package. boolean isUniqueDeviceAttestationSupported() Returns true if the StrongBox Keymaster implementation on the device was provisioned with an individual attestation certificate and can sign attestation records using it (as attestation using an individual attestation certificate is a feature only Keymaster implementations with StrongBox security level can implement). boolean isUsbDataSignalingEnabled() Returns whether USB data signaling is currently enabled. boolean isUsingUnifiedPassword(ComponentName admin) When called by a profile owner of a managed profile returns true if the profile uses unified challenge with its parent user.

List listForegroundAffiliatedUsers() Gets the list of affiliated users running on foreground. void lockNow() Make the device lock immediately, as if the lock screen timeout has expired at the point of this call. void lockNow(int flags) Make the device lock immediately, as if the lock screen timeout has expired at the point of this call. int logoutUser(ComponentName admin) Called by a profile owner of secondary user that is affiliated with the device to stop the calling user and switch back to primary user (when the user was switchUser(android.content.ComponentName, android.os.UserHandle) switched to) or stop the user (when it was started in background. void reboot(ComponentName admin) Called by device owner to reboot the device. void removeActiveAdmin(ComponentName admin) Remove a current administration component. boolean removeCrossProfileWidgetProvider(ComponentName admin, String packageName) Called by the profile owner of a managed profile or a holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_PROFILE_INTERACTION to disable widget providers from a given package to be available in the parent profile. boolean removeKeyPair(ComponentName admin, String alias) This API can be called by the following to remove a certificate and private key pair installed under a given alias: Device owner Profile owner Delegated certificate installer Credential management app From Android Build.VERSION_CODES.S, the credential management app can call this API. boolean removeOverrideApn(ComponentName admin, int apnId) Called by device owner or managed profile owner to remove an override APN. boolean removeUser(ComponentName admin, UserHandle userHandle) Called by a device owner to remove a user/profile and all associated data. boolean requestBugreport(ComponentName admin) Called by a device owner to request a bugreport. boolean resetPassword(String password, int flags) This method was deprecated in API level 30. Please use resetPasswordWithToken(ComponentName, String, byte, int) instead. boolean resetPasswordWithToken(ComponentName admin, String password, byte[] token, int flags) Called by device or profile owner to force set a new device unlock password or a managed profile challenge on current user. List retrieveNetworkLogs(ComponentName admin, long batchToken) Called by device owner, profile owner of a managed profile or delegated app with DELEGATION_NETWORK_LOGGING to retrieve the most recent batch of network logging events. List retrievePreRebootSecurityLogs(ComponentName admin) Called by device owner or profile owner of an organization-owned managed profile to retrieve device logs from before the device's last reboot. List retrieveSecurityLogs(ComponentName admin) Called by device owner or profile owner of an organization-owned managed profile to retrieve all new security logging entries since the last call to this API after device boots. boolean revokeKeyPairFromApp(ComponentName admin, String alias, String packageName) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to revoke an application's grant to a KeyChain key pair. boolean revokeKeyPairFromWifiAuth(String alias) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to deny using a KeyChain key pair for authentication to Wifi networks. void setAccountManagementDisabled(ComponentName admin, String accountType, boolean disabled) Called by a device owner or profile owner to disable account management for a specific type of account. void setAffiliationIds(ComponentName admin, Set ids) Indicates the entity that controls the device.

void setAlwaysOnVpnPackage(ComponentName admin, String vpnPackage, boolean lockdownEnabled) Called by a device or profile owner to configure an always-on VPN connection through a specific application for the current user. void setAlwaysOnVpnPackage(ComponentName admin, String vpnPackage, boolean lockdownEnabled, Set lockdownAllowlist) A version of setAlwaysOnVpnPackage(android.content.ComponentName, java.lang.String, boolean) that allows the admin to specify a set of apps that should be able to access the network directly when VPN is not connected. boolean setApplicationHidden(ComponentName admin, String packageName, boolean hidden) Hide or unhide packages. void setApplicationRestrictions(ComponentName admin, String packageName, Bundle settings) Sets the application restrictions for a given target application running in the calling user. void setApplicationRestrictionsManagingPackage(ComponentName admin, String packageName) This method was deprecated in API level 26. From Build.VERSION_CODES.O. Use setDelegatedScopes(ComponentName, String, List) with the DELEGATION_APP_RESTRICTIONS scope instead. void setAutoTimeEnabled(ComponentName admin, boolean enabled) Called by a device owner, a profile owner for the primary user or a profile owner of an organization-owned managed profile to turn auto time on and off.

void setAutoTimeRequired(ComponentName admin, boolean required) This method was deprecated in API level 30. From Build.VERSION_CODES.R. Use setAutoTimeEnabled(ComponentName, boolean) to turn auto time on or off and use UserManager#DISALLOW_CONFIG_DATE_TIME to prevent the user from changing this setting. void setAutoTimeZoneEnabled(ComponentName admin, boolean enabled) Called by a device owner, a profile owner for the primary user or a profile owner of an organization-owned managed profile to turn auto time zone on and off. void setBackupServiceEnabled(ComponentName admin, boolean enabled) Allows the device owner or profile owner to enable or disable the backup service. void setBluetoothContactSharingDisabled(ComponentName admin, boolean disabled) Called by a profile owner of a managed profile to set whether bluetooth devices can access enterprise contacts. void setCameraDisabled(ComponentName admin, boolean disabled) Called by an application that is administering the device to disable all cameras on the device, for this user. void setCertInstallerPackage(ComponentName admin, String installerPackage) This method was deprecated in API level 26. From Build.VERSION_CODES.O. Use setDelegatedScopes(ComponentName, String, List) with the DELEGATION_CERT_INSTALL scope instead. void setCommonCriteriaModeEnabled(ComponentName admin, boolean enabled) Called by device owner or profile owner of an organization-owned managed profile to toggle Common Criteria mode for the device. void setConfiguredNetworksLockdownState(ComponentName admin, boolean lockdown) Called by a device owner or a profile owner of an organization-owned managed profile to control whether the user can change networks configured by the admin. void setCredentialManagerPolicy(PackagePolicy policy) Called by a device owner or profile owner of a managed profile to set the credential manager policy. void setCrossProfileCalendarPackages(ComponentName admin, Set packageNames) This method was deprecated in API level 34. Use setCrossProfilePackages(android.content.ComponentName, java.util.Set). void setCrossProfileCallerIdDisabled(ComponentName admin, boolean disabled) This method was deprecated in API level 34. starting with Build.VERSION_CODES.UPSIDE_DOWN_CAKE, use setManagedProfileCallerIdAccessPolicy(android.app.admin.PackagePolicy) instead void setCrossProfileContactsSearchDisabled(ComponentName admin, boolean disabled) This method was deprecated in API level 34. From Build.VERSION_CODES.UPSIDE_DOWN_CAKE use setManagedProfileContactsAccessPolicy(android.app.admin.PackagePolicy) void setCrossProfilePackages(ComponentName admin, Set packageNames) Sets the set of admin-allowlisted package names that are allowed to request user consent for cross-profile communication. void setDefaultDialerApplication(String packageName) Must be called by a device owner or a profile owner of an organization-owned managed profile to set the default dialer application for the calling user. void setDefaultSmsApplication(ComponentName admin, String packageName) Must be called by a device owner or a profile owner of an organization-owned managed profile to set the default SMS application. void setDelegatedScopes(ComponentName admin, String delegatePackage, List scopes) Called by a profile owner or device owner to grant access to privileged APIs to another app. void setDeviceOwnerLockScreenInfo(ComponentName admin, CharSequence info) Sets the device owner information to be shown on the lock screen. void setEndUserSessionMessage(ComponentName admin, CharSequence endUserSessionMessage) Called by a device owner to specify the user session end message. void setFactoryResetProtectionPolicy(ComponentName admin, FactoryResetProtectionPolicy policy) Callable by device owner or profile owner of an organization-owned device, to set a factory reset protection (FRP) policy.

int setGlobalPrivateDnsModeOpportunistic(ComponentName admin) Sets the global Private DNS mode to opportunistic. int setGlobalPrivateDnsModeSpecifiedHost(ComponentName admin, String privateDnsHost) Sets the global Private DNS host to be used. void setGlobalSetting(ComponentName admin, String setting, String value) This method is mostly deprecated. void setKeepUninstalledPackages(ComponentName admin, List packageNames) Set a list of apps to keep around as APKs even if no user has currently installed it. boolean setKeyPairCertificate(ComponentName admin, String alias, List certs, boolean isUserSelectable) This API can be called by the following to associate certificates with a key pair that was generated using generateKeyPair(ComponentName, String, KeyGenParameterSpec, int), and set whether the key is available for the user to choose in the certificate selection prompt: Device owner Profile owner Delegated certificate installer Credential management app From Android Build.VERSION_CODES.S, the credential management app can call this API. boolean setKeyguardDisabled(ComponentName admin, boolean disabled) Called by a device owner or profile owner of secondary users that is affiliated with the device to disable the keyguard altogether. void setKeyguardDisabledFeatures(ComponentName admin, int which) Called by an application that is administering the device to disable keyguard customizations, such as widgets. void setLocationEnabled(ComponentName admin, boolean locationEnabled) Called by device owners to set the user's global location setting. void setLockTaskFeatures(ComponentName admin, int flags) Sets which system features are enabled when the device runs in lock task mode.

void setLockTaskPackages(ComponentName admin, String[] packages) Sets which packages may enter lock task mode. void setLogoutEnabled(ComponentName admin, boolean enabled) Called by a device owner to specify whether logout is enabled for all secondary users. void setLongSupportMessage(ComponentName admin, CharSequence message) Called by a device admin to set the long support message. void setManagedProfileCallerIdAccessPolicy(PackagePolicy policy) Called by a profile owner of a managed profile to set the packages that are allowed to lookup contacts in the managed profile based on caller id information. void setManagedProfileContactsAccessPolicy(PackagePolicy policy) Called by a profile owner of a managed profile to set the packages that are allowed access to the managed profile contacts from the parent user. void setManagedProfileMaximumTimeOff(ComponentName admin, long timeoutMillis) Called by a profile owner of an organization-owned managed profile to set maximum time the profile is allowed to be turned off. void setManagedSubscriptionsPolicy(ManagedSubscriptionsPolicy policy) Called by a profile owner of an organization-owned device to specify ManagedSubscriptionsPolicy Managed subscriptions policy controls how SIMs would be associated with the managed profile. void setMasterVolumeMuted(ComponentName admin, boolean on) Called by profile or device owners to set the global volume mute on or off. void setMaximumFailedPasswordsForWipe(ComponentName admin, int num) Setting this to a value greater than zero enables a policy that will perform a device or profile wipe after too many incorrect device-unlock passwords have been entered. void setMaximumTimeToLock(ComponentName admin, long timeMs) Called by an application that is administering the device to set the maximum time for user activity until the device will lock. List setMeteredDataDisabledPackages(ComponentName admin, List packageNames) Called by a device or profile owner to restrict packages from using metered data. void setMinimumRequiredWifiSecurityLevel(int level) Called by device owner or profile owner of an organization-owned managed profile to specify the minimum security level required for Wi-Fi networks. void setMtePolicy(int policy) Called by a device owner, profile owner of an organization-owned device, to set the Memory Tagging Extension (MTE) policy. void setNearbyAppStreamingPolicy(int policy) Called by a device/profile owner to set nearby app streaming policy. void setNearbyNotificationStreamingPolicy(int policy) Called by a device/profile owner to set nearby notification streaming policy. void setNetworkLoggingEnabled(ComponentName admin, boolean enabled) Called by a device owner, profile owner of a managed profile or delegated app with DELEGATION_NETWORK_LOGGING to control the network logging feature. void setOrganizationColor(ComponentName admin, int color) This method was deprecated in API level 31. From Build.VERSION_CODES.R, the organization color is never used as the background color of the confirm credentials screen. void setOrganizationId(String enterpriseId) Sets the Enterprise ID for the work profile or managed device. void setOrganizationName(ComponentName admin, CharSequence title) Called by the device owner (since API 26) or profile owner (since API 24) to set the name of the organization under management. void setOverrideApnsEnabled(ComponentName admin, boolean enabled) Called by device owner to set if override APNs should be enabled. String[] setPackagesSuspended(ComponentName admin, String[] packageNames, boolean suspended) Called by device or profile owners to suspend packages for this user. void setPasswordExpirationTimeout(ComponentName admin, long timeout) Called by a device admin to set the password expiration timeout. void setPasswordHistoryLength(ComponentName admin, int length) Called by an application that is administering the device to set the length of the password history. void setPasswordMinimumLength(ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. void setPasswordMinimumLetters(ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. void setPasswordMinimumLowerCase(ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. void setPasswordMinimumNonLetter(ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. void setPasswordMinimumNumeric(ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. void setPasswordMinimumSymbols(ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. void setPasswordMinimumUpperCase(ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. void setPasswordQuality(ComponentName admin, int quality) This method was deprecated in API level 31.

Prefer using setRequiredPasswordComplexity(int), to require a password that satisfies a complexity level defined by the platform, rather than specifying custom password requirement. Setting custom, overly-complicated password requirements leads to passwords that are hard for users to remember and may not provide any security benefits given as Android uses hardware-backed throttling to thwart online and offline brute-forcing of the device's screen lock.

Company-owned devices (fully-managed and organization-owned managed profile devices) are able to continue using this method, though it is recommended that setRequiredPasswordComplexity(int) should be used instead. boolean setPermissionGrantState(ComponentName admin, String packageName, String permission, int grantState) Sets the grant state of a runtime permission for a specific application. void setPermissionPolicy(ComponentName admin, int policy) Set the default response for future runtime permission requests by applications. boolean setPermittedAccessibilityServices(ComponentName admin, List packageNames) Called by a profile or device owner to set the permitted AccessibilityService. boolean setPermittedCrossProfileNotificationListeners(ComponentName admin, List packageList) Called by a profile owner of a managed profile to set the packages that are allowed to use a NotificationListenerService in the primary user to see notifications from the managed profile. boolean setPermittedInputMethods(ComponentName admin, List packageNames) Called by a profile or device owner or holder of the Manifest.permission.MANAGE_DEVICE_POLICY_INPUT_METHODS permission to set the permitted input methods services for this user. void setPersonalAppsSuspended(ComponentName admin, boolean suspended) Called by a profile owner of an organization-owned managed profile to suspend personal apps on the device. void setPreferentialNetworkServiceConfigs(List preferentialNetworkServiceConfigs) Sets preferential network configurations. void setPreferentialNetworkServiceEnabled(boolean enabled) Sets whether preferential network service is enabled. void setProfileEnabled(ComponentName admin) Sets the enabled state of the profile. void setProfileName(ComponentName admin, String profileName) Sets the name of the profile. void setRecommendedGlobalProxy(ComponentName admin, ProxyInfo proxyInfo) Set a network-independent global HTTP proxy. void setRequiredPasswordComplexity(int passwordComplexity) Sets a minimum password complexity requirement for the user's screen lock. void setRequiredStrongAuthTimeout(ComponentName admin, long timeoutMs) Called by a device/profile owner to set the timeout after which unlocking with secondary, non strong auth (e.g. fingerprint, face, trust agents) times out, i.e. boolean setResetPasswordToken(ComponentName admin, byte[] token) Called by a profile or device owner to provision a token which can later be used to reset the device lockscreen password (if called by device owner), or managed profile challenge (if called by profile owner), via resetPasswordWithToken(ComponentName, String, byte, int). void setRestrictionsProvider(ComponentName admin, ComponentName provider) Designates a specific service component as the provider for making permission requests of a local or remote administrator of the user. void setScreenCaptureDisabled(ComponentName admin, boolean disabled) Called by a device/profile owner to set whether the screen capture is disabled.

void setSecureSetting(ComponentName admin, String setting, String value) This method is mostly deprecated. void setSecurityLoggingEnabled(ComponentName admin, boolean enabled) Called by device owner or a profile owner of an organization-owned managed profile to control the security logging feature. void setShortSupportMessage(ComponentName admin, CharSequence message) Called by a device admin to set the short support message. void setStartUserSessionMessage(ComponentName admin, CharSequence startUserSessionMessage) Called by a device owner to specify the user session start message. boolean setStatusBarDisabled(ComponentName admin, boolean disabled) Called by device owner or profile owner of secondary users that is affiliated with the device to disable the status bar.

int setStorageEncryption(ComponentName admin, boolean encrypt) This method was deprecated in API level 30. This method does not actually modify the storage encryption of the device. It has never affected the encryption status of a device. Called by an application that is administering the device to request that the storage system be encrypted. Does nothing if the caller is on a secondary user or a managed profile.

When multiple device administrators attempt to control device encryption, the most secure, supported setting will always be used. If any device administrator requests device encryption, it will be enabled; Conversely, if a device administrator attempts to disable device encryption while another device administrator has enabled it, the call to disable will fail (most commonly returning ENCRYPTION_STATUS_ACTIVE). This policy controls encryption of the secure (application data) storage area. Data written to other storage areas may or may not be encrypted, and this policy does not require or control the encryption of any other storage areas. There is one exception: If Environment.isExternalStorageEmulated() is true, then the directory returned by Environment.getExternalStorageDirectory() must be written to disk within the encrypted storage area. Important Note: On some devices, it is possible to encrypt storage without requiring the user to create a device PIN or Password. In this case, the storage is encrypted, but the encryption key may not be fully secured. For maximum security, the administrator should also require (and check for) a pattern, PIN, or password. void setSystemSetting(ComponentName admin, String setting, String value) Called by a device or profile owner to update Settings.System settings. void setSystemUpdatePolicy(ComponentName admin, SystemUpdatePolicy policy) Called by device owners or profile owners of an organization-owned managed profile to to set a local system update policy.

boolean setTime(ComponentName admin, long millis) Called by a device owner or a profile owner of an organization-owned managed profile to set the system wall clock time. boolean setTimeZone(ComponentName admin, String timeZone) Called by a device owner or a profile owner of an organization-owned managed profile to set the system's persistent default time zone. void setTrustAgentConfiguration(ComponentName admin, ComponentName target, PersistableBundle configuration) Sets a list of configuration features to enable for a trust agent component. void setUninstallBlocked(ComponentName admin, String packageName, boolean uninstallBlocked) Change whether a user can uninstall a package. void setUsbDataSignalingEnabled(boolean enabled) Called by a device owner or profile owner of an organization-owned managed profile to enable or disable USB data signaling for the device. void setUserControlDisabledPackages(ComponentName admin, List packages) Called by a device owner or a profile owner or holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_APPS_CONTROL to disable user control over apps. void setUserIcon(ComponentName admin, Bitmap icon) Called by profile or device owners to set the user's photo. void setWifiSsidPolicy(WifiSsidPolicy policy) Called by device owner or profile owner of an organization-owned managed profile to specify the Wi-Fi SSID policy (WifiSsidPolicy). int startUserInBackground(ComponentName admin, UserHandle userHandle) Called by a device owner to start the specified secondary user in background. int stopUser(ComponentName admin, UserHandle userHandle) Called by a device owner to stop the specified secondary user.

boolean switchUser(ComponentName admin, UserHandle userHandle) Called by a device owner to switch the specified secondary user to the foreground. void transferOwnership(ComponentName admin, ComponentName target, PersistableBundle bundle) Changes the current administrator to another one. void uninstallAllUserCaCerts(ComponentName admin) Uninstalls all custom trusted CA certificates from the profile. void uninstallCaCert(ComponentName admin, byte[] certBuffer) Uninstalls the given certificate from trusted user CAs, if present. boolean updateOverrideApn(ComponentName admin, int apnId, ApnSetting apnSetting) Called by device owner or managed profile owner to update an override APN. void wipeData(int flags, CharSequence reason) Ask that all user data be wiped. void wipeData(int flags) See wipeData(int, java.lang.CharSequence) void wipeDevice(int flags) Ask that the device be wiped and factory reset. From class java.lang.Object Object clone() Creates and returns a copy of this object. boolean equals(Object obj) Indicates whether some other object is "equal to" this one. void finalize() Called by the garbage collector on an object when garbage collection determines that there are no more references to the object. final Class getClass() Returns the runtime class of this Object. int hashCode() Returns a hash code value for the object. final void notify() Wakes up a single thread that is waiting on this object's monitor. final void notifyAll() Wakes up all threads that are waiting on this object's monitor. String toString() Returns a string representation of the object. final void wait(long timeoutMillis, int nanos) Causes the current thread to wait until it is awakened, typically by being notified or interrupted, or until a certain amount of real time has elapsed. final void wait(long timeoutMillis) Causes the current thread to wait until it is awakened, typically by being notified or interrupted, or until a certain amount of real time has elapsed. final void wait() Causes the current thread to wait until it is awakened, typically by being notified or interrupted. public static final String ACTION_ADD_DEVICE_ADMIN Activity action: ask the user to add a new device administrator to the system. The desired policy is the ComponentName of the policy in the EXTRA_DEVICE_ADMIN extra field. This will invoke a UI to bring the user through adding the device administrator to the system (or allowing them to reject it). You can optionally include the EXTRA_ADD_EXPLANATION field to provide the user with additional explanation (in addition to your component's description) about what is being added. If your administrator is already active, this will ordinarily return immediately (without user intervention). However, if your administrator has been updated and is requesting additional uses-policy flags, the user will be presented with the new list. New policies will not be available to the updated administrator until the user has accepted the new list.

Constant Value: "android.app.action.ADD_DEVICE_ADMIN" public static final String ACTION_ADMIN_POLICY_COMPLIANCE Activity action: Starts the administrator to show policy compliance for the provisioning.

This action is used any time that the administrator has an opportunity to show policy compliance before the end of setup wizard. This could happen as part of the admin-integrated provisioning flow (in which case this gets sent after ACTION_GET_PROVISIONING_MODE), or it could happen during provisioning finalization if the administrator supports finalization during setup wizard. Intents with this action may also be supplied with the EXTRA_PROVISIONING_ADMIN_EXTRAS_BUNDLE extra. See also: ACTION_GET_PROVISIONING_MODE Constant Value: "android.app.action.ADMIN_POLICY_COMPLIANCE" public static final String ACTION_APPLICATION_DELEGATION_SCOPES_CHANGED Broadcast Action: Sent after application delegation scopes are changed. The new delegation scopes will be sent in an ArrayList extra identified by the EXTRA_DELEGATION_SCOPES key. Note: This is a protected intent that can only be sent by the system. Constant Value: "android.app.action.APPLICATION_DELEGATION_SCOPES_CHANGED" public static final String ACTION_CHECK_POLICY_COMPLIANCE Activity action: launch the DPC to check policy compliance. This intent is launched when the user taps on the notification about personal apps suspension. When handling this intent the DPC must check if personal apps should still be suspended and either unsuspend them or instruct the user on how to resolve the noncompliance causing the suspension. See also: setPersonalAppsSuspended(ComponentName, boolean) Constant Value: "android.app.action.CHECK_POLICY_COMPLIANCE" public static final String ACTION_DEVICE_ADMIN_SERVICE Service action: Action for a service that device owner and profile owner can optionally own. If a device owner or a profile owner has such a service, the system tries to keep a bound connection to it, in order to keep their process always running.

The service must be protected with the Manifest.permission.BIND_DEVICE_ADMIN permission.

Constant Value: "android.app.action.DEVICE_ADMIN_SERVICE" public static final String ACTION_DEVICE_FINANCING_STATE_CHANGED Broadcast Action: Broadcast sent to indicate that the device financing state has changed. This occurs when, for example, a financing kiosk app has been added or removed. To query the current device financing state see isDeviceFinanced(). This will be delivered to the following apps if they include a receiver for this action in their manifest: Device owner admins. Organization-owned profile owner admins The supervision app The device management role holder Constant Value: "android.app.admin.action.DEVICE_FINANCING_STATE_CHANGED" public static final String ACTION_GET_PROVISIONING_MODE Activity action: Starts the administrator to get the mode for the provisioning.

This intent may contain the following extras: The target activity should return one of the following values in EXTRA_PROVISIONING_MODE as result: PROVISIONING_MODE_FULLY_MANAGED_DEVICE PROVISIONING_MODE_MANAGED_PROFILE If performing fully-managed device provisioning and the admin app desires to show its own education screens, the target activity can additionally return EXTRA_PROVISIONING_SKIP_EDUCATION_SCREENS set to true. The target activity may also return the account that needs to be migrated from primary user to managed profile in case of a profile owner provisioning in EXTRA_PROVISIONING_ACCOUNT_TO_MIGRATE as result. The target activity may also include the EXTRA_PROVISIONING_ADMIN_EXTRAS_BUNDLE extra in the intent result.

The values of this PersistableBundle will be sent as an intent extra of the same name to the ACTION_ADMIN_POLICY_COMPLIANCE activity, along with the values of the EXTRA_PROVISIONING_ADMIN_EXTRAS_BUNDLE extra that are already supplied to this activity.

Other extras the target activity may include in the intent result: See also: ACTION_ADMIN_POLICY_COMPLIANCE Constant Value: "android.app.action.GET_PROVISIONING_MODE" public static final String ACTION_MANAGED_PROFILE_PROVISIONED Broadcast Action: This broadcast is sent to indicate that provisioning of a managed profile has completed successfully. The broadcast is limited to the primary profile, to the app specified in the provisioning intent with action ACTION_PROVISION_MANAGED_PROFILE. This intent will contain the following extras Constant Value: "android.app.action.MANAGED_PROFILE_PROVISIONED" Added in API level 23 Deprecated in API level 31 public static final String ACTION_PROVISION_MANAGED_DEVICE This constant was deprecated in API level 31. to support Build.VERSION_CODES.S and later, admin apps must implement activities with intent filters for the ACTION_GET_PROVISIONING_MODE and ACTION_ADMIN_POLICY_COMPLIANCE intent actions; using ACTION_PROVISION_MANAGED_DEVICE to start provisioning will cause the provisioning to fail; to additionally support pre-Build.VERSION_CODES.S, admin apps must also continue to use this constant. Activity action: Starts the provisioning flow which sets up a managed device. Must be started with Activity.startActivityForResult(Intent, int). During device owner provisioning a device admin app is set as the owner of the device. A device owner has full control over the device. The device owner can not be modified by the user. A typical use case would be a device that is owned by a company, but used by either an employee or client. An intent with this action can be sent only on an unprovisioned device. It is possible to check if provisioning is allowed or not by querying the method isProvisioningAllowed(java.lang.String). The intent contains the following extras: When device owner provisioning has completed, an intent of the type DeviceAdminReceiver#ACTION_PROFILE_PROVISIONING_COMPLETE is broadcast to the device owner.

From version Build.VERSION_CODES.O, when device owner provisioning has completed, along with the above broadcast, activity intent ACTION_PROVISIONING_SUCCESSFUL will also be sent to the device owner. If provisioning fails, the device is factory reset. A result code of Activity.RESULT_OK implies that the synchronous part of the provisioning flow was successful, although this doesn't guarantee the full flow will succeed. Conversely a result code of Activity.RESULT_CANCELED implies that the user backed-out of provisioning, or some precondition for provisioning wasn't met. Constant Value: "android.app.action.PROVISION_MANAGED_DEVICE" public static final String ACTION_PROVISION_MANAGED_PROFILE Activity action: Starts the provisioning flow which sets up a managed profile. A managed profile allows data separation for example for the usage of a device as a personal and corporate device. The user which provisioning is started from and the managed profile share a launcher. This intent will typically be sent by a mobile device management application (MDM). Provisioning adds a managed profile and sets the MDM as the profile owner who has full control over the profile. It is possible to check if provisioning is allowed or not by querying the method isProvisioningAllowed(java.lang.String). In version Build.VERSION_CODES.LOLLIPOP, this intent must contain the extra EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_NAME.

As of Build.VERSION_CODES.M, it should contain the extra EXTRA_PROVISIONING_DEVICE_ADMIN_COMPONENT_NAME instead, although specifying only EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_NAME is still supported.

The intent may also contain the following extras: When managed provisioning has completed, broadcasts are sent to the application specified in the provisioning intent. The DeviceAdminReceiver#ACTION_PROFILE_PROVISIONING_COMPLETE broadcast is sent in the managed profile and the ACTION_MANAGED_PROFILE_PROVISIONED broadcast is sent in the primary profile. From version Build.VERSION_CODES.O, when managed provisioning has completed, along with the above broadcast, activity intent ACTION_PROVISIONING_SUCCESSFUL will also be sent to the profile owner. If provisioning fails, the managedProfile is removed so the device returns to its previous state. If launched with Activity.startActivityForResult(Intent, int) a result code of Activity.RESULT_OK implies that the synchronous part of the provisioning flow was successful, although this doesn't guarantee the full flow will succeed. Conversely a result code of Activity.RESULT_CANCELED implies that the user backed-out of provisioning, or some precondition for provisioning wasn't met. If a device policy management role holder (DPMRH) updater is present on the device, an internet connection attempt must be made prior to launching this intent. If internet connection could not be established, provisioning will fail unless EXTRA_PROVISIONING_ALLOW_OFFLINE is explicitly set to true, in which case provisioning will continue without using the DPMRH. If an internet connection has been established, the DPMRH updater will be launched, which will update the DPMRH if it's not present on the device, or if it's present and not valid. If a DPMRH is present on the device and valid, the provisioning flow will be deferred to it. Constant Value: "android.app.action.PROVISION_MANAGED_PROFILE" public static final String ACTION_SET_NEW_PARENT_PROFILE_PASSWORD Activity action: have the user enter a new password for the parent profile.

If the intent is launched from within a managed profile, this will trigger entering a new password for the parent of the profile.

The caller can optionally set EXTRA_DEVICE_PASSWORD_REQUIREMENT_ONLY to only enforce device-wide password requirement. In all other cases the behaviour is identical to ACTION_SET_NEW_PASSWORD. Constant Value: "android.app.action.SET_NEW_PARENT_PROFILE_PASSWORD" public static final String ACTION_SET_NEW_PASSWORD Activity action: have the user enter a new password. For admin apps, this activity should be launched after using setPasswordQuality(android.content.ComponentName, int), or setPasswordMinimumLength(android.content.ComponentName, int) to have the user enter a new password that meets the current requirements. You can use isActivePasswordSufficient() to determine whether you need to have the user select a new password in order to meet the current constraints. Upon being resumed from this activity, you can check the new password characteristics to see if they are sufficient. Non-admin apps can use getPasswordComplexity() to check the current screen lock complexity, and use this activity with extra EXTRA_PASSWORD_COMPLEXITY to suggest to users how complex the app wants the new screen lock to be.

Note that both getPasswordComplexity() and the extra EXTRA_PASSWORD_COMPLEXITY require the calling app to have the permission permission#REQUEST_PASSWORD_COMPLEXITY. If the intent is launched from within a managed profile with a profile owner built against Build.VERSION_CODES.M or before, this will trigger entering a new password for the parent of the profile. For all other cases it will trigger entering a new password for the user or profile it is launched from. See also: ACTION_SET_NEW_PARENT_PROFILE_PASSWORD Constant Value: "android.app.action.SET_NEW_PASSWORD" public static final String ACTION_START_ENCRYPTION Activity action: begin the process of encrypting data on the device. This activity should be launched after using setStorageEncryption(ComponentName, boolean) to request encryption be activated.

After resuming from this activity, use getStorageEncryption(ComponentName) to check encryption status. However, on some devices this activity may never return, as it may trigger a reboot and in some cases a complete data wipe of the device. Constant Value: "android.app.action.START_ENCRYPTION" public static final String ACTION_SYSTEM_UPDATE_POLICY_CHANGED Broadcast action: notify that a new local system update policy has been set by the device owner.

The new policy can be retrieved by getSystemUpdatePolicy(). Constant Value: "android.app.action.SYSTEM_UPDATE_POLICY_CHANGED" public static final String DELEGATION_CERT_INSTALL Delegation of certificate installation and management. This scope grants access to the getInstalledCaCerts(ComponentName), hasCaCertInstalled(ComponentName, byte), installCaCert(ComponentName, byte), uninstallCaCert(ComponentName, byte), uninstallAllUserCaCerts(ComponentName) and installKeyPair(ComponentName, PrivateKey, Certificate, String) APIs. This scope also grants the ability to read identifiers that the delegating device owner or profile owner can obtain. See getEnrollmentSpecificId(). Constant Value: "delegation-cert-install" public static final String DELEGATION_NETWORK_LOGGING Grants access to setNetworkLoggingEnabled(ComponentName, boolean), isNetworkLoggingEnabled(ComponentName) and retrieveNetworkLogs(ComponentName, long).

Once granted the delegated app will start receiving DelegatedAdminReceiver.onNetworkLogsAvailable() callback, and Device owner or Profile Owner will no longer receive the DeviceAdminReceiver.onNetworkLogsAvailable() callback. There can be at most one app that has this delegation. If another app already had delegated network logging access, it will lose the delegation when a new app is delegated. Device Owner can grant this access since Android 10. Profile Owner of a managed profile can grant this access since Android 12. Constant Value: "delegation-network-logging" Added in API level 11 Deprecated in API level 34 public static final int ENCRYPTION_STATUS_ACTIVATING This constant was deprecated in API level 34. This result code has never actually been used, so there is no reason for apps to check for it.

Result code for getStorageEncryptionStatus(): indicating that encryption is not currently active, but is currently being activated. Constant Value: 2 (0x00000002) public static final int ENCRYPTION_STATUS_ACTIVE Result code for setStorageEncryption(ComponentName, boolean) and getStorageEncryptionStatus(): indicating that encryption is active.

getStorageEncryptionStatus() can only return this value for apps targeting API level 23 or lower, or on devices that use Full Disk Encryption. Support for Full Disk Encryption was entirely removed in API level 33, having been replaced by File Based Encryption. The result code ENCRYPTION_STATUS_ACTIVE_PER_USER is used on devices that use File Based Encryption, except when the app targets API level 23 or lower.

setStorageEncryption(ComponentName, boolean) can still return this value for an unrelated reason, but setStorageEncryption(ComponentName, boolean) is deprecated since it doesn't do anything useful. Constant Value: 3 (0x00000003) public static final int ENCRYPTION_STATUS_ACTIVE_DEFAULT_KEY Result code for getStorageEncryptionStatus(): indicating that encryption is active, but the encryption key is not cryptographically protected by the user's credentials. This value can only be returned on devices that use Full Disk Encryption. Support for Full Disk Encryption was entirely removed in API level 33, having been replaced by File Based Encryption. With File Based Encryption, each user's credential-encrypted storage is always cryptographically protected by the user's credentials.

Constant Value: 4 (0x00000004) public static final int ENCRYPTION_STATUS_ACTIVE_PER_USER Result code for getStorageEncryptionStatus(): indicating that encryption is active and the encryption key is tied to the user or profile. This value is only returned to apps targeting API level 24 and above. For apps targeting earlier API levels, ENCRYPTION_STATUS_ACTIVE is returned, even if the encryption key is specific to the user or profile. Constant Value: 5 (0x00000005) public static final int ENCRYPTION_STATUS_INACTIVE Result code for setStorageEncryption(ComponentName, boolean) and getStorageEncryptionStatus(): indicating that encryption is supported, but is not currently active. getStorageEncryptionStatus() can only return this value on devices that use Full Disk Encryption. Support for Full Disk Encryption was entirely removed in API level 33, having been replaced by File Based Encryption. Devices that use File Based Encryption always automatically activate their encryption on first boot.

setStorageEncryption(ComponentName, boolean) can still return this value for an unrelated reason, but setStorageEncryption(ComponentName, boolean) is deprecated since it doesn't do anything useful. Constant Value: 1 (0x00000001) public static final String EXTRA_ADD_EXPLANATION An optional CharSequence providing additional explanation for why the admin is being added. See also: Constant Value: "android.app.extra.ADD_EXPLANATION" public static final String EXTRA_PROVISIONING_ACCOUNT_TO_MIGRATE An Account extra holding the account to migrate during managed profile provisioning. If the account supplied is present in the primary user, it will be copied, along with its credentials to the managed profile and removed from the primary user. Use with ACTION_PROVISION_MANAGED_PROFILE, with managed account provisioning, or return as an extra to the intent result from the ACTION_GET_PROVISIONING_MODE activity.

Constant Value: "android.app.extra.PROVISIONING_ACCOUNT_TO_MIGRATE" public static final String EXTRA_PROVISIONING_ADMIN_EXTRAS_BUNDLE A Parcelable extra of type PersistableBundle that allows a mobile device management application or NFC programmer application which starts managed provisioning to pass data to the management application instance after provisioning. If used with ACTION_PROVISION_MANAGED_PROFILE it can be used by the application that sends the intent to pass data to itself on the newly created profile. If used with ACTION_PROVISION_MANAGED_DEVICE it allows passing data to the same instance of the app on the primary user. Starting from Build.VERSION_CODES.M, if used with MIME_TYPE_PROVISIONING_NFC as part of NFC managed device provisioning, the NFC message should contain a stringified Properties instance, whose string properties will be converted into a PersistableBundle and passed to the management application after provisioning. Admin apps will receive this extra in their ACTION_GET_PROVISIONING_MODE and ACTION_ADMIN_POLICY_COMPLIANCE intent handlers. Additionally, ACTION_GET_PROVISIONING_MODE may also return this extra which will then be sent over to ACTION_ADMIN_POLICY_COMPLIANCE, alongside the original values that were passed to ACTION_GET_PROVISIONING_MODE. In both cases the application receives the data in DeviceAdminReceiver#onProfileProvisioningComplete via an intent with the action DeviceAdminReceiver#ACTION_PROFILE_PROVISIONING_COMPLETE. The bundle is not changed during the managed provisioning. Constant Value: "android.app.extra.PROVISIONING_ADMIN_EXTRAS_BUNDLE" public static final String EXTRA_PROVISIONING_ALLOW_OFFLINE A boolean extra indicating whether offline provisioning is allowed. For the online provisioning flow, there will be an attempt to download and install the latest version of the device policy management role holder. The platform will then delegate provisioning to the device policy management role holder via role holder-specific provisioning actions. For the offline provisioning flow, the provisioning flow will always be handled by the platform. If this extra is set to false, the provisioning flow will enforce that an internet connection is established, which will start the online provisioning flow.

If an internet connection cannot be established, provisioning will fail. If this extra is set to true, the provisioning flow will still try to connect to the internet, but if it fails it will start the offline provisioning flow.

For T if this extra is set to true, the provisioning flow will be forced through the platform and there will be no attempt to download and install the device policy management role holder.

The default value is false. This extra is respected when provided via the provisioning intent actions such as ACTION_PROVISION_MANAGED_PROFILE. Constant Value: "android.app.extra.PROVISIONING_ALLOW_OFFLINE" public static final String EXTRA_PROVISIONING_DEVICE_ADMIN_COMPONENT_NAME A ComponentName extra indicating the device admin receiver of the mobile device management application that will be set as the profile owner or device owner and active admin. If an application starts provisioning directly via an intent with action ACTION_PROVISION_MANAGED_PROFILE or ACTION_PROVISION_MANAGED_DEVICE the package name of this component has to match the package name of the application that started provisioning. This component is set as device owner and active admin when device owner provisioning is started by an intent with action ACTION_PROVISION_MANAGED_DEVICE or by an NFC message containing an NFC record with MIME type MIME_TYPE_PROVISIONING_NFC. For the NFC record, the component name must be flattened to a string, via ComponentName#flattenToShortString(). See also: Constant Value: "android.app.extra.PROVISIONING_DEVICE_ADMIN_COMPONENT_NAME" public static final String EXTRA_PROVISIONING_DEVICE_ADMIN_MINIMUM_VERSION_CODE An int extra holding a minimum required version code for the device admin package. If the device admin is already installed on the device, it will only be re-downloaded from EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION if the version of the installed package is less than this version code. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_DEVICE_ADMIN_MINIMUM_VERSION_CODE" public static final String EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_CHECKSUM A String extra holding the URL-safe base64 encoded SHA-256 hash of the file at download location specified in EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION. Either this extra or EXTRA_PROVISIONING_DEVICE_ADMIN_SIGNATURE_CHECKSUM must be present.

The provided checksum must match the checksum of the file at the download location. If the checksum doesn't match an error will be shown to the user and the user will be asked to factory reset the device. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump.

It can also be used for QR code provisioning. Note: for devices running Build.VERSION_CODES.LOLLIPOP and Build.VERSION_CODES.LOLLIPOP_MR1 only SHA-1 hash is supported. Starting from Build.VERSION_CODES.M, this parameter accepts SHA-256 in addition to SHA-1. From Build.VERSION_CODES.Q, only SHA-256 hash is supported.

Constant Value: "android.app.extra.PROVISIONING_DEVICE_ADMIN_PACKAGE_CHECKSUM" public static final String EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_COOKIE_HEADER A String extra holding a http cookie header which should be used in the http request to the url specified in EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump.

It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_COOKIE_HEADER" public static final String EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION A String extra holding a url that specifies the download location of the device admin package. When not provided it is assumed that the device admin package is already installed. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION" Added in API level 21 Deprecated in API level 23 public static final String EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_NAME This constant was deprecated in API level 23. Use EXTRA_PROVISIONING_DEVICE_ADMIN_COMPONENT_NAME. This extra is still supported, but only if there is only one device admin receiver in the package that requires the permission Manifest.permission.BIND_DEVICE_ADMIN. A String extra holding the package name of the mobile device management application that will be set as the profile owner or device owner. If an application starts provisioning directly via an intent with action ACTION_PROVISION_MANAGED_PROFILE this package has to match the package name of the application that started provisioning. The package will be set as profile owner in that case. This package is set as device owner when device owner provisioning is started by an NFC message containing an NFC record with MIME type MIME_TYPE_PROVISIONING_NFC. When this extra is set, the application must have exactly one device admin receiver. This receiver will be set as the profile or device owner and active admin. See also: Constant Value: "android.app.extra.PROVISIONING_DEVICE_ADMIN_PACKAGE_NAME" public static final String EXTRA_PROVISIONING_DISCLAIMERS A Bundle[] extra consisting of list of disclaimer headers and disclaimer contents. Each Bundle must have both EXTRA_PROVISIONING_DISCLAIMER_HEADER as disclaimer header, and EXTRA_PROVISIONING_DISCLAIMER_CONTENT as disclaimer content. The extra typically contains one disclaimer from the company of mobile device management application (MDM), and one disclaimer from the organization. Call Bundle#putParcelableArray(String, Parcelable[]) to put the Bundle[] Maximum 3 key-value pairs can be specified. The rest will be ignored. Can be used in an intent with action ACTION_PROVISION_MANAGED_PROFILE. This extra can also be returned by the admin app when performing the admin-integrated provisioning flow as a result of the ACTION_GET_PROVISIONING_MODE activity.

Constant Value: "android.app.extra.PROVISIONING_DISCLAIMERS" public static final String EXTRA_PROVISIONING_DISCLAIMER_CONTENT A Uri extra pointing to disclaimer content. The following URI schemes are accepted: Styled text is supported in the disclaimer content. The content is parsed by Html.fromHtml(String) and displayed in a TextView. If a content: URI is passed, URI is passed, the intent should have the flag Intent#FLAG_GRANT_READ_URI_PERMISSION and the uri should be added to the ClipData of the intent too. Use in Bundle EXTRA_PROVISIONING_DISCLAIMERS System app, i.e. application with ApplicationInfo#FLAG_SYSTEM, can also insert a disclaimer by declaring an application-level meta-data in AndroidManifest.xml.

Must use it with EXTRA_PROVISIONING_DISCLAIMER_HEADER. Here is the example: Constant Value: "android.app.extra.PROVISIONING_DISCLAIMER_CONTENT" public static final String EXTRA_PROVISIONING_DISCLAIMER_HEADER A String extra of localized disclaimer header. The extra is typically the company name of mobile device management application (MDM) or the organization name. Use in Bundle EXTRA_PROVISIONING_DISCLAIMERS System app, i.e. application with ApplicationInfo#FLAG_SYSTEM, can also insert a disclaimer by declaring an application-level meta-data in AndroidManifest.xml. Must use it with EXTRA_PROVISIONING_DISCLAIMER_CONTENT. Here is the example: Constant Value: "android.app.extra.PROVISIONING_DISCLAIMER_HEADER" Added in API level 21 Deprecated in API level 26 public static final String EXTRA_PROVISIONING_EMAIL_ADDRESS This constant was deprecated in API level 26. From Build.VERSION_CODES.O, never used while provisioning the device. Constant Value: "android.app.extra.PROVISIONING_EMAIL_ADDRESS" public static final String EXTRA_PROVISIONING_IMEI A string extra holding the IMEI (International Mobile Equipment Identity) of the device. Constant Value: "android.app.extra.PROVISIONING_IMEI" Added in API level 33 Deprecated in API level 34 public static final String EXTRA_PROVISIONING_KEEP_SCREEN_ON This constant was deprecated in API level 34. from Build.VERSION_CODES.UPSIDE_DOWN_CAKE, the flag wouldn't be functional. The screen is kept on throughout the provisioning flow. A boolean flag that indicates whether the screen should be on throughout the provisioning flow. This extra can either be passed as an extra to the ACTION_PROVISION_MANAGED_PROFILE intent, or it can be returned by the admin app when performing the admin-integrated provisioning flow as a result of the ACTION_GET_PROVISIONING_MODE activity. Constant Value: "android.app.extra.PROVISIONING_KEEP_SCREEN_ON" public static final String EXTRA_PROVISIONING_LEAVE_ALL_SYSTEM_APPS_ENABLED A Boolean extra that can be used by the mobile device management application to skip the disabling of system apps during provisioning when set to true. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC, an intent with action ACTION_PROVISION_MANAGED_PROFILE that starts profile owner provisioning or set as an extra to the intent result of the ACTION_GET_PROVISIONING_MODE activity. Constant Value: "android.app.extra.PROVISIONING_LEAVE_ALL_SYSTEM_APPS_ENABLED" public static final String EXTRA_PROVISIONING_LOCALE A String extra holding the Locale that the device will be set to. Format: xx_yy, where xx is the language code, and yy the country code. Use only for device owner provisioning. This extra can be returned by the admin app when performing the admin-integrated provisioning flow as a result of the ACTION_GET_PROVISIONING_MODE activity. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_LOCALE" public static final String EXTRA_PROVISIONING_LOCAL_TIME A Long extra holding the wall clock time (in milliseconds) to be set on the device's AlarmManager. Use only for device owner provisioning. This extra can be returned by the admin app when performing the admin-integrated provisioning flow as a result of the ACTION_GET_PROVISIONING_MODE activity. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning.

Constant Value: "android.app.extra.PROVISIONING_LOCAL_TIME" public static final String EXTRA_PROVISIONING_SENSORS_PERMISSION_GRANT_OPT_OUT A boolean extra indicating the admin of a fully-managed device opts out of controlling permission grants for sensor-related permissions, see setPermissionGrantState(android.content.ComponentName, java.lang.String, java.lang.String, int). The default for this extra is false - by default, the admin of a fully-managed device has the ability to grant sensors-related permissions. Use only for device owner provisioning. This extra can be returned by the admin app when performing the admin-integrated provisioning flow as a result of the ACTION_GET_PROVISIONING_MODE activity. This extra may also be provided to the admin app via an intent extra for ACTION_GET_PROVISIONING_MODE. See also: ACTION_GET_PROVISIONING_MODE Constant Value: "android.app.extra.PROVISIONING_SENSORS_PERMISSION_GRANT_OPT_OUT" public static final String EXTRA_PROVISIONING_SERIAL_NUMBER A string extra holding the serial number of the device. Constant Value: "android.app.extra.PROVISIONING_SERIAL_NUMBER" public static final String EXTRA_PROVISIONING_SHOULD_LAUNCH_RESULT_INTENT A boolean extra that determines whether the provisioning flow should launch the resulting launch intent, if one is supplied by the device policy management role holder via EXTRA_RESULT_LAUNCH_INTENT. Default value is false. If true, the resulting intent will be launched by the provisioning flow, if one is supplied by the device policy management role holder. If false, the resulting intent will be returned as EXTRA_RESULT_LAUNCH_INTENT to the provisioning initiator, if one is supplied by the device manager role holder. It will be the responsibility of the provisioning initiator to launch this Intent after provisioning completes. This extra is respected when provided via the provisioning intent actions such as ACTION_PROVISION_MANAGED_PROFILE.

Constant Value: "android.app.extra.PROVISIONING_SHOULD_LAUNCH_RESULT_INTENT" public static final String EXTRA_PROVISIONING_SKIP_EDUCATION_SCREENS A boolean extra indicating if the education screens from the provisioning flow should be skipped. If unspecified, defaults to false. This extra can be set in the following ways: By the admin app when performing the admin-integrated provisioning flow as a result of the ACTION_GET_PROVISIONING_MODE activity For managed account enrollment If the education screens are skipped, it is the admin application's responsibility to display its own user education screens. Constant Value: "android.app.extra.PROVISIONING_SKIP_EDUCATION_SCREENS" Added in API level 26 Deprecated in API level 31 public static final String EXTRA_PROVISIONING_SKIP_USER_CONSENT This constant was deprecated in API level 31. this extra is no longer relevant as device owners cannot create managed profiles A boolean extra indicating if the user consent steps from the provisioning flow should be skipped. If unspecified, defaults to false. It can only be used by an existing device owner trying to create a managed profile via ACTION_PROVISION_MANAGED_PROFILE. Otherwise it is ignored. Constant Value: "android.app.extra.PROVISIONING_SKIP_USER_CONSENT" public static final String EXTRA_PROVISIONING_TIME_ZONE A String extra holding the time zone AlarmManager that the device will be set to.

Use only for device owner provisioning. This extra can be returned by the admin app when performing the admin-integrated provisioning flow as a result of the ACTION_GET_PROVISIONING_MODE activity. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning.

Constant Value: "android.app.extra.PROVISIONING_TIME_ZONE" public static final String EXTRA_PROVISIONING_USE_MOBILE_DATA A boolean extra indicating if mobile data should be used during the provisioning flow for downloading the admin app. If EXTRA_PROVISIONING_WIFI_SSID is also specified, wifi network will be used instead. Default value is false. If this extra is set to true and EXTRA_PROVISIONING_WIFI_SSID is not specified, this extra has different behaviour depending on the way provisioning is triggered: For provisioning started via a QR code or an NFC tag, mobile data is always used for downloading the admin app. For all other provisioning methods, a mobile data connection check is made at the start of provisioning. If mobile data is connected at that point, the admin app download will happen using mobile data. If mobile data is not connected at that point, the end-user will be asked to pick a wifi network and the admin app download will proceed over wifi. Constant Value: "android.app.extra.PROVISIONING_USE_MOBILE_DATA" public static final String EXTRA_PROVISIONING_WIFI_HIDDEN A boolean extra indicating whether the wifi network in EXTRA_PROVISIONING_WIFI_SSID is hidden or not. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_WIFI_HIDDEN" public static final String EXTRA_PROVISIONING_WIFI_PAC_URL A String extra holding the proxy auto-config (PAC) URL for the wifi network in EXTRA_PROVISIONING_WIFI_SSID. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump.

It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_WIFI_PAC_URL" public static final String EXTRA_PROVISIONING_WIFI_PASSWORD A String extra holding the password of the wifi network in EXTRA_PROVISIONING_WIFI_SSID. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_WIFI_PASSWORD" public static final String EXTRA_PROVISIONING_WIFI_PROXY_BYPASS A String extra holding the proxy bypass for the wifi network in EXTRA_PROVISIONING_WIFI_SSID. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_WIFI_PROXY_BYPASS" public static final String EXTRA_PROVISIONING_WIFI_PROXY_HOST A String extra holding the proxy host for the wifi network in EXTRA_PROVISIONING_WIFI_SSID. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_WIFI_PROXY_HOST" public static final String EXTRA_PROVISIONING_WIFI_PROXY_PORT An int extra holding the proxy port for the wifi network in EXTRA_PROVISIONING_WIFI_SSID. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_WIFI_PROXY_PORT" public static final String EXTRA_PROVISIONING_WIFI_SECURITY_TYPE A String extra indicating the security type of the wifi network in EXTRA_PROVISIONING_WIFI_SSID and could be one of NONE, WPA, WEP or EAP. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_WIFI_SECURITY_TYPE" public static final String EXTRA_PROVISIONING_WIFI_SSID A String extra holding the ssid of the wifi network that should be used during nfc device owner provisioning for downloading the mobile device management application.

Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_WIFI_SSID" public static final String EXTRA_PROVISIONING_WIFI_USER_CERTIFICATE The user certificate of the wifi network in EXTRA_PROVISIONING_WIFI_SSID. This should be an X.509 certificate and private key Base64 encoded DER format, ie.

PEM representation of a certificate and key without header, footer and line breaks. More information This is only used if the EXTRA_PROVISIONING_WIFI_SECURITY_TYPE is EAP. Use in an NFC record with MIME_TYPE_PROVISIONING_NFC that starts device owner provisioning via an NFC bump. It can also be used for QR code provisioning. Constant Value: "android.app.extra.PROVISIONING_WIFI_USER_CERTIFICATE" public static final int EXTRA_RESOURCE_TYPE_DRAWABLE A int value for EXTRA_RESOURCE_TYPE to indicate that a resource of type Drawable is being updated. Constant Value: 1 (0x00000001) public static final int EXTRA_RESOURCE_TYPE_STRING A int value for EXTRA_RESOURCE_TYPE to indicate that a resource of type String is being updated.

Constant Value: 2 (0x00000002) public static final int FLAG_EVICT_CREDENTIAL_ENCRYPTION_KEY Flag for lockNow(int): also evict the user's credential encryption key from the keyring. The user's credential will need to be entered again in order to derive the credential encryption key that will be stored back in the keyring for future use. This flag can only be used by a profile owner when locking a managed profile when getStorageEncryptionStatus() returns ENCRYPTION_STATUS_ACTIVE_PER_USER. In order to secure user data, the user will be stopped and restarted so apps should wait until they are next run to perform further actions. Constant Value: 1 (0x00000001) public static final int INSTALLKEY_SET_USER_SELECTABLE Specifies that a user can select the key via the Certificate Selection prompt. If this flag is not set when calling installKeyPair(ComponentName, PrivateKey, Certificate, String), the key can only be granted access by implementing DeviceAdminReceiver.onChoosePrivateKeyAlias(Context, Intent, int, Uri, String). For use with installKeyPair(android.content.ComponentName, java.security.PrivateKey, java.security.cert.Certificate[], java.lang.String, int) Constant Value: 2 (0x00000002) public static final int KEYGUARD_DISABLE_BIOMETRICS Disable all biometric authentication on keyguard secure screens (e.g. PIN/Pattern/Password). Constant Value: 416 (0x000001a0) public static final int KEYGUARD_DISABLE_FACE Disable face authentication on keyguard secure screens (e.g. PIN/Pattern/Password). Constant Value: 128 (0x00000080) public static final int KEYGUARD_DISABLE_FEATURES_ALL Disable all current and future keyguard customizations. Constant Value: 2147483647 (0x7fffffff) public static final int KEYGUARD_DISABLE_FEATURES_NONE Widgets are enabled in keyguard Constant Value: 0 (0x00000000) public static final int KEYGUARD_DISABLE_FINGERPRINT Disable fingerprint authentication on keyguard secure screens (e.g. PIN/Pattern/Password). Constant Value: 32 (0x00000020) public static final int KEYGUARD_DISABLE_IRIS Disable iris authentication on keyguard secure screens (e.g. PIN/Pattern/Password). Constant Value: 256 (0x00000100) Added in API level 24 Deprecated in API level 33 public static final int KEYGUARD_DISABLE_REMOTE_INPUT This constant was deprecated in API level 33. This flag was added in version Build.VERSION_CODES.N, but it never had any effect. Disable text entry into notifications on secure keyguard screens (e.g. PIN/Pattern/Password). Constant Value: 64 (0x00000040) public static final int KEYGUARD_DISABLE_SECURE_CAMERA Disable the camera on secure keyguard screens (e.g. PIN/Pattern/Password) Constant Value: 2 (0x00000002) public static final int KEYGUARD_DISABLE_SECURE_NOTIFICATIONS Disable showing all notifications on secure keyguard screens (e.g. PIN/Pattern/Password) Constant Value: 4 (0x00000004) public static final int KEYGUARD_DISABLE_SHORTCUTS_ALL Disable all keyguard shortcuts. Constant Value: 512 (0x00000200) public static final int KEYGUARD_DISABLE_TRUST_AGENTS Disable trust agents on secure keyguard screens (e.g. PIN/Pattern/Password). By setting this flag alone, all trust agents are disabled. If the admin then wants to allowlist specific features of some trust agent, setTrustAgentConfiguration(ComponentName, ComponentName, PersistableBundle) can be used in conjuction to set trust-agent-specific configurations. Constant Value: 16 (0x00000010) public static final int KEYGUARD_DISABLE_UNREDACTED_NOTIFICATIONS Only allow redacted notifications on secure keyguard screens (e.g. PIN/Pattern/Password) Constant Value: 8 (0x00000008) public static final int KEYGUARD_DISABLE_WIDGETS_ALL Disable all keyguard widgets. Has no effect starting from Build.VERSION_CODES.LOLLIPOP since keyguard widget is only supported on Android versions lower than 5.0. Constant Value: 1 (0x00000001) public static final int LOCK_TASK_FEATURE_BLOCK_ACTIVITY_START_IN_TASK Enable blocking of non-allowlisted activities from being started into a locked task. See also: setLockTaskFeatures(ComponentName, int) Constant Value: 64 (0x00000040) public static final int LOCK_TASK_FEATURE_NONE Disable all configurable SystemUI features during LockTask mode. This includes, system info area in the status bar (connectivity icons, clock, etc.) notifications (including alerts, icons, and the notification shade) Home button Recents button and UI global actions menu (i.e. power button menu) keyguard See also: setLockTaskFeatures(ComponentName, int) Constant Value: 0 (0x00000000) public static final int LOCK_TASK_FEATURE_SYSTEM_INFO Enable the system info area in the status bar during LockTask mode. The system info area usually occupies the right side of the status bar (although this can differ across OEMs). It includes all system information indicators, such as date and time, connectivity, battery, vibration mode, etc. See also: setLockTaskFeatures(ComponentName, int) Constant Value: 1 (0x00000001) public static final String MIME_TYPE_PROVISIONING_NFC This MIME type is used for starting the device owner provisioning. During device owner provisioning a device admin app is set as the owner of the device. A device owner has full control over the device. The device owner can not be modified by the user and the only way of resetting the device is if the device owner app calls a factory reset. A typical use case would be a device that is owned by a company, but used by either an employee or client. The NFC message must be sent to an unprovisioned device. The NFC record must contain a serialized Properties object which contains the following properties: EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_NAME EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_LOCATION, optional EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_DOWNLOAD_COOKIE_HEADER, optional EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_CHECKSUM, optional EXTRA_PROVISIONING_LOCAL_TIME (convert to String), optional EXTRA_PROVISIONING_TIME_ZONE, optional EXTRA_PROVISIONING_LOCALE, optional EXTRA_PROVISIONING_WIFI_SSID, optional EXTRA_PROVISIONING_WIFI_HIDDEN (convert to String), optional EXTRA_PROVISIONING_WIFI_SECURITY_TYPE, optional EXTRA_PROVISIONING_WIFI_PASSWORD, optional EXTRA_PROVISIONING_WIFI_PROXY_HOST, optional EXTRA_PROVISIONING_WIFI_PROXY_PORT (convert to String), optional EXTRA_PROVISIONING_WIFI_PROXY_BYPASS, optional EXTRA_PROVISIONING_WIFI_PAC_URL, optional EXTRA_PROVISIONING_ADMIN_EXTRAS_BUNDLE, optional, supported from Build.VERSION_CODES.M EXTRA_PROVISIONING_WIFI_EAP_METHOD, optional, supported from Build.VERSION_CODES.Q EXTRA_PROVISIONING_WIFI_PHASE2_AUTH, optional, supported from Build.VERSION_CODES.Q EXTRA_PROVISIONING_WIFI_CA_CERTIFICATE, optional, supported from Build.VERSION_CODES.Q EXTRA_PROVISIONING_WIFI_USER_CERTIFICATE, optional, supported from Build.VERSION_CODES.Q EXTRA_PROVISIONING_WIFI_IDENTITY, optional, supported from Build.VERSION_CODES.Q EXTRA_PROVISIONING_WIFI_ANONYMOUS_IDENTITY, optional, supported from Build.VERSION_CODES.Q EXTRA_PROVISIONING_WIFI_DOMAIN, optional, supported from Build.VERSION_CODES.Q As of Build.VERSION_CODES.M, the properties should contain EXTRA_PROVISIONING_DEVICE_ADMIN_COMPONENT_NAME instead of EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_NAME, (although specifying only EXTRA_PROVISIONING_DEVICE_ADMIN_PACKAGE_NAME is still supported). Constant Value: "application/com.android.managedprovisioning" public static final int MTE_DISABLED Require that MTE be disabled on the device. Can be set by a device owner. Constant Value: 2 (0x00000002) public static final int MTE_ENABLED Require that MTE be enabled on the device, if supported. Can be set by a device owner or a profile owner of an organization-owned managed profile. Constant Value: 1 (0x00000001) public static final int MTE_NOT_CONTROLLED_BY_POLICY Allow the user to choose whether to enable MTE on the device. Constant Value: 0 (0x00000000) public static final int NEARBY_STREAMING_DISABLED Indicates that nearby streaming is disabled. Constant Value: 1 (0x00000001) public static final int NEARBY_STREAMING_ENABLED Indicates that nearby streaming is enabled. Constant Value: 2 (0x00000002) public static final int NEARBY_STREAMING_NOT_CONTROLLED_BY_POLICY Indicates that nearby streaming is not controlled by policy, which means nearby streaming is allowed. Constant Value: 0 (0x00000000) public static final int NEARBY_STREAMING_SAME_MANAGED_ACCOUNT_ONLY Indicates that nearby streaming is enabled only to devices offering a comparable level of security, with the same authenticated managed account. Constant Value: 3 (0x00000003) public static final int OPERATION_SAFETY_REASON_DRIVING_DISTRACTION Indicates that a UnsafeStateException was thrown because the operation would distract the driver of the vehicle. Constant Value: 1 (0x00000001) public static final int PASSWORD_COMPLEXITY_HIGH Constant for getPasswordComplexity() and setRequiredPasswordComplexity(int). Define the high password complexity band as: PIN with no repeating (4444) or ordered (1234, 4321, 2468) sequences, length at least 8 alphabetic, length at least 6 alphanumeric, length at least 6 When returned from getPasswordComplexity(), the constant represents the exact complexity band the password is in. When passed to {@link #setRequiredPasswordComplexity(int), it sets the minimum complexity band which the password must meet. Constant Value: 327680 (0x00050000) public static final int PASSWORD_COMPLEXITY_MEDIUM Constant for getPasswordComplexity() and setRequiredPasswordComplexity(int). Define the medium password complexity band as: PIN with no repeating (4444) or ordered (1234, 4321, 2468) sequences, length at least 4 alphabetic, length at least 4 alphanumeric, length at least 4 When returned from getPasswordComplexity(), the constant represents the exact complexity band the password is in. When passed to {@link #setRequiredPasswordComplexity(int), it sets the minimum complexity band which the password must meet. Constant Value: 196608 (0x00030000) public static final int PASSWORD_QUALITY_ALPHABETIC Constant for setPasswordQuality(ComponentName, int): the user must have entered a password containing at least alphabetic (or other symbol) characters. Note that quality constants are ordered so that higher values are more restrictive. Constant Value: 262144 (0x00040000) public static final int PASSWORD_QUALITY_ALPHANUMERIC Constant for setPasswordQuality(ComponentName, int): the user must have entered a password containing at least both> numeric and alphabetic (or other symbol) characters. Note that quality constants are ordered so that higher values are more restrictive. Constant Value: 327680 (0x00050000) public static final int PASSWORD_QUALITY_BIOMETRIC_WEAK Constant for setPasswordQuality(ComponentName, int): the policy allows for low-security biometric recognition technology. This implies technologies that can recognize the identity of an individual to about a 3 digit PIN (false detection is less than 1 in 1,000). Note that quality constants are ordered so that higher values are more restrictive. Constant Value: 32768 (0x00008000) public static final int PASSWORD_QUALITY_COMPLEX Constant for setPasswordQuality(ComponentName, int): allows the admin to set precisely how many characters of various types the password should contain to satisfy the policy. The admin should set these requirements via setPasswordMinimumLetters(ComponentName, int), setPasswordMinimumNumeric(ComponentName, int), setPasswordMinimumSymbols(ComponentName, int), setPasswordMinimumUpperCase(ComponentName, int), setPasswordMinimumLowerCase(ComponentName, int), setPasswordMinimumNonLetter(ComponentName, int), and setPasswordMinimumLength(ComponentName, int). Note that quality constants are ordered so that higher values are more restrictive. Constant Value: 393216 (0x00060000) public static final int PASSWORD_QUALITY_NUMERIC Constant for setPasswordQuality(ComponentName, int): the user must have entered a password containing at least numeric characters. Note that quality constants are ordered so that higher values are more restrictive. Constant Value: 131072 (0x00020000) public static final int PASSWORD_QUALITY_NUMERIC_COMPLEX Constant for setPasswordQuality(ComponentName, int): the user must have entered a password containing at least numeric characters with no repeating (4444) or ordered (1234, 4321, 2468) sequences. Note that quality constants are ordered so that higher values are more restrictive. Constant Value: 196608 (0x00030000) public static final int PASSWORD_QUALITY_SOMETHING Constant for setPasswordQuality(ComponentName, int): the policy requires some kind of password or pattern, but doesn't care what it is. Note that quality constants are ordered so that higher values are more restrictive. Constant Value: 65536 (0x00010000) public static final int PASSWORD_QUALITY_UNSPECIFIED Constant for setPasswordQuality(ComponentName, int): the policy has no requirements for the password. Note that quality constants are ordered so that higher values are more restrictive. Constant Value: 0 (0x00000000) public static final int PERMISSION_GRANT_STATE_DEFAULT Runtime permission state: The user can manage the permission through the UI. Constant Value: 0 (0x00000000) public static final int PERMISSION_GRANT_STATE_DENIED Runtime permission state: The permission is denied to the app and the user cannot manage the permission through the UI. Constant Value: 2 (0x00000002) public static final int PERMISSION_GRANT_STATE_GRANTED Runtime permission state: The permission is granted to the app and the user cannot manage the permission through the UI. Constant Value: 1 (0x00000001) public static final int PERMISSION_POLICY_AUTO_DENY Permission policy to always deny new permission requests for runtime permissions. Already granted or denied permissions are not affected by this. Constant Value: 2 (0x00000002) public static final int PERMISSION_POLICY_AUTO_GRANT Permission policy to always grant new permission requests for runtime permissions. Already granted or denied permissions are not affected by this. Constant Value: 1 (0x00000001) public static final int PERMISSION_POLICY_PROMPT Permission policy to prompt user for new permission requests for runtime permissions. Already granted or denied permissions are not affected by this. Constant Value: 0 (0x00000000) public static final int PRIVATE_DNS_MODE_OFF Specifies that Private DNS was turned off completely. Constant Value: 1 (0x00000001) public static final int PRIVATE_DNS_MODE_OPPORTUNISTIC Specifies that the device owner requested opportunistic DNS over TLS Constant Value: 2 (0x00000002) public static final int PRIVATE_DNS_MODE_PROVIDER_HOSTNAME Specifies that the device owner configured a specific host to use for Private DNS. Constant Value: 3 (0x00000003) public static final int PRIVATE_DNS_MODE_UNKNOWN Specifies that the Private DNS setting is in an unknown state. Constant Value: 0 (0x00000000) public static final int PRIVATE_DNS_SET_ERROR_FAILURE_SETTING General failure to set the Private DNS mode, not due to one of the reasons listed above. Constant Value: 2 (0x00000002) public static final int PRIVATE_DNS_SET_ERROR_HOST_NOT_SERVING If the privateDnsHost provided was of a valid hostname but that host was found to not support DNS-over-TLS. Constant Value: 1 (0x00000001) public static final int PRIVATE_DNS_SET_NO_ERROR The selected mode has been set successfully. If the mode is PRIVATE_DNS_MODE_PROVIDER_HOSTNAME then it implies the supplied host is valid and reachable. Constant Value: 0 (0x00000000) public static final int PROVISIONING_MODE_FULLY_MANAGED_DEVICE The provisioning mode for fully managed device. Constant Value: 1 (0x00000001) public static final int PROVISIONING_MODE_MANAGED_PROFILE The provisioning mode for managed profile. Constant Value: 2 (0x00000002) public static final int PROVISIONING_MODE_MANAGED_PROFILE_ON_PERSONAL_DEVICE The provisioning mode for a managed profile on a personal device. This mode is only available when the provisioning initiator has explicitly instructed the provisioning flow to support managed profile on a personal device provisioning. In that case, PROVISIONING_MODE_MANAGED_PROFILE corresponds to an organization-owned managed profile, whereas this constant corresponds to a personally-owned managed profile. See also: Constant Value: 3 (0x00000003) public static final int RESET_PASSWORD_DO_NOT_ASK_CREDENTIALS_ON_BOOT Flag for resetPasswordWithToken(ComponentName, String, byte, int) and resetPassword(String, int): don't ask for user credentials on device boot.

If the flag is set, the device can be booted without asking for user password. The absence of this flag does not change the current boot requirements. This flag can be set by the device owner only. If the app is not the device owner, the flag is ignored. Once the flag is set, it cannot be reverted back without resetting the device to factory defaults. Constant Value: 2 (0x00000002) public static final int WIPE_EUICC Flag for wipeData(int): also erase the device's eUICC data. Constant Value: 4 (0x00000004) public static final int WIPE_EXTERNAL_STORAGE Flag for wipeData(int): also erase the device's external storage (such as SD cards). Constant Value: 1 (0x00000001) public static final int WIPE_RESET_PROTECTION_DATA Flag for wipeData(int): also erase the factory reset protection data. This flag may only be set by device owner admins; if it is set by other admins a SecurityException will be thrown. Constant Value: 2 (0x00000002) public static final int WIPE_SILENTLY Flag for wipeData(int): won't show reason for wiping to the user. Constant Value: 8 (0x00000008) public int addOverrideApn (ComponentName admin, ApnSetting apnSetting) Called by device owner or managed profile owner to add an override APN. This method may returns -1 if apnSetting conflicts with an existing override APN. Update the existing conflicted APN with updateOverrideApn(android.content.ComponentName, int, android.telephony.data.ApnSetting) instead of adding a new entry. Two override APNs are considered to conflict when all the following APIs return the same values on both override APNs: Before Android version Build.VERSION_CODES.TIRAMISU: Only device owners can add APNs. Starting from Android version Build.VERSION_CODES.TIRAMISU: Both device owners and managed profile owners can add enterprise APNs (ApnSetting#TYPE_ENTERPRISE), while only device owners can add other type of APNs. Enterprise APNs are specific to the managed profile and do not override any user-configured VPNs. They are prerequisites for enabling preferential network service on the managed profile on 4G networks (setPreferentialNetworkServiceConfigs(List)). Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with This value cannot be null. apnSetting ApnSetting: the override APN to insert This value cannot be null. Returns int The id of inserted override APN.

Or -1 when failed to insert into the database. Throws SecurityException If request is for enterprise APN admin is either device owner or profile owner and in all other types of APN if admin is not a device owner. See also: setOverrideApnsEnabled(ComponentName, boolean) public void addPersistentPreferredActivity (ComponentName admin, IntentFilter filter, ComponentName activity) Called by a profile owner or device owner or holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_LOCK_TASK. to set a default activity that the system selects to handle intents that match the given IntentFilter.

This activity will remain the default intent handler even if the set of potential event handlers for the intent filter changes and if the intent preferences are reset. Note that the caller should still declare the activity in the manifest, the API just sets the activity to be the default one to handle the given intent filter. The default disambiguation mechanism takes over if the activity is not installed (anymore). When the activity is (re)installed, it is automatically reset as default intent handler for the filter. The calling device admin must be a profile owner or device owner. If it is not, a security exception will be thrown.

Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the persistent preferred activity policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. NOTE: Performs disk I/O and shouldn't be called on the main thread. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.

Null if the caller is not a device admin. This value may be null. filter IntentFilter: The IntentFilter for which a default handler is added. activity ComponentName: The Activity that is added as default intent handler. This value cannot be null. public void addUserRestriction (ComponentName admin, String key) Called by a profile owner, device owner or a holder of any permission that is associated with a user restriction to set a user restriction specified by the key. The calling device admin must be a profile owner, device owner or holder of any permission that is associated with a user restriction; if it is not, a security exception will be thrown. The profile owner of an organization-owned managed profile may invoke this method on the DevicePolicyManager instance it obtained from getParentProfileInstance(android.content.ComponentName), for enforcing device-wide restrictions. See the constants in UserManager for the list of restrictions that can be enforced device-wide. These constants will also state in their documentation which permission is required to manage the restriction using this API. For callers targeting Android Build.VERSION_CODES.UPSIDE_DOWN_CAKE or above, calling this API will result in applying the restriction locally on the calling user, or locally on the parent profile if called from the DevicePolicyManager instance obtained from getParentProfileInstance(android.content.ComponentName). To set a restriction globally, call addUserRestrictionGlobally(String) instead.

Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the user restriction policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.

This value cannot be null. key String: The key of the restriction. Value is UserManager.DISALLOW_MODIFY_ACCOUNTS, UserManager.DISALLOW_CONFIG_WIFI, UserManager.DISALLOW_CONFIG_LOCALE, UserManager.DISALLOW_INSTALL_APPS, UserManager.DISALLOW_UNINSTALL_APPS, UserManager.DISALLOW_SHARE_LOCATION, UserManager.DISALLOW_AIRPLANE_MODE, UserManager.DISALLOW_CONFIG_BRIGHTNESS, UserManager.DISALLOW_AMBIENT_DISPLAY, UserManager.DISALLOW_CONFIG_SCREEN_TIMEOUT, UserManager.DISALLOW_INSTALL_UNKNOWN_SOURCES, UserManager.DISALLOW_INSTALL_UNKNOWN_SOURCES_GLOBALLY, UserManager.DISALLOW_CONFIG_BLUETOOTH, UserManager.DISALLOW_BLUETOOTH, UserManager.DISALLOW_BLUETOOTH_SHARING, UserManager.DISALLOW_USB_FILE_TRANSFER, UserManager.DISALLOW_CONFIG_CREDENTIALS, UserManager.DISALLOW_REMOVE_USER, UserManager.DISALLOW_REMOVE_MANAGED_PROFILE, UserManager.DISALLOW_DEBUGGING_FEATURES, UserManager.DISALLOW_CONFIG_VPN, UserManager.DISALLOW_CONFIG_LOCATION, UserManager.DISALLOW_CONFIG_DATE_TIME, UserManager.DISALLOW_CONFIG_TETHERING, UserManager.DISALLOW_NETWORK_RESET, UserManager.DISALLOW_FACTORY_RESET, UserManager.DISALLOW_ADD_USER, UserManager.DISALLOW_ADD_MANAGED_PROFILE, android.os.UserManager.DISALLOW_ADD_CLONE_PROFILE, UserManager.ENSURE_VERIFY_APPS, UserManager.DISALLOW_CONFIG_CELL_BROADCASTS, UserManager.DISALLOW_CONFIG_MOBILE_NETWORKS, UserManager.DISALLOW_APPS_CONTROL, UserManager.DISALLOW_MOUNT_PHYSICAL_MEDIA, UserManager.DISALLOW_UNMUTE_MICROPHONE, UserManager.DISALLOW_ADJUST_VOLUME, UserManager.DISALLOW_OUTGOING_CALLS, UserManager.DISALLOW_SMS, UserManager.DISALLOW_FUN, UserManager.DISALLOW_CREATE_WINDOWS, UserManager.DISALLOW_SYSTEM_ERROR_DIALOGS, UserManager.DISALLOW_CROSS_PROFILE_COPY_PASTE, UserManager.DISALLOW_OUTGOING_BEAM, android.os.UserManager.DISALLOW_WALLPAPER, UserManager.DISALLOW_SET_WALLPAPER, UserManager.DISALLOW_SAFE_BOOT, android.os.UserManager.DISALLOW_RECORD_AUDIO, android.os.UserManager.DISALLOW_RUN_IN_BACKGROUND, android.os.UserManager.DISALLOW_CAMERA, android.os.UserManager.DISALLOW_UNMUTE_DEVICE, UserManager.DISALLOW_DATA_ROAMING, UserManager.DISALLOW_SET_USER_ICON, android.os.UserManager.DISALLOW_OEM_UNLOCK, UserManager.DISALLOW_UNIFIED_PASSWORD, UserManager.ALLOW_PARENT_PROFILE_APP_LINKING, UserManager.DISALLOW_AUTOFILL, UserManager.DISALLOW_CONTENT_CAPTURE, UserManager.DISALLOW_CONTENT_SUGGESTIONS, UserManager.DISALLOW_USER_SWITCH, UserManager.DISALLOW_SHARE_INTO_MANAGED_PROFILE, UserManager.DISALLOW_PRINTING, UserManager.DISALLOW_CONFIG_PRIVATE_DNS, UserManager.DISALLOW_MICROPHONE_TOGGLE, UserManager.DISALLOW_CAMERA_TOGGLE, UserManager.KEY_RESTRICTIONS_PENDING, android.os.UserManager.DISALLOW_BIOMETRIC, UserManager.DISALLOW_CHANGE_WIFI_STATE, UserManager.DISALLOW_WIFI_TETHERING, UserManager.DISALLOW_SHARING_ADMIN_CONFIGURED_WIFI, UserManager.DISALLOW_WIFI_DIRECT, UserManager.DISALLOW_ADD_WIFI_CONFIG, UserManager.DISALLOW_CELLULAR_2G, UserManager.DISALLOW_ULTRA_WIDEBAND_RADIO, or UserManager.DISALLOW_GRANT_ADMIN Throws SecurityException if admin is not a device or profile owner and if the caller has not been granted the permission to set the given user restriction. public void addUserRestrictionGlobally (String key) Called by a profile owner, device owner or a holder of any permission that is associated with a user restriction to set a user restriction specified by the provided key globally on all users. To clear the restriction use clearUserRestriction(ComponentName, String). For a given user, a restriction will be set if it was applied globally or locally by any admin. The calling device admin must be a profile owner, device owner or or a holder of any permission that is associated with a user restriction; if it is not, a security exception will be thrown. See the constants in UserManager for the list of restrictions that can be enforced device-wide. These constants will also state in their documentation which permission is required to manage the restriction using this API. After the user restriction policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Parameters key String: The key of the restriction.

This value cannot be null. Value is UserManager.DISALLOW_MODIFY_ACCOUNTS, UserManager.DISALLOW_CONFIG_WIFI, UserManager.DISALLOW_CONFIG_LOCALE, UserManager.DISALLOW_INSTALL_APPS, UserManager.DISALLOW_UNINSTALL_APPS, UserManager.DISALLOW_SHARE_LOCATION, UserManager.DISALLOW_AIRPLANE_MODE, UserManager.DISALLOW_CONFIG_BRIGHTNESS, UserManager.DISALLOW_AMBIENT_DISPLAY, UserManager.DISALLOW_CONFIG_SCREEN_TIMEOUT, UserManager.DISALLOW_INSTALL_UNKNOWN_SOURCES, UserManager.DISALLOW_INSTALL_UNKNOWN_SOURCES_GLOBALLY, UserManager.DISALLOW_CONFIG_BLUETOOTH, UserManager.DISALLOW_BLUETOOTH, UserManager.DISALLOW_BLUETOOTH_SHARING, UserManager.DISALLOW_USB_FILE_TRANSFER, UserManager.DISALLOW_CONFIG_CREDENTIALS, UserManager.DISALLOW_REMOVE_USER, UserManager.DISALLOW_REMOVE_MANAGED_PROFILE, UserManager.DISALLOW_DEBUGGING_FEATURES, UserManager.DISALLOW_CONFIG_VPN, UserManager.DISALLOW_CONFIG_LOCATION, UserManager.DISALLOW_CONFIG_DATE_TIME, UserManager.DISALLOW_CONFIG_TETHERING, UserManager.DISALLOW_NETWORK_RESET, UserManager.DISALLOW_FACTORY_RESET, UserManager.DISALLOW_ADD_USER, UserManager.DISALLOW_ADD_MANAGED_PROFILE, android.os.UserManager.DISALLOW_ADD_CLONE_PROFILE, UserManager.ENSURE_VERIFY_APPS, UserManager.DISALLOW_CONFIG_CELL_BROADCASTS, UserManager.DISALLOW_CONFIG_MOBILE_NETWORKS, UserManager.DISALLOW_APPS_CONTROL, UserManager.DISALLOW_MOUNT_PHYSICAL_MEDIA, UserManager.DISALLOW_UNMUTE_MICROPHONE, UserManager.DISALLOW_ADJUST_VOLUME, UserManager.DISALLOW_OUTGOING_CALLS, UserManager.DISALLOW_SMS, UserManager.DISALLOW_FUN, UserManager.DISALLOW_CREATE_WINDOWS, UserManager.DISALLOW_SYSTEM_ERROR_DIALOGS, UserManager.DISALLOW_CROSS_PROFILE_COPY_PASTE, UserManager.DISALLOW_OUTGOING_BEAM, android.os.UserManager.DISALLOW_WALLPAPER, UserManager.DISALLOW_SET_WALLPAPER, UserManager.DISALLOW_SAFE_BOOT, android.os.UserManager.DISALLOW_RECORD_AUDIO, android.os.UserManager.DISALLOW_RUN_IN_BACKGROUND, android.os.UserManager.DISALLOW_CAMERA, android.os.UserManager.DISALLOW_UNMUTE_DEVICE, UserManager.DISALLOW_DATA_ROAMING, UserManager.DISALLOW_SET_USER_ICON, android.os.UserManager.DISALLOW_OEM_UNLOCK, UserManager.DISALLOW_UNIFIED_PASSWORD, UserManager.ALLOW_PARENT_PROFILE_APP_LINKING, UserManager.DISALLOW_AUTOFILL, UserManager.DISALLOW_CONTENT_CAPTURE, UserManager.DISALLOW_CONTENT_SUGGESTIONS, UserManager.DISALLOW_USER_SWITCH, UserManager.DISALLOW_SHARE_INTO_MANAGED_PROFILE, UserManager.DISALLOW_PRINTING, UserManager.DISALLOW_CONFIG_PRIVATE_DNS, UserManager.DISALLOW_MICROPHONE_TOGGLE, UserManager.DISALLOW_CAMERA_TOGGLE, UserManager.KEY_RESTRICTIONS_PENDING, android.os.UserManager.DISALLOW_BIOMETRIC, UserManager.DISALLOW_CHANGE_WIFI_STATE, UserManager.DISALLOW_WIFI_TETHERING, UserManager.DISALLOW_SHARING_ADMIN_CONFIGURED_WIFI, UserManager.DISALLOW_WIFI_DIRECT, UserManager.DISALLOW_ADD_WIFI_CONFIG, UserManager.DISALLOW_CELLULAR_2G, UserManager.DISALLOW_ULTRA_WIDEBAND_RADIO, or UserManager.DISALLOW_GRANT_ADMIN public boolean bindDeviceAdminServiceAsUser (ComponentName admin, Intent serviceIntent, ServiceConnection conn, int flags, UserHandle targetUser) Called by a device owner to bind to a service from a secondary managed user or vice versa. See getBindDeviceAdminTargetUsers(ComponentName) for the pre-requirements of a device owner to bind to services of another managed user. The service must be protected by Manifest.permission.BIND_DEVICE_ADMIN.

Note that the Context used to obtain this DevicePolicyManager instance via Context#getSystemService(Class) will be used to bind to the Service. Note: This method used to be available for communication between device owner and profile owner. However, since Android 11, this combination is not possible. This method is now only useful for communication between device owner and managed secondary users. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. serviceIntent Intent: Identifies the service to connect to. The Intent must specify either an explicit component name or a package name to match an IntentFilter published by a service. This value cannot be null. conn ServiceConnection: Receives information as the service is started and stopped in main thread. This must be a valid ServiceConnection object; it must not be null. flags int: Operation options for the binding operation.

See Context#bindService(Intent, ServiceConnection, int). Value is either 0 or a combination of Context.BIND_AUTO_CREATE, Context.BIND_DEBUG_UNBIND, Context.BIND_NOT_FOREGROUND, Context.BIND_ABOVE_CLIENT, Context.BIND_ALLOW_OOM_MANAGEMENT, Context.BIND_WAIVE_PRIORITY, Context.BIND_IMPORTANT, Context.BIND_ADJUST_WITH_ACTIVITY, Context.BIND_NOT_PERCEPTIBLE, Context.BIND_ALLOW_ACTIVITY_STARTS, Context.BIND_INCLUDE_CAPABILITIES, Context.BIND_SHARED_ISOLATED_PROCESS, and Context.BIND_EXTERNAL_SERVICE targetUser UserHandle: Which user to bind to. Must be one of the users returned by getBindDeviceAdminTargetUsers(ComponentName), otherwise a SecurityException will be thrown. This value cannot be null. Returns boolean If you have successfully bound to the service, true is returned; false is returned if the connection is not made and you will not receive the service object. public boolean canAdminGrantSensorsPermissions () Returns true if the caller is running on a device where an admin can grant permissions related to device sensors. This is a signal that the device is a fully-managed device where personal usage is discouraged. The list of permissions is listed in setPermissionGrantState(android.content.ComponentName, java.lang.String, java.lang.String, int). May be called by any app. Returns boolean true if an admin can grant device sensors-related permissions, false otherwise. public boolean canUsbDataSignalingBeDisabled () Returns whether enabling or disabling USB data signaling is supported on the device. Returns boolean true if the device supports enabling and disabling USB data signaling. public void clearApplicationUserData (ComponentName admin, String packageName, Executor executor, DevicePolicyManager.OnClearApplicationUserDataListener listener) Called by the device owner or profile owner to clear application user data of a given package. The behaviour of this is equivalent to the target application calling ActivityManager.clearApplicationUserData(). Note: an application can store data outside of its application data, e.g. external storage or user dictionary. This data will not be wiped by calling this API. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null.

packageName String: The name of the package which will have its user data wiped.

This value cannot be null. executor Executor: The executor through which the listener should be invoked. This value cannot be null. Callback and listener events are dispatched through this Executor, providing an easy way to control which thread is used. To dispatch events through the main thread of your application, you can use Context.getMainExecutor(). Otherwise, provide an Executor that dispatches to an appropriate thread. listener DevicePolicyManager.OnClearApplicationUserDataListener: A callback object that will inform the caller when the clearing is done. This value cannot be null. public void clearCrossProfileIntentFilters (ComponentName admin) Called by a profile owner of a managed profile to remove the cross-profile intent filters that go from the managed profile to the parent, or from the parent to the managed profile. Only removes those that have been set by the profile owner. Note: A list of default cross profile intent filters are set up by the system when the profile is created, some of them ensure the proper functioning of the profile, while others enable sharing of data from the parent to the managed profile for user convenience. These default intent filters are not cleared when this API is called. If the default cross profile data sharing is not desired, they can be disabled with UserManager#DISALLOW_SHARE_INTO_MANAGED_PROFILE. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value may be null. Throws SecurityException if admin is not a profile owner. Added in API level 21 Deprecated in API level 26 public void clearDeviceOwnerApp (String packageName) This method was deprecated in API level 26. This method is expected to be used for testing purposes only. The device owner will lose control of the device and its data after calling it. In order to protect any sensitive data that remains on the device, it is advised that the device owner factory resets the device instead of calling this method. See wipeData(int). Clears the current device owner. The caller must be the device owner.

This function should be used cautiously as once it is called it cannot be undone. The device owner can only be set as a part of device setup, before it completes. While some policies previously set by the device owner will be cleared by this method, it is a best-effort process and some other policies will still remain in place after the device owner is cleared. Parameters packageName String: The package name of the device owner. Throws SecurityException if the caller is not in packageName or packageName does not own the current device owner component. public void clearPackagePersistentPreferredActivities (ComponentName admin, String packageName) Called by a profile owner or device owner or holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_LOCK_TASK to remove all persistent intent handler preferences associated with the given package that were set by addPersistentPreferredActivity(ComponentName, IntentFilter, ComponentName). The calling device admin must be a profile owner. If it is not, a security exception will be thrown. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the persistent preferred activity policy has been cleared, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully cleared or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. packageName String: The name of the package for which preferences are removed. Added in API level 24 Deprecated in API level 26 public void clearProfileOwner (ComponentName admin) This method was deprecated in API level 26. This method is expected to be used for testing purposes only. The profile owner will lose control of the user and its data after calling it. In order to protect any sensitive data that remains on this user, it is advised that the profile owner deletes it instead of calling this method. See wipeData(int). Clears the active profile owner. The caller must be the profile owner of this user, otherwise a SecurityException will be thrown. This method is not available to managed profile owners. While some policies previously set by the profile owner will be cleared by this method, it is a best-effort process and some other policies will still remain in place after the profile owner is cleared. Parameters admin ComponentName: The component to remove as the profile owner. This value cannot be null. Throws SecurityException if admin is not an active profile owner, or the method is being called from a managed profile. public void clearUserRestriction (ComponentName admin, String key) Called by a profile owner, device owner or a holder of any permission that is associated with a user restriction to clear a user restriction specified by the key. The calling device admin must be a profile or device owner; if it is not, a security exception will be thrown. The profile owner of an organization-owned managed profile may invoke this method on the DevicePolicyManager instance it obtained from getParentProfileInstance(android.content.ComponentName), for clearing device-wide restrictions. See the constants in UserManager for the list of restrictions. These constants state in their documentation which permission is required to manage the restriction using this API. For callers targeting Android Build.VERSION_CODES.UPSIDE_DOWN_CAKE or above, calling this API will result in clearing any local and global restriction with the specified key that was previously set by the caller. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the user restriction policy has been cleared, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully cleared or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null.

key String: The key of the restriction. Value is UserManager.DISALLOW_MODIFY_ACCOUNTS, UserManager.DISALLOW_CONFIG_WIFI, UserManager.DISALLOW_CONFIG_LOCALE, UserManager.DISALLOW_INSTALL_APPS, UserManager.DISALLOW_UNINSTALL_APPS, UserManager.DISALLOW_SHARE_LOCATION, UserManager.DISALLOW_AIRPLANE_MODE, UserManager.DISALLOW_CONFIG_BRIGHTNESS, UserManager.DISALLOW_AMBIENT_DISPLAY, UserManager.DISALLOW_CONFIG_SCREEN_TIMEOUT, UserManager.DISALLOW_INSTALL_UNKNOWN_SOURCES, UserManager.DISALLOW_INSTALL_UNKNOWN_SOURCES_GLOBALLY, UserManager.DISALLOW_CONFIG_BLUETOOTH, UserManager.DISALLOW_BLUETOOTH, UserManager.DISALLOW_BLUETOOTH_SHARING, UserManager.DISALLOW_USB_FILE_TRANSFER, UserManager.DISALLOW_CONFIG_CREDENTIALS, UserManager.DISALLOW_REMOVE_USER, UserManager.DISALLOW_REMOVE_MANAGED_PROFILE, UserManager.DISALLOW_DEBUGGING_FEATURES, UserManager.DISALLOW_CONFIG_VPN, UserManager.DISALLOW_CONFIG_LOCATION, UserManager.DISALLOW_CONFIG_DATE_TIME, UserManager.DISALLOW_CONFIG_TETHERING, UserManager.DISALLOW_NETWORK_RESET, UserManager.DISALLOW_FACTORY_RESET, UserManager.DISALLOW_ADD_USER, UserManager.DISALLOW_ADD_MANAGED_PROFILE, android.os.UserManager.DISALLOW_ADD_CLONE_PROFILE, UserManager.ENSURE_VERIFY_APPS, UserManager.DISALLOW_CONFIG_CELL_BROADCASTS, UserManager.DISALLOW_CONFIG_MOBILE_NETWORKS, UserManager.DISALLOW_APPS_CONTROL, UserManager.DISALLOW_MOUNT_PHYSICAL_MEDIA, UserManager.DISALLOW_UNMUTE_MICROPHONE, UserManager.DISALLOW_ADJUST_VOLUME, UserManager.DISALLOW_OUTGOING_CALLS, UserManager.DISALLOW_SMS, UserManager.DISALLOW_FUN, UserManager.DISALLOW_CREATE_WINDOWS, UserManager.DISALLOW_SYSTEM_ERROR_DIALOGS, UserManager.DISALLOW_CROSS_PROFILE_COPY_PASTE, UserManager.DISALLOW_OUTGOING_BEAM, android.os.UserManager.DISALLOW_WALLPAPER, UserManager.DISALLOW_SET_WALLPAPER, UserManager.DISALLOW_SAFE_BOOT, android.os.UserManager.DISALLOW_RECORD_AUDIO, android.os.UserManager.DISALLOW_RUN_IN_BACKGROUND, android.os.UserManager.DISALLOW_CAMERA, android.os.UserManager.DISALLOW_UNMUTE_DEVICE, UserManager.DISALLOW_DATA_ROAMING, UserManager.DISALLOW_SET_USER_ICON, android.os.UserManager.DISALLOW_OEM_UNLOCK, UserManager.DISALLOW_UNIFIED_PASSWORD, UserManager.ALLOW_PARENT_PROFILE_APP_LINKING, UserManager.DISALLOW_AUTOFILL, UserManager.DISALLOW_CONTENT_CAPTURE, UserManager.DISALLOW_CONTENT_SUGGESTIONS, UserManager.DISALLOW_USER_SWITCH, UserManager.DISALLOW_SHARE_INTO_MANAGED_PROFILE, UserManager.DISALLOW_PRINTING, UserManager.DISALLOW_CONFIG_PRIVATE_DNS, UserManager.DISALLOW_MICROPHONE_TOGGLE, UserManager.DISALLOW_CAMERA_TOGGLE, UserManager.KEY_RESTRICTIONS_PENDING, android.os.UserManager.DISALLOW_BIOMETRIC, UserManager.DISALLOW_CHANGE_WIFI_STATE, UserManager.DISALLOW_WIFI_TETHERING, UserManager.DISALLOW_SHARING_ADMIN_CONFIGURED_WIFI, UserManager.DISALLOW_WIFI_DIRECT, UserManager.DISALLOW_ADD_WIFI_CONFIG, UserManager.DISALLOW_CELLULAR_2G, UserManager.DISALLOW_ULTRA_WIDEBAND_RADIO, or UserManager.DISALLOW_GRANT_ADMIN Throws SecurityException if admin is not a device or profile owner and if the caller has not been granted the permission to set the given user restriction. public UserHandle createAndManageUser (ComponentName admin, String name, ComponentName profileOwner, PersistableBundle adminExtras, int flags) Called by a device owner to create a user with the specified name and a given component of the calling package as profile owner. The UserHandle returned by this method should not be persisted as user handles are recycled as users are removed and created.

If you need to persist an identifier for this user, use UserManager#getSerialNumberForUser. The new user will not be started in the background. admin is the DeviceAdminReceiver which is the device owner. profileOwner is also a DeviceAdminReceiver in the same package as admin, and will become the profile owner and will be registered as an active admin on the new user. The profile owner package will be installed on the new user. If the adminExtras are not null, they will be stored on the device until the user is started for the first time. Then the extras will be passed to the admin when onEnable is called. From Build.VERSION_CODES.P onwards, if targeting Build.VERSION_CODES.P, throws UserOperationException instead of returning null on failure. Returns UserHandle the UserHandle object for the created user, or null if the user could not be created. public AttestedKeyPair generateKeyPair (ComponentName admin, String algorithm, KeyGenParameterSpec keySpec, int idAttestationFlags) This API can be called by the following to generate a new private/public key pair: If the device supports key generation via secure hardware, this method is useful for creating a key in KeyChain that never left the secure hardware. Access to the key is controlled the same way as in installKeyPair(ComponentName, PrivateKey, Certificate, String). From Android Build.VERSION_CODES.S, the credential management app can call this API. If called by the credential management app, the componentName must be null. Note, there can only be a credential management app on an unmanaged device. Because this method might take several seconds to complete, it should only be called from a worker thread. This method returns null when called from the main thread.

This method is not thread-safe, calling it from multiple threads at the same time will result in undefined behavior.

If the calling thread is interrupted while the invocation is in-flight, it will eventually terminate and return null. Note: If the provided alias is of an existing alias, all former grants that apps have been given to access the key and certificates associated with this alias will be revoked. Attestation: to enable attestation, set an attestation challenge in keySpec via KeyGenParameterSpec.Builder#setAttestationChallenge. By specifying flags to the idAttestationFlags parameter, it is possible to request the device's unique identity to be included in the attestation record. Specific identifiers can be included in the attestation record, and an individual attestation certificate can be used to sign the attestation record. To find out if the device supports these features, refer to isDeviceIdAttestationSupported() and isUniqueDeviceAttestationSupported(). Device owner, profile owner, their delegated certificate installer and the credential management app can use ID_TYPE_BASE_INFO to request inclusion of the general device information including manufacturer, model, brand, device and product in the attestation record.

Only device owner, profile owner on an organization-owned device or affiliated user, and their delegated certificate installers can use ID_TYPE_SERIAL, ID_TYPE_IMEI and ID_TYPE_MEID to request unique device identifiers to be attested (the serial number, IMEI and MEID correspondingly), if supported by the device (see isDeviceIdAttestationSupported()). Additionally, device owner, profile owner on an organization-owned device and their delegated certificate installers can also request the attestation record to be signed using an individual attestation certificate by specifying the ID_TYPE_INDIVIDUAL_ATTESTATION flag (if supported by the device, see isUniqueDeviceAttestationSupported()). If any of ID_TYPE_SERIAL, ID_TYPE_IMEI and ID_TYPE_MEID is set, it is implicitly assumed that ID_TYPE_BASE_INFO is also set. Attestation using ID_TYPE_INDIVIDUAL_ATTESTATION can only be requested if key generation is done in StrongBox. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if the caller is not a device admin. algorithm String: The key generation algorithm, see KeyPairGenerator. This value cannot be null. keySpec KeyGenParameterSpec: Specification of the key to generate, see KeyPairGenerator. This value cannot be null. idAttestationFlags int: A bitmask of the identifiers that should be included in the attestation record (ID_TYPE_BASE_INFO, ID_TYPE_SERIAL, ID_TYPE_IMEI and ID_TYPE_MEID), and ID_TYPE_INDIVIDUAL_ATTESTATION if the attestation record should be signed using an individual attestation certificate. 0 should be passed in if no device identification is required in the attestation record and the batch attestation certificate should be used. If any flag is specified, then an attestation challenge must be included in the keySpec. Value is either 0 or a combination of ID_TYPE_BASE_INFO, ID_TYPE_SERIAL, ID_TYPE_IMEI, ID_TYPE_MEID, and ID_TYPE_INDIVIDUAL_ATTESTATION Returns AttestedKeyPair A non-null AttestedKeyPair if the key generation succeeded, null otherwise. Throws SecurityException if admin is not null and not a device or profile owner, or admin is null but the calling application is not a delegated certificate installer or credential management app. If Device ID attestation is requested (using ID_TYPE_SERIAL, ID_TYPE_IMEI or ID_TYPE_MEID), the caller must be the Device Owner or the Certificate Installer delegate. IllegalArgumentException in the following cases: The alias in keySpec is empty. The algorithm specification in keySpec is not RSAKeyGenParameterSpec or ECGenParameterSpec.

Device ID attestation was requested but the keySpec does not contain an attestation challenge. UnsupportedOperationException if Device ID attestation or individual attestation was requested but the underlying hardware does not support it. StrongBoxUnavailableException if the use of StrongBox for key generation was specified in keySpec but the device does not have one. See also: KeyGenParameterSpec.Builder.setAttestationChallenge(byte[]) public List getActiveAdmins () Return a list of all currently active device administrators' component names. If there are no administrators null may be returned. Returns List public String getAlwaysOnVpnPackage (ComponentName admin) Called by a device or profile owner to read the name of the package administering an always-on VPN connection for the current user. If there is no such package, or the always-on VPN is provided by the system instead of by an application, null will be returned. Parameters admin ComponentName: This value cannot be null. Returns String Package name of VPN controller responsible for always-on VPN, or null if none is set. Throws SecurityException if admin is not a device or a profile owner. public boolean getAutoTimeEnabled (ComponentName admin) Returns true if auto time is enabled on the device. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. Returns boolean true if auto time is enabled on the device. Throws SecurityException if caller is not a device owner, a profile owner for the primary user, or a profile owner of an organization-owned managed profile.

public boolean getAutoTimeZoneEnabled (ComponentName admin) Returns true if auto time zone is enabled on the device. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. Returns boolean true if auto time zone is enabled on the device. Throws SecurityException if caller is not a device owner, a profile owner for the primary user, or a profile owner of an organization-owned managed profile. public boolean getBluetoothContactSharingDisabled (ComponentName admin) Called by a profile owner of a managed profile to determine whether or not Bluetooth devices cannot access enterprise contacts.

The calling device admin must be a profile owner. If it is not, a security exception will be thrown. This API works on managed profile only. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. Throws SecurityException if admin is not a profile owner. public boolean getCameraDisabled (ComponentName admin) Determine whether or not the device's cameras have been disabled for this user, either by the calling admin, if specified, or all admins. This method can be called on the DevicePolicyManager instance, returned by getParentProfileInstance(android.content.ComponentName), where the caller must be the profile owner of an organization-owned managed profile. Parameters admin ComponentName: The name of the admin component to check, or null to check whether any admins have disabled the camera public PackagePolicy getCredentialManagerPolicy () Called by a device owner or profile owner of a managed profile to retrieve the credential manager policy. Returns PackagePolicy the current credential manager policy if null then this policy has not been configured. Throws SecurityException if caller is not a device owner or profile owner of a managed profile. public List getDelegatePackages (ComponentName admin, String delegationScope) Called by a profile owner or device owner to retrieve a list of delegate packages that were granted a delegation scope. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. delegationScope String: The scope whose delegates should be retrieved. This value cannot be null. Returns List A list of package names of the current delegated packages for delegationScope. This value may be null. Throws SecurityException if admin is not a device or a profile owner. public List getDelegatedScopes (ComponentName admin, String delegatedPackage) Called by a profile owner or device owner to retrieve a list of the scopes given to a delegate package. Other apps can use this method to retrieve their own delegated scopes by passing null for admin and their own package name as delegatedPackage. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if the caller is delegatedPackage. delegatedPackage String: The package name of the app whose scopes should be retrieved. This value cannot be null. Returns List A list containing the scopes given to delegatedPackage. Throws SecurityException if admin is not a device or a profile owner. public String getDevicePolicyManagementRoleHolderPackage () Returns the package name of the device policy management role holder. If the device policy management role holder is not configured for this device, returns null. public String getEnrollmentSpecificId () Returns an enrollment-specific identifier of this device, which is guaranteed to be the same value for the same device, enrolled into the same organization by the same managing app. This identifier is high-entropy, useful for uniquely identifying individual devices within the same organisation. It is available both in a work profile and on a fully-managed device. The identifier would be consistent even if the work profile is removed and enrolled again (to the same organization), or the device is factory reset and re-enrolled. Can only be called by the Profile Owner or Device Owner, if the setOrganizationId(java.lang.String) was previously called. If setOrganizationId(java.lang.String) was not called, then the returned value will be an empty string. Note about access to device identifiers: a device owner, a profile owner of an organization-owned device or the delegated certificate installer (holding the DELEGATION_CERT_INSTALL delegation) on such a device can still obtain hardware identifiers by calling e.g. Build.getSerial(), in addition to using this method. However, a profile owner on a personal (non organization-owned) device, or the delegated certificate installer on such a device, cannot obtain hardware identifiers anymore and must switch to using this method. Returns String A stable, enrollment-specific identifier. This value cannot be null. public String getGlobalPrivateDnsHost (ComponentName admin) Returns the system-wide Private DNS host. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns String The hostname used for Private DNS queries, null if none is set. Throws SecurityException if the caller is not the device owner. public int getGlobalPrivateDnsMode (ComponentName admin) Returns the system-wide Private DNS mode. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns int one of PRIVATE_DNS_MODE_OFF, PRIVATE_DNS_MODE_OPPORTUNISTIC, PRIVATE_DNS_MODE_PROVIDER_HOSTNAME or PRIVATE_DNS_MODE_UNKNOWN. Throws SecurityException if the caller is not the device owner.

public List getInstalledCaCerts (ComponentName admin) Returns all CA certificates that are currently trusted, excluding system CA certificates. If a user has installed any certificates by other means than device policy these will be included too. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if calling from a delegated certificate installer. Returns List a List of byte[] arrays, each encoding one user CA certificate. This value cannot be null. public Map> getKeyPairGrants (String alias) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to query which apps have access to a given KeyChain key. Key are granted on a per-UID basis, so if several apps share the same UID, granting access to one of them automatically grants it to others. This method returns a map containing one entry per grantee UID. Entries have UIDs as keys and sets of corresponding package names as values. In particular, grantee packages that don't share UID with other packages are represented by entries having singleton sets as values. Parameters alias String: The alias of the key to grant access to. This value cannot be null. Returns Map> apps that have access to a given key, arranged in a map from UID to sets of package names. This value cannot be null. See also: grantKeyPairToApp(ComponentName, String, String) public int getLockTaskFeatures (ComponentName admin) Gets which system features are enabled for LockTask mode. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, the returned policy will be the current resolved policy rather than the policy set by the calling admin. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. See also: isAffiliatedUser()setLockTaskFeatures(ComponentName, int) public PackagePolicy getManagedProfileCallerIdAccessPolicy () Called by a profile owner of a managed profile to retrieve the caller id policy. The calling device admin must be a profile owner of a managed profile. If it is not, a SecurityException will be thrown. Returns PackagePolicy the current caller id policy This value may be null. public PackagePolicy getManagedProfileContactsAccessPolicy () Called by a profile owner of a managed profile to determine the current policy applied to managed profile contacts. The calling device admin must be a profile owner of a managed profile. If it is not, a SecurityException will be thrown.

Returns PackagePolicy the current contacts search policy This value may be null. public long getManagedProfileMaximumTimeOff (ComponentName admin) Called by a profile owner of an organization-owned managed profile to get maximum time the profile is allowed to be turned off.

Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with This value cannot be null.

Returns long Maximum time the profile is allowed to be off in milliseconds or 0 if not limited. See also: setPersonalAppsSuspended(ComponentName, boolean) public long getMaximumTimeToLock (ComponentName admin) Retrieve the current maximum time to unlock for a particular admin or all admins that set restrictions on this user and its participating profiles. Restrictions on profiles that have a separate challenge are not taken into account. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to retrieve restrictions on the parent profile.

Parameters admin ComponentName: The name of the admin component to check, or null to aggregate all admins. Returns long time in milliseconds for the given admin or the minimum value (strictest) of all admins if admin is null.

Returns 0 if there are no restrictions. public List getMeteredDataDisabledPackages (ComponentName admin) Called by a device or profile owner to retrieve the list of packages which are restricted by the admin from using metered data. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns List the list of restricted package names. This value cannot be null. Throws SecurityException if admin is not a device or profile owner. Added in API level 24 Deprecated in API level 31 public int getOrganizationColor (ComponentName admin) This method was deprecated in API level 31. From Build.VERSION_CODES.R, the organization color is never used as the background color of the confirm credentials screen. Called by a profile owner of a managed profile to retrieve the color used for customization. This color is used as background color of the confirm credentials screen for that user. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns int The 24bit (0xRRGGBB) representation of the color to be used. Throws SecurityException if admin is not a profile owner. public DevicePolicyManager getParentProfileInstance (ComponentName admin) Called by the profile owner of a managed profile to obtain a DevicePolicyManager whose calls act on the parent profile. The following methods are supported for the parent instance, all other methods will throw a SecurityException when called on the parent instance: getPasswordQuality(ComponentName) setPasswordQuality(ComponentName, int) getPasswordMinimumLength(ComponentName) setPasswordMinimumLength(ComponentName, int) getPasswordMinimumUpperCase(ComponentName) setPasswordMinimumUpperCase(ComponentName, int) getPasswordMinimumLowerCase(ComponentName) setPasswordMinimumLowerCase(ComponentName, int) getPasswordMinimumLetters(ComponentName) setPasswordMinimumLetters(ComponentName, int) getPasswordMinimumNumeric(ComponentName) setPasswordMinimumNumeric(ComponentName, int) getPasswordMinimumSymbols(ComponentName) setPasswordMinimumSymbols(ComponentName, int) getPasswordMinimumNonLetter(ComponentName) setPasswordMinimumNonLetter(ComponentName, int) getPasswordHistoryLength(ComponentName) setPasswordHistoryLength(ComponentName, int) getPasswordExpirationTimeout(ComponentName) setPasswordExpirationTimeout(ComponentName, long) getPasswordExpiration(ComponentName) getPasswordMaximumLength(int) isActivePasswordSufficient() getCurrentFailedPasswordAttempts() getMaximumFailedPasswordsForWipe(ComponentName) setMaximumFailedPasswordsForWipe(ComponentName, int) getMaximumTimeToLock(ComponentName) setMaximumTimeToLock(ComponentName, long) lockNow() getKeyguardDisabledFeatures(ComponentName) setKeyguardDisabledFeatures(ComponentName, int) getTrustAgentConfiguration(ComponentName, ComponentName) setTrustAgentConfiguration(ComponentName, ComponentName, PersistableBundle) getRequiredStrongAuthTimeout(ComponentName) setRequiredStrongAuthTimeout(ComponentName, long) getAccountTypesWithManagementDisabled() setRequiredPasswordComplexity(int) getRequiredPasswordComplexity() The following methods are supported for the parent instance but can only be called by the profile owner of a managed profile that was created during the device provisioning flow: The following methods can be called by the profile owner of a managed profile on an organization-owned device: Parameters admin ComponentName: This value cannot be null. Throws SecurityException if admin is not a profile owner. public int getPasswordMaximumLength (int quality) Return the maximum password length that the device supports for a particular password quality. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always empty and this method always returns 0. Parameters quality int: The quality being interrogated. Returns int Returns the maximum length that the user can enter. public int getPermissionGrantState (ComponentName admin, String packageName, String permission) Returns the current grant state of a runtime permission for a specific application. This function can be called by a device owner, profile owner, or by a delegate given the DELEGATION_PERMISSION_GRANT scope via setDelegatedScopes(ComponentName, String, List). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.

Null if the caller is not a device admin. This value may be null. packageName String: The application to check the grant state for. This value cannot be null. permission String: The permission to check for. This value cannot be null. Throws SecurityException if admin is not a device or profile owner. public int getPermissionPolicy (ComponentName admin) Returns the current runtime permission policy set by the device or profile owner. The default is PERMISSION_POLICY_PROMPT. Parameters admin ComponentName: Which profile or device owner this request is associated with. Returns int the current policy for future permission requests. public List getPermittedAccessibilityServices (ComponentName admin) Returns the list of permitted accessibility services set by this device or profile owner. An empty list means no accessibility services except system services are allowed.

null means all accessibility services are allowed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns List List of accessiblity service package names. Throws SecurityException if admin is not a device or profile owner. public List getPermittedCrossProfileNotificationListeners (ComponentName admin) Returns the list of packages installed on the primary user that allowed to use a NotificationListenerService to receive notifications from this managed profile, as set by the profile owner.

An empty list means no notification listener services except system ones are allowed. A null return value indicates that all notification listeners are allowed. Parameters admin ComponentName: This value cannot be null. public List getPermittedInputMethods (ComponentName admin) Returns the list of permitted input methods set by this device or profile owner.

This method can be called on the DevicePolicyManager instance, returned by getParentProfileInstance(android.content.ComponentName), where the caller must be a profile owner of an organization-owned managed profile. If called on the parent instance, then the returned list of permitted input methods are those which are applied on the personal profile. An empty list means no input methods except system input methods are allowed. Null means all input methods are allowed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin This value may be null. Returns List List of input method package names.

This value may be null. Throws SecurityException if admin is not a device, profile owner or if called on the parent profile and the admin is not a profile owner of an organization-owned managed profile. public boolean getScreenCaptureDisabled (ComponentName admin) Determine whether or not screen capture has been disabled by the calling admin, if specified, or all admins. This method can be called on the DevicePolicyManager instance, returned by getParentProfileInstance(android.content.ComponentName), where the caller must be the profile owner of an organization-owned managed profile (the calling admin must be specified). Parameters admin ComponentName: The name of the admin component to check, or null to check whether any admins have disabled screen capture. Added in API level 11 Deprecated in API level 30 public boolean getStorageEncryption (ComponentName admin) This method was deprecated in API level 30. This method only returns the value set by setStorageEncryption(ComponentName, boolean).

It does not actually reflect the storage encryption status. Use getStorageEncryptionStatus() for that. Called by an application that is administering the device to determine the requested setting for secure storage. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. If null, this will return the requested encryption setting as an aggregate of all active administrators. Returns boolean true if the admin(s) are requesting encryption, false if not. public int getStorageEncryptionStatus () Called by an application that is administering the device to determine the current encryption status of the device. Depending on the returned status code, the caller may proceed in different ways. If the result is ENCRYPTION_STATUS_UNSUPPORTED, the storage system does not support encryption. If the result is ENCRYPTION_STATUS_INACTIVE, use ACTION_START_ENCRYPTION to begin the process of encrypting or decrypting the storage. If the result is ENCRYPTION_STATUS_ACTIVE_DEFAULT_KEY, the storage system has enabled encryption but no password is set so further action may be required. If the result is ENCRYPTION_STATUS_ACTIVATING, ENCRYPTION_STATUS_ACTIVE or ENCRYPTION_STATUS_ACTIVE_PER_USER, no further action is required. Throws SecurityException if called on a parent instance. public Bundle getUserRestrictions (ComponentName admin) Called by an admin to get user restrictions set by themselves with addUserRestriction(android.content.ComponentName, java.lang.String). The target user may have more restrictions set by the system or other admin. To get all the user restrictions currently set, use UserManager#getUserRestrictions(). The profile owner of an organization-owned managed profile may invoke this method on the DevicePolicyManager instance it obtained from getParentProfileInstance(android.content.ComponentName), for retrieving device-wide restrictions it previously set with addUserRestriction(android.content.ComponentName, java.lang.String). For callers targeting Android Build.VERSION_CODES.UPSIDE_DOWN_CAKE or above, this API will return the local restrictions set on the calling user, or on the parent profile if called from the DevicePolicyManager instance obtained from getParentProfileInstance(android.content.ComponentName). To get global restrictions set by admin, call getUserRestrictionsGlobally() instead. Note that this is different that the returned restrictions for callers targeting pre Android Build.VERSION_CODES.UPSIDE_DOWN_CAKE, were this API returns all local/global restrictions set by the admin on the calling user using addUserRestriction(android.content.ComponentName, java.lang.String) or the parent user if called on the DevicePolicyManager instance it obtained from getParentProfileInstance(ComponentName). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns Bundle a Bundle whose keys are the user restrictions, and the values a boolean indicating whether the restriction is set. This value cannot be null. Throws SecurityException if admin is not a device or profile owner. public String getWifiMacAddress (ComponentName admin) Called by a device owner or profile owner on organization-owned device to get the MAC address of the Wi-Fi device. NOTE: The MAC address returned here should only be used for inventory management and is not likely to be the MAC address used by the device to connect to Wi-Fi networks: MAC addresses used for scanning and connecting to Wi-Fi networks are randomized by default. To get the randomized MAC address used, call WifiConfiguration.getRandomizedMacAddress(). Parameters admin ComponentName: Which admin this request is associated with. Null if the caller is not a device admin This value may be null. Returns String the MAC address of the Wi-Fi device, or null when the information is not available. (For example, Wi-Fi hasn't been enabled, or the device doesn't support Wi-Fi.) The address will be in the XX:XX:XX:XX:XX:XX format. public boolean grantKeyPairToApp (ComponentName admin, String alias, String packageName) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to grant an application access to an already-installed (or generated) KeyChain key. This is useful (in combination with installKeyPair(ComponentName, PrivateKey, Certificate, String) or generateKeyPair(ComponentName, String, KeyGenParameterSpec, int)) to let an application call KeyChain.getPrivateKey(Context, String) without having to call KeyChain.choosePrivateKeyAlias(Activity, KeyChainAliasCallback, String, Principal, Uri, String) first. The grantee app will receive the KeyChain.ACTION_KEY_ACCESS_CHANGED broadcast when access to a key is granted. Starting from Build.VERSION_CODES.UPSIDE_DOWN_CAKE throws an IllegalArgumentException if alias doesn't correspond to an existing key.

Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if calling from a delegated certificate chooser.

alias String: The alias of the key to grant access to.

This value cannot be null. packageName String: The name of the (already installed) package to grant access to.

This value cannot be null. Returns boolean true if the grant was set successfully, false otherwise.

Throws SecurityException if the caller is not a device owner, a profile owner or delegated certificate chooser. IllegalArgumentException if packageName or alias are empty, or if packageName is not a name of an installed package.

See also: revokeKeyPairFromApp(ComponentName, String, String) public boolean hasCaCertInstalled (ComponentName admin, byte[] certBuffer) Returns whether this certificate is installed as a trusted CA. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if calling from a delegated certificate installer. certBuffer byte: encoded form of the certificate to look up. public boolean hasGrantedPolicy (ComponentName admin, int usesPolicy) Returns true if an administrator has been granted a particular device policy. This can be used to check whether the administrator was activated under an earlier set of policies, but requires additional policies after an upgrade. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.

Must be an active administrator, or an exception will be thrown. This value cannot be null. usesPolicy int: Which uses-policy to check, as defined in DeviceAdminInfo. Throws SecurityException if admin is not an active administrator. public boolean hasLockdownAdminConfiguredNetworks (ComponentName admin) Called by a device owner or a profile owner of an organization-owned managed profile to determine whether the user is prevented from modifying networks configured by the admin. Parameters admin ComponentName: admin Which DeviceAdminReceiver this request is associated with. This value may be null. Throws SecurityException if caller is not a device owner or a profile owner of an organization-owned managed profile. public boolean installExistingPackage (ComponentName admin, String packageName) Install an existing package that has been installed in another user, or has been kept after removal via setKeepUninstalledPackages(ComponentName, List). This function can be called by a device owner, profile owner or a delegate given the DELEGATION_INSTALL_EXISTING_PACKAGE scope via setDelegatedScopes(ComponentName, String, List). When called in a secondary user or managed profile, the user/profile must be affiliated with the device. See isAffiliatedUser().

Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.

This value cannot be null. packageName String: The package to be installed in the calling profile. Returns boolean true if the app is installed; false otherwise. Throws SecurityException if admin is not the device owner, or the profile owner of an affiliated user or profile.

public boolean installKeyPair (ComponentName admin, PrivateKey privKey, Certificate[] certs, String alias, int flags) This API can be called by the following to install a certificate chain and corresponding private key for the leaf certificate: All apps within the profile will be able to access the certificate chain and use the private key, given direct user approval (if the user is allowed to select the private key). From Android Build.VERSION_CODES.S, the credential management app can call this API. If called by the credential management app: The componentName must be nullr The alias must exist in the credential management app's AppUriAuthenticationPolicy The key pair must not be user selectable Note, there can only be a credential management app on an unmanaged device. The caller of this API may grant itself access to the certificate and private key immediately, without user approval. It is a best practice not to request this unless strictly necessary since it opens up additional security vulnerabilities.

Include INSTALLKEY_SET_USER_SELECTABLE in the flags argument to allow the user to select the key from a dialog. Note: If the provided alias is of an existing alias, all former grants that apps have been given to access the key and certificates associated with this alias will be revoked. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if the caller is not a device admin. privKey PrivateKey: The private key to install.

This value cannot be null.

certs Certificate: The certificate chain to install. The chain should start with the leaf certificate and include the chain of trust in order. This will be returned by KeyChain.getCertificateChain(Context, String). This value cannot be null. alias String: The private key alias under which to install the certificate. If a certificate with that alias already exists, it will be overwritten. This value cannot be null. flags int: Flags to request that the calling app be granted access to the credentials and set the key to be user-selectable. See INSTALLKEY_SET_USER_SELECTABLE and INSTALLKEY_REQUEST_CREDENTIALS_ACCESS. Returns boolean true if the keys were installed, false otherwise. public boolean installKeyPair (ComponentName admin, PrivateKey privKey, Certificate[] certs, String alias, boolean requestAccess) This API can be called by the following to install a certificate chain and corresponding private key for the leaf certificate: All apps within the profile will be able to access the certificate chain and use the private key, given direct user approval. From Android Build.VERSION_CODES.S, the credential management app can call this API. However, this API sets the key pair as user selectable by default, which is not permitted when called by the credential management app. Instead, installKeyPair(android.content.ComponentName, java.security.PrivateKey, java.security.cert.Certificate[], java.lang.String, int) should be called with INSTALLKEY_SET_USER_SELECTABLE not set as a flag.

Note, there can only be a credential management app on an unmanaged device. The caller of this API may grant itself access to the certificate and private key immediately, without user approval. It is a best practice not to request this unless strictly necessary since it opens up additional security vulnerabilities. Note: If the provided alias is of an existing alias, all former grants that apps have been given to access the key and certificates associated with this alias will be revoked. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if the caller is not a device admin. privKey PrivateKey: The private key to install. This value cannot be null. certs Certificate: The certificate chain to install. The chain should start with the leaf certificate and include the chain of trust in order. This will be returned by KeyChain.getCertificateChain(Context, String). This value cannot be null. alias String: The private key alias under which to install the certificate.

If a certificate with that alias already exists, it will be overwritten. This value cannot be null. requestAccess boolean: true to request that the calling app be granted access to the credentials immediately. Otherwise, access to the credentials will be gated by user approval. Returns boolean true if the keys were installed, false otherwise. public boolean installKeyPair (ComponentName admin, PrivateKey privKey, Certificate cert, String alias) This API can be called by the following to install a certificate and corresponding private key: All apps within the profile will be able to access the certificate and use the private key, given direct user approval. From Android Build.VERSION_CODES.S, the credential management app can call this API. However, this API sets the key pair as user selectable by default, which is not permitted when called by the credential management app. Instead, installKeyPair(android.content.ComponentName, java.security.PrivateKey, java.security.cert.Certificate[], java.lang.String, int) should be called with INSTALLKEY_SET_USER_SELECTABLE not set as a flag. Access to the installed credentials will not be granted to the caller of this API without direct user approval. This is for security - should a certificate installer become compromised, certificates it had already installed will be protected. If the installer must have access to the credentials, call installKeyPair(android.content.ComponentName, java.security.PrivateKey, java.security.cert.Certificate[], java.lang.String, boolean) instead. Note: If the provided alias is of an existing alias, all former grants that apps have been given to access the key and certificates associated with this alias will be revoked. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if the caller is not a device admin. privKey PrivateKey: The private key to install. This value cannot be null. cert Certificate: The certificate to install. This value cannot be null. alias String: The private key alias under which to install the certificate. If a certificate with that alias already exists, it will be overwritten. This value cannot be null. Returns boolean true if the keys were installed, false otherwise. public void installSystemUpdate (ComponentName admin, Uri updateFilePath, Executor executor, DevicePolicyManager.InstallSystemUpdateCallback callback) Called by device owner or profile owner of an organization-owned managed profile to install a system update from the given file. The device will be rebooted in order to finish installing the update. Note that if the device is rebooted, this doesn't necessarily mean that the update has been applied successfully.

The caller should additionally check the system version with Build.FINGERPRINT or Build.VERSION. If an error occurs during processing the OTA before the reboot, the caller will be notified by InstallSystemUpdateCallback. If device does not have sufficient battery level, the installation will fail with error DevicePolicyManager.InstallSystemUpdateCallback.UPDATE_ERROR_BATTERY_LOW.

Parameters admin ComponentName: The DeviceAdminReceiver that this request is associated with. Null if the caller is not a device admin This value may be null. updateFilePath Uri: A Uri of the file that contains the update.

The file should be readable by the calling app. This value cannot be null. executor Executor: The executor through which the callback should be invoked. This value cannot be null. Callback and listener events are dispatched through this Executor, providing an easy way to control which thread is used. To dispatch events through the main thread of your application, you can use Context.getMainExecutor(). Otherwise, provide an Executor that dispatches to an appropriate thread. callback DevicePolicyManager.InstallSystemUpdateCallback: A callback object that will inform the caller when installing an update fails. This value cannot be null. public boolean isActivePasswordSufficient () Determines whether the calling user's current password meets policy requirements (e.g. quality, minimum length). The user must be unlocked to perform this check. Policy requirements which affect this check can be set by admins of the user, but also by the admin of a managed profile associated with the calling user (when the managed profile doesn't have a separate work challenge). When a managed profile has a separate work challenge, its policy requirements only affect the managed profile. Depending on the user, this method checks the policy requirement against one of the following passwords: For the primary user or secondary users: the personal keyguard password. For managed profiles: a work challenge if set, otherwise the parent user's personal keyguard password. In other words, it's always checking the requirement against the password that is protecting the calling user. Note that this method considers all policy requirements targeting the password in question.

For example a profile owner might set a requirement on the parent profile i.e. personal keyguard but not on the profile itself. When the device has a weak personal keyguard password and no separate work challenge, calling this method will return false despite the profile owner not setting a policy on the profile itself. This is because the profile's current password is the personal keyguard password, and it does not meet all policy requirements. Device admins must request DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD before calling this method. Note, this policy type is deprecated for device admins in Android 9.0 (API level 28) or higher. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to determine if the password set on the parent profile is sufficient. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always treated as empty - i.e. this method will always return false on such devices, provided any password requirements were set.

Returns boolean true if the password meets the policy requirements, false otherwise public boolean isActivePasswordSufficientForDeviceRequirement () Called by profile owner of a managed profile to determine whether the current device password meets policy requirements set explicitly device-wide.

This API is similar to isActivePasswordSufficient(), with two notable differences: this API always targets the device password. As a result it should always be called on the getParentProfileInstance(android.content.ComponentName) instance. password policy requirement set on the managed profile is not taken into consideration by this API, even if the device currently does not have a separate work challenge set. This API is designed to facilite progressive password enrollment flows when the DPC imposes both device and profile password policies.

DPC applies profile password policy by calling setPasswordQuality(android.content.ComponentName, int) or setRequiredPasswordComplexity(int) on the regular DevicePolicyManager instance, while it applies device-wide policy by calling setRequiredPasswordComplexity(int) on the getParentProfileInstance(android.content.ComponentName) instance. The DPC can utilize this check to guide the user to set a device password first taking into consideration the device-wide policy only, and then prompt the user to either upgrade it to be fully compliant, or enroll a separate work challenge to satisfy the profile password policy only. The device user must be unlocked (@link UserManager#isUserUnlocked(UserHandle)) to perform this check. Returns boolean true if the device password meets explicit requirement set on it, false otherwise. Throws SecurityException if the calling application is not a profile owner of a managed profile, or if this API is not called on the parent DevicePolicyManager instance. IllegalStateException if the user isn't unlocked See also: EXTRA_DEVICE_PASSWORD_REQUIREMENT_ONLY public boolean isAdminActive (ComponentName admin) Return true if the given administrator component is currently active (enabled) in the system. Parameters admin ComponentName: The administrator component to check for.

This value cannot be null. Returns boolean true if admin is currently enabled in the system, false otherwise public boolean isAffiliatedUser () Returns whether this user is affiliated with the device. By definition, the user that the device owner runs on is always affiliated with the device. Any other user is considered affiliated with the device if the set specified by its profile owner via setAffiliationIds(ComponentName, Set) intersects with the device owner's. See also: setAffiliationIds(ComponentName, Set) public boolean isApplicationHidden (ComponentName admin, String packageName) Determine if a package is hidden.

This function can be called by a device owner, profile owner, or by a delegate given the DELEGATION_PACKAGE_ACCESS scope via setDelegatedScopes(ComponentName, String, List). This method can be called on the DevicePolicyManager instance, returned by getParentProfileInstance(android.content.ComponentName), where the caller must be the profile owner of an organization-owned managed profile and the package must be a system package. If called on the parent instance, this will determine whether the package is hidden or unhidden in the personal profile. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, the returned policy will be the current resolved policy rather than the policy set by the calling admin. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if the caller is not a device admin. packageName String: The name of the package to retrieve the hidden status of. Returns boolean true if the package is hidden, false otherwise. Throws SecurityException if admin is not a device or profile owner or if called on the parent profile and the admin is not a profile owner of an organization-owned managed profile. IllegalArgumentException if called on the parent profile and the package provided is not a system package. public boolean isCommonCriteriaModeEnabled (ComponentName admin) Returns whether Common Criteria mode is currently enabled. Device owner and profile owner of an organization-owned managed profile can query its own Common Criteria mode setting by calling this method with its admin ComponentName. Any caller can obtain the aggregated device-wide Common Criteria mode state by passing null as the admin argument. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. Returns boolean true if Common Criteria mode is enabled, false otherwise. public boolean isDeviceOwnerApp (String packageName) Used to determine if a particular package has been registered as a Device Owner app. A device owner app is a special device admin that cannot be deactivated by the user, once activated as a device admin. It also cannot be uninstalled. To check whether a particular package is currently registered as the device owner app, pass in the package name from Context#getPackageName() to this method.This is useful for device admin apps that want to check whether they are also registered as the device owner app. The exact mechanism by which a device admin app is registered as a device owner app is defined by the setup process. Parameters packageName String: the package name of the app, to compare with the registered device owner app, if any. Returns boolean whether or not the package is registered as the device owner app. public boolean isEphemeralUser (ComponentName admin) Checks if the profile owner is running in an ephemeral user. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns boolean whether the profile owner is running in an ephemeral user. public boolean isKeyPairGrantedToWifiAuth (String alias) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to query whether a KeyChain key pair can be used for authentication to Wifi networks. Parameters alias String: The alias of the key pair.

This value cannot be null. Returns boolean true if the key pair can be used, false otherwise. Throws SecurityException if the caller is not a device owner, a profile owner or delegated certificate chooser. See also: grantKeyPairToWifiAuth(String) public boolean isLockTaskPermitted (String pkg) This function lets the caller know whether the given component is allowed to start the lock task mode. Parameters pkg String: The package to check public boolean isLogoutEnabled () Returns whether logout is enabled by a device owner. Returns boolean true if logout is enabled by device owner, false otherwise. public boolean isMasterVolumeMuted (ComponentName admin) Called by profile or device owners to check whether the global volume mute is on or off. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns boolean true if global volume is muted, false if it's not. Throws SecurityException if admin is not a device or profile owner. public boolean isNetworkLoggingEnabled (ComponentName admin) Return whether network logging is enabled by a device owner or profile owner of a managed profile. Returns boolean true if network logging is enabled by device owner or profile owner, false otherwise. Throws SecurityException if admin is not a device owner or profile owner and caller has no MANAGE_USERS permission public boolean isOrganizationOwnedDeviceWithManagedProfile () Apps can use this method to find out if the device was provisioned as organization-owend device with a managed profile. This, together with checking whether the device has a device owner (by calling isDeviceOwnerApp(String)), could be used to learn whether the device is owned by an organization or an individual: If this method returns true OR isDeviceOwnerApp(String) returns true (for any package), then the device is owned by an organization. Otherwise, it's owned by an individual. Returns boolean true if the device was provisioned as organization-owned device, false otherwise. public boolean isPreferentialNetworkServiceEnabled () Indicates whether preferential network service is enabled. Before Android version Build.VERSION_CODES.TIRAMISU: This method can be called by the profile owner of a managed profile. Starting from Android version Build.VERSION_CODES.TIRAMISU: This method can be called by the profile owner of a managed profile or device owner. Returns boolean whether preferential network service is enabled. public boolean isProfileOwnerApp (String packageName) Used to determine if a particular package is registered as the profile owner for the user. A profile owner is a special device admin that has additional privileges within the profile. Parameters packageName String: The package name of the app to compare with the registered profile owner.

Returns boolean Whether or not the package is registered as the profile owner. public boolean isSafeOperation (int reason) Checks if it's safe to run operations that can be affected by the given reason. Note: notice that the operation safety state might change between the time this method returns and the operation's method is called, so calls to the latter could still throw a UnsafeStateException even when this method returns true. Returns boolean whether it's safe to run operations that can be affected by the given reason. public boolean isSecurityLoggingEnabled (ComponentName admin) Return whether security logging is enabled or not by the admin. Can only be called by the device owner or a profile owner of an organization-owned managed profile, otherwise a SecurityException will be thrown. Parameters admin ComponentName: Which device admin this request is associated with. Null if the caller is not a device admin This value may be null. Returns boolean true if security logging is enabled, false otherwise. public boolean isUninstallBlocked (ComponentName admin, String packageName) Check whether the user has been blocked by device policy from uninstalling a package.

Requires the caller to be the profile owner if checking a specific admin's policy. Note: Starting from Build.VERSION_CODES.LOLLIPOP_MR1, the behavior of this API is changed such that passing null as the admin parameter will return if any admin has blocked the uninstallation. Before L MR1, passing null will cause a NullPointerException to be raised. Note: If your app targets Android 11 (API level 30) or higher, this method returns a filtered result. Learn more about how to manage package visibility. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, the returned policy will be the current resolved policy rather than the policy set by the calling admin. Parameters admin ComponentName: The name of the admin component whose blocking policy will be checked, or null to check whether any admin has blocked the uninstallation. Starting from Build.VERSION_CODES.UPSIDE_DOWN_CAKE admin will be ignored and assumed null. packageName String: package to check. Returns boolean true if uninstallation is blocked and the given package is visible to you, false otherwise if uninstallation isn't blocked or the given package isn't visible to you. Throws SecurityException if admin is not a device or profile owner. public boolean isUsbDataSignalingEnabled () Returns whether USB data signaling is currently enabled. When called by a device owner or profile owner of an organization-owned managed profile, this API returns whether USB data signaling is currently enabled by that admin. When called by any other app, returns whether USB data signaling is currently enabled on the device. Returns boolean true if USB data signaling is enabled, false otherwise. public boolean isUsingUnifiedPassword (ComponentName admin) When called by a profile owner of a managed profile returns true if the profile uses unified challenge with its parent user.

Note: This method is not concerned with password quality and will return false if the profile has empty password as a separate challenge. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null.

See also: UserManager.DISALLOW_UNIFIED_PASSWORD public void lockNow () Make the device lock immediately, as if the lock screen timeout has expired at the point of this call. This method secures the device in response to an urgent situation, such as a lost or stolen device. After this method is called, the device must be unlocked using strong authentication (PIN, pattern, or password). This API is intended for use only by device admins. From version Build.VERSION_CODES.R onwards, the caller must either have the LOCK_DEVICE permission or the device must have the device admin feature; if neither is true, then the method will return without completing any action. Before version Build.VERSION_CODES.R, the device needed the device admin feature, regardless of the caller's permissions. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_FORCE_LOCK to be able to call this method; if it has not, a security exception will be thrown. If there's no lock type set, this method forces the device to go to sleep but doesn't lock the device. Device admins who find the device in this state can lock an otherwise-insecure device by first calling resetPassword(String, int) to set the password and then lock the device. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to lock the parent profile. NOTE: on automotive builds, this method doesn't turn off the screen as it would be a driving safety distraction. Equivalent to calling lockNow(int) with no flags. public void lockNow (int flags) Make the device lock immediately, as if the lock screen timeout has expired at the point of this call. This method secures the device in response to an urgent situation, such as a lost or stolen device. After this method is called, the device must be unlocked using strong authentication (PIN, pattern, or password).

This API is for use only by device admins and holders of the Manifest.permission.MANAGE_DEVICE_POLICY_LOCK permission. From version Build.VERSION_CODES.R onwards, the caller must either have the LOCK_DEVICE permission or the device must have the device admin feature; if neither is true, then the method will return without completing any action. Before version Build.VERSION_CODES.R, the device needed the device admin feature, regardless of the caller's permissions. A calling device admin must have requested DeviceAdminInfo#USES_POLICY_FORCE_LOCK to be able to call this method; if it has not, a security exception will be thrown.

If there's no lock type set, this method forces the device to go to sleep but doesn't lock the device. Device admins who find the device in this state can lock an otherwise-insecure device by first calling resetPassword(String, int) to set the password and then lock the device. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to lock the parent profile as well as the managed profile. NOTE: In order to lock the parent profile and evict the encryption key of the managed profile, lockNow() must be called twice: First, lockNow() should be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName), then lockNow(int) should be called on the DevicePolicyManager instance associated with the managed profile, with the FLAG_EVICT_CREDENTIAL_ENCRYPTION_KEY flag. Calling the method twice in this order ensures that all users are locked and does not stop the device admin on the managed profile from issuing a second call to lock its own profile. NOTE: on automotive builds, this method doesn't turn off the screen as it would be a driving safety distraction. public int logoutUser (ComponentName admin) Called by a profile owner of secondary user that is affiliated with the device to stop the calling user and switch back to primary user (when the user was switchUser(android.content.ComponentName, android.os.UserHandle) switched to) or stop the user (when it was started in background. Notice that on devices running with headless system user mode, there is no primary user, so it switches back to the user that was in the foreground before the first call to switchUser(android.content.ComponentName, android.os.UserHandle) (or fails with UserManager#USER_OPERATION_ERROR_UNKNOWN if that method was not called prior to this call). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns int one of the following result codes: UserManager#USER_OPERATION_ERROR_UNKNOWN, UserManager#USER_OPERATION_SUCCESS, UserManager#USER_OPERATION_ERROR_MANAGED_PROFILE, UserManager#USER_OPERATION_ERROR_CURRENT_USER Value is UserManager.USER_OPERATION_SUCCESS, UserManager.USER_OPERATION_ERROR_UNKNOWN, UserManager.USER_OPERATION_ERROR_MANAGED_PROFILE, UserManager.USER_OPERATION_ERROR_MAX_RUNNING_USERS, UserManager.USER_OPERATION_ERROR_CURRENT_USER, UserManager.USER_OPERATION_ERROR_LOW_STORAGE, UserManager.USER_OPERATION_ERROR_MAX_USERS, or android.os.UserManager.USER_OPERATION_ERROR_USER_ACCOUNT_ALREADY_EXISTS See also: getSecondaryUsers(ComponentName) public void removeActiveAdmin (ComponentName admin) Remove a current administration component. This can only be called by the application that owns the administration component; if you try to remove someone else's component, a security exception will be thrown. Note that the operation is not synchronous and the admin might still be active (as indicated by getActiveAdmins()) by the time this method returns. Parameters admin ComponentName: The administration compononent to remove. This value cannot be null. public boolean removeKeyPair (ComponentName admin, String alias) This API can be called by the following to remove a certificate and private key pair installed under a given alias: Device owner Profile owner Delegated certificate installer Credential management app From Android Build.VERSION_CODES.S, the credential management app can call this API. If called by the credential management app, the componentName must be null. Note, there can only be a credential management app on an unmanaged device. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if the caller is not a device admin. alias String: The private key alias under which the certificate is installed. This value cannot be null. Returns boolean true if the private key alias no longer exists, false otherwise. Throws SecurityException if admin is not null and not a device or profile owner, or admin is null but the calling application is not a delegated certificate installer or credential management app. public boolean removeOverrideApn (ComponentName admin, int apnId) Called by device owner or managed profile owner to remove an override APN. This method may returns false if there is no override APN with the given apnId. Before Android version Build.VERSION_CODES.TIRAMISU: Only device owners can remove APNs. Starting from Android version Build.VERSION_CODES.TIRAMISU: Both device owners and managed profile owners can remove enterprise APNs (ApnSetting#TYPE_ENTERPRISE), while only device owners can remove other type of APNs. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with This value cannot be null. apnId int: the id of the override APN to remove Returns boolean true if the required override APN is successfully removed, false otherwise. Throws SecurityException If request is for enterprise APN admin is either device owner or profile owner and in all other types of APN if admin is not a device owner. See also: setOverrideApnsEnabled(ComponentName, boolean) public boolean removeUser (ComponentName admin, UserHandle userHandle) Called by a device owner to remove a user/profile and all associated data. The primary user can not be removed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.

This value cannot be null. userHandle UserHandle: the user to remove. This value cannot be null. Returns boolean true if the user was removed, false otherwise. Throws SecurityException if admin is not a device owner. public boolean requestBugreport (ComponentName admin) Called by a device owner to request a bugreport. If the device contains secondary users or profiles, they must be affiliated with the device. Otherwise a SecurityException will be thrown. See isAffiliatedUser(). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. Returns boolean true if the bugreport collection started successfully, or false if it wasn't triggered because a previous bugreport operation is still active (either the bugreport is still running or waiting for the user to share or decline) Throws SecurityException if admin is not a device owner, or there is at least one profile or secondary user that is not affiliated with the device. See also: Added in API level 8 Deprecated in API level 30 public boolean resetPassword (String password, int flags) This method was deprecated in API level 30. Please use resetPasswordWithToken(ComponentName, String, byte, int) instead. Force a new password for device unlock (the password needed to access the entire device) or the work profile challenge on the current user. This takes effect immediately. Before Build.VERSION_CODES.N, this API is available to device admin, profile owner and device owner. Starting from Build.VERSION_CODES.N, legacy device admin (who is not also profile owner or device owner) can only call this API to set a new password if there is currently no password set. Profile owner and device owner can continue to force change an existing password as long as the target user is unlocked, although device owner will not be able to call this API at all if there is also a managed profile on the device. Between Build.VERSION_CODES.O, Build.VERSION_CODES.P and Build.VERSION_CODES.Q, profile owner and devices owner targeting SDK level Build.VERSION_CODES.O or above who attempt to call this API will receive SecurityException; they are encouraged to migrate to the new resetPasswordWithToken(ComponentName, String, byte, int) API instead. Profile owner and device owner targeting older SDK levels are not affected: they continue to experience the existing behaviour described in the previous paragraph. Starting from Build.VERSION_CODES.R, this API is no longer supported in most cases. Device owner and profile owner calling this API will receive SecurityException if they target SDK level Build.VERSION_CODES.O or above, or they will receive a silent failure (API returning false) if they target lower SDK level. For legacy device admins, this API throws SecurityException if they target SDK level Build.VERSION_CODES.N or above, and returns false otherwise. Only privileged apps holding RESET_PASSWORD permission which are part of the system factory image can still call this API to set a new password if there is currently no password set. In this case, if the device already has a password, this API will throw SecurityException.

The given password must be sufficient for the current password quality and length constraints as returned by getPasswordQuality(android.content.ComponentName) and getPasswordMinimumLength(android.content.ComponentName); if it does not meet these constraints, then it will be rejected and false returned. Note that the password may be a stronger quality (containing alphanumeric characters when the requested quality is only numeric), in which case the currently active quality will be increased to match. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, this methods does nothing. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_RESET_PASSWORD to be able to call this method; if it has not, a security exception will be thrown. Requires the PackageManager#FEATURE_SECURE_LOCK_SCREEN feature which can be detected using PackageManager.hasSystemFeature(String). Returns boolean Returns true if the password was applied, or false if it is not acceptable for the current constraints. public boolean resetPasswordWithToken (ComponentName admin, String password, byte[] token, int flags) Called by device or profile owner to force set a new device unlock password or a managed profile challenge on current user. This takes effect immediately. Unlike resetPassword(String, int), this API can change the password even before the user or device is unlocked or decrypted.

The supplied token must have been previously provisioned via setResetPasswordToken(ComponentName, byte), and in active state isResetPasswordTokenActive(ComponentName). The given password must be sufficient for the current password quality and length constraints as returned by getPasswordQuality(android.content.ComponentName) and getPasswordMinimumLength(android.content.ComponentName); if it does not meet these constraints, then it will be rejected and false returned. Note that the password may be a stronger quality, for example, a password containing alphanumeric characters when the requested quality is only numeric. Calling with a null or empty password will clear any existing PIN, pattern or password if the current password constraints allow it. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, calling this methods has no effect - the password is always empty - and false is returned. Requires the PackageManager#FEATURE_SECURE_LOCK_SCREEN feature which can be detected using PackageManager.hasSystemFeature(String).

Returns boolean Returns true if the password was applied, or false if it is not acceptable for the current constraints. public List retrieveNetworkLogs (ComponentName admin, long batchToken) Called by device owner, profile owner of a managed profile or delegated app with DELEGATION_NETWORK_LOGGING to retrieve the most recent batch of network logging events. When network logging is enabled by a profile owner, the network logs will only include work profile network activity, not activity on the personal profile. A device owner or profile owner has to provide a batchToken provided as part of DeviceAdminReceiver#onNetworkLogsAvailable callback. If the token doesn't match the token of the most recent available batch of logs, null will be returned. NetworkEvent can be one of DnsEvent or ConnectEvent.

The list of network events is sorted chronologically, and contains at most 1200 events. Access to the logs is rate limited and this method will only return a new batch of logs after the device device owner has been notified via DeviceAdminReceiver#onNetworkLogsAvailable. If the caller is not a profile owner and a secondary user or profile is created, calling this method will throw a SecurityException until all users become affiliated again. It will also no longer be possible to retrieve the network logs batch with the most recent batchToken provided by DeviceAdminReceiver#onNetworkLogsAvailable.

See DevicePolicyManager#setAffiliationIds. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if called by a delegated app. batchToken long: A token of the batch to retrieve Returns List A new batch of network logs which is a list of NetworkEvent. Returns null if the batch represented by batchToken is no longer available or if logging is disabled. Throws SecurityException if admin is not a device owner, profile owner or if the admin is not a profile owner and there is at least one profile or secondary user that is not affiliated with the device. public List retrievePreRebootSecurityLogs (ComponentName admin) Called by device owner or profile owner of an organization-owned managed profile to retrieve device logs from before the device's last reboot. This API is not supported on all devices. Calling this API on unsupported devices will result in null being returned. The device logs are retrieved from a RAM region which is not guaranteed to be corruption-free during power cycles, as a result be cautious about data corruption when parsing. When called by a device owner, if there is any other user or profile on the device, it must be affiliated with the device. Otherwise a SecurityException will be thrown. See isAffiliatedUser(). Parameters admin ComponentName: Which device admin this request is associated with, or null if called by a delegated app. Returns List Device logs from before the latest reboot of the system, or null if this API is not supported on the device. Throws SecurityException if the caller is not allowed to access security logging, or there is at least one profile or secondary user that is not affiliated with the device. See also: isAffiliatedUser()retrieveSecurityLogs(ComponentName) public boolean revokeKeyPairFromApp (ComponentName admin, String alias, String packageName) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to revoke an application's grant to a KeyChain key pair. Calls by the application to KeyChain.getPrivateKey(Context, String) will fail after the grant is revoked. The grantee app will receive the KeyChain.ACTION_KEY_ACCESS_CHANGED broadcast when access to a key is revoked. Starting from Build.VERSION_CODES.UPSIDE_DOWN_CAKE throws an IllegalArgumentException if alias doesn't correspond to an existing key. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if calling from a delegated certificate chooser. alias String: The alias of the key to revoke access from. This value cannot be null. packageName String: The name of the (already installed) package to revoke access from.

This value cannot be null. Returns boolean true if the grant was revoked successfully, false otherwise. Throws SecurityException if the caller is not a device owner, a profile owner or delegated certificate chooser.

IllegalArgumentException if packageName or alias are empty, or if packageName is not a name of an installed package. See also: grantKeyPairToApp(ComponentName, String, String) public boolean revokeKeyPairFromWifiAuth (String alias) Called by a device or profile owner, or delegated certificate chooser (an app that has been delegated the DELEGATION_CERT_SELECTION privilege), to deny using a KeyChain key pair for authentication to Wifi networks.

Configured networks using this key won't be able to authenticate. Starting from Build.VERSION_CODES.UPSIDE_DOWN_CAKE throws an IllegalArgumentException if alias doesn't correspond to an existing key. Parameters alias String: The alias of the key pair. This value cannot be null. Returns boolean true if the operation was set successfully, false otherwise. Throws SecurityException if the caller is not a device owner, a profile owner or delegated certificate chooser. See also: grantKeyPairToWifiAuth(String) public void setAccountManagementDisabled (ComponentName admin, String accountType, boolean disabled) Called by a device owner or profile owner to disable account management for a specific type of account. The calling device admin must be a device owner or profile owner. If it is not, a security exception will be thrown. When account management is disabled for an account type, adding or removing an account of that type will not be possible. From Build.VERSION_CODES.N the profile or device owner can still use AccountManager APIs to add or remove accounts when account management for a specific type is disabled. This method may be called on the DevicePolicyManager instance returned from getParentProfileInstance(android.content.ComponentName) by the profile owner on an organization-owned device, to restrict accounts that may not be managed on the primary profile. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the account management disabled policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. accountType String: For which account management is disabled or enabled. disabled boolean: The boolean indicating that account management will be disabled (true) or enabled (false).

Throws SecurityException if admin is not a device or profile owner. public void setAffiliationIds (ComponentName admin, Set ids) Indicates the entity that controls the device. Two users are affiliated if the set of ids set by the device owner and the admin of the secondary user.

A user that is affiliated with the device owner user is considered to be affiliated with the device. Note: Features that depend on user affiliation (such as security logging or bindDeviceAdminServiceAsUser(ComponentName, Intent, ServiceConnection, BindServiceFlags, UserHandle)) won't be available when a secondary user is created, until it becomes affiliated. Therefore it is recommended that the appropriate affiliation ids are set by its owner as soon as possible after the user is created. Note: This method used to be available for affiliating device owner and profile owner. However, since Android 11, this combination is not possible. This method is now only useful for affiliating the primary user with managed secondary users. Parameters admin ComponentName: Which device owner, or owner of secondary user, this request is associated with. This value cannot be null.

ids Set: A set of opaque non-empty affiliation ids. This value cannot be null. Throws IllegalArgumentException if ids is null or contains an empty string. See also: public void setAlwaysOnVpnPackage (ComponentName admin, String vpnPackage, boolean lockdownEnabled) Called by a device or profile owner to configure an always-on VPN connection through a specific application for the current user. This connection is automatically granted and persisted after a reboot. To support the always-on feature, an app must The call will fail if called with the package name of an unsupported VPN app. Enabling lockdown via lockdownEnabled argument carries the risk that any failure of the VPN provider could break networking for all apps. This method clears any lockdown allowlist set by setAlwaysOnVpnPackage(android.content.ComponentName, java.lang.String, boolean, java.util.Set). Starting from API 31 calling this method with vpnPackage set to null only removes the existing configuration if it was previously created by this admin. To remove VPN configuration created by the user use UserManager#DISALLOW_CONFIG_VPN. Parameters admin ComponentName: This value cannot be null. vpnPackage String: The package name for an installed VPN app on the device, or null to remove an existing always-on VPN configuration. lockdownEnabled boolean: true to disallow networking when the VPN is not connected or false otherwise. This has no effect when clearing. See also: setAlwaysOnVpnPackage(ComponentName, String, boolean, Set) public void setAlwaysOnVpnPackage (ComponentName admin, String vpnPackage, boolean lockdownEnabled, Set lockdownAllowlist) A version of setAlwaysOnVpnPackage(android.content.ComponentName, java.lang.String, boolean) that allows the admin to specify a set of apps that should be able to access the network directly when VPN is not connected. When VPN connects these apps switch over to VPN if allowed to use that VPN. System apps can always bypass VPN. Note that the system doesn't update the allowlist when packages are installed or uninstalled, the admin app must call this method to keep the list up to date. When lockdownEnabled is false lockdownAllowlist is ignored . When lockdownEnabled is true and lockdownAllowlist is null or empty, only system apps can bypass VPN. Setting always-on VPN package to null or using setAlwaysOnVpnPackage(android.content.ComponentName, java.lang.String, boolean) clears lockdown allowlist. Parameters admin ComponentName: This value cannot be null. vpnPackage String: package name for an installed VPN app on the device, or null to remove an existing always-on VPN configuration lockdownEnabled boolean: true to disallow networking when the VPN is not connected or false otherwise. This has no effect when clearing. lockdownAllowlist Set: Packages that will be able to access the network directly when VPN is in lockdown mode but not connected. Has no effect when clearing. This value may be null. public boolean setApplicationHidden (ComponentName admin, String packageName, boolean hidden) Hide or unhide packages. When a package is hidden it is unavailable for use, but the data and actual package file remain. This function can be called by a device owner, profile owner, or by a delegate given the DELEGATION_PACKAGE_ACCESS scope via setDelegatedScopes(ComponentName, String, List). This method can be called on the DevicePolicyManager instance, returned by getParentProfileInstance(android.content.ComponentName), where the caller must be the profile owner of an organization-owned managed profile and the package must be a system package. If called on the parent instance, then the package is hidden or unhidden in the personal profile. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the application hidden policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if the caller is not a device admin. packageName String: The name of the package to hide or unhide. hidden boolean: true if the package should be hidden, false if it should be unhidden. Returns boolean boolean Whether the hidden setting of the package was successfully updated. Throws SecurityException if admin is not a device or profile owner or if called on the parent profile and the admin is not a profile owner of an organization-owned managed profile.

IllegalArgumentException if called on the parent profile and the package provided is not a system package.

public void setApplicationRestrictions (ComponentName admin, String packageName, Bundle settings) Sets the application restrictions for a given target application running in the calling user. The caller must be a profile or device owner on that user, or the package allowed to manage application restrictions via setDelegatedScopes(ComponentName, String, List) with the DELEGATION_APP_RESTRICTIONS scope; otherwise a security exception will be thrown. The provided Bundle consists of key-value pairs, where the types of values may be: If the restrictions are not available yet, but may be applied in the near future, the caller can notify the target application of that by adding UserManager#KEY_RESTRICTIONS_PENDING to the settings parameter. The application restrictions are only made visible to the target application via UserManager#getApplicationRestrictions(String), in addition to the profile or device owner, and the application restrictions managing package via getApplicationRestrictions(ComponentName, String). Starting from Android Version Build.VERSION_CODES.UPSIDE_DOWN_CAKE, multiple admins can set app restrictions for the same application, the target application can get the list of app restrictions set by each admin via RestrictionsManager.getApplicationRestrictionsPerAdmin(). NOTE: The method performs disk I/O and shouldn't be called on the main thread This method may take several seconds to complete, so it should only be called from a worker thread. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if called by the application restrictions managing package. packageName String: The name of the package to update restricted settings for. settings Bundle: A Bundle to be parsed by the receiving application, conveying a new set of active restrictions. Throws SecurityException if admin is not a device or profile owner. Added in API level 24 Deprecated in API level 26 public void setApplicationRestrictionsManagingPackage (ComponentName admin, String packageName) This method was deprecated in API level 26. From Build.VERSION_CODES.O. Use setDelegatedScopes(ComponentName, String, List) with the DELEGATION_APP_RESTRICTIONS scope instead. Called by a profile owner or device owner to grant permission to a package to manage application restrictions for the calling user via setApplicationRestrictions(ComponentName, String, Bundle) and getApplicationRestrictions(ComponentName, String). This permission is persistent until it is later cleared by calling this method with a null value or uninstalling the managing package. The supplied application restriction managing package must be installed when calling this API, otherwise an NameNotFoundException will be thrown. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.

This value cannot be null. packageName String: The package name which will be given access to application restrictions APIs. If null is given the current package will be cleared. public void setAutoTimeEnabled (ComponentName admin, boolean enabled) Called by a device owner, a profile owner for the primary user or a profile owner of an organization-owned managed profile to turn auto time on and off. Callers are recommended to use UserManager#DISALLOW_CONFIG_DATE_TIME to prevent the user from changing this setting. If user restriction UserManager#DISALLOW_CONFIG_DATE_TIME is used, no user will be able set the date and time. Instead, the network date and time will be used. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. enabled boolean: Whether time should be obtained automatically from the network or not. Throws SecurityException if caller is not a device owner, a profile owner for the primary user, or a profile owner of an organization-owned managed profile. Added in API level 21 Deprecated in API level 30 public void setAutoTimeRequired (ComponentName admin, boolean required) This method was deprecated in API level 30. From Build.VERSION_CODES.R. Use setAutoTimeEnabled(ComponentName, boolean) to turn auto time on or off and use UserManager#DISALLOW_CONFIG_DATE_TIME to prevent the user from changing this setting.

Called by a device owner, or alternatively a profile owner from Android 8.0 (API level 26) or higher, to set whether auto time is required. If auto time is required, no user will be able set the date and time and network date and time will be used.

Note: If auto time is required the user can still manually set the time zone. Staring from Android 11, if auto time is required, the user cannot manually set the time zone. The calling device admin must be a device owner, or alternatively a profile owner from Android 8.0 (API level 26) or higher. If it is not, a security exception will be thrown. Staring from Android 11, this API switches to use UserManager#DISALLOW_CONFIG_DATE_TIME to enforce the auto time settings. Calling this API to enforce auto time will result in UserManager#DISALLOW_CONFIG_DATE_TIME being set, while calling this API to lift the requirement will result in UserManager#DISALLOW_CONFIG_DATE_TIME being cleared. From Android 11, this API can also no longer be called on a managed profile. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. required boolean: Whether auto time is set required or not. Throws SecurityException if admin is not a device owner, not a profile owner or if this API is called on a managed profile. public void setAutoTimeZoneEnabled (ComponentName admin, boolean enabled) Called by a device owner, a profile owner for the primary user or a profile owner of an organization-owned managed profile to turn auto time zone on and off. Callers are recommended to use UserManager#DISALLOW_CONFIG_DATE_TIME to prevent the user from changing this setting.

If user restriction UserManager#DISALLOW_CONFIG_DATE_TIME is used, no user will be able set the date and time zone.

Instead, the network date and time zone will be used. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with or Null if the caller is not a device admin.

This value may be null. enabled boolean: Whether time zone should be obtained automatically from the network or not. Throws SecurityException if caller is not a device owner, a profile owner for the primary user, or a profile owner of an organization-owned managed profile. public void setBackupServiceEnabled (ComponentName admin, boolean enabled) Allows the device owner or profile owner to enable or disable the backup service. Each user has its own backup service which manages the backup and restore mechanisms in that user. Disabling the backup service will prevent data from being backed up or restored. Device owner calls this API to control backup services across all users on the device. Profile owner can use this API to enable or disable the profile's backup service.

However, for a managed profile its backup functionality is only enabled if both the device owner and the profile owner have enabled the backup service. By default, backup service is disabled on a device with device owner, and within a managed profile. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. enabled boolean: true to enable the backup service, false to disable it. Throws SecurityException if admin is not a device owner or a profile owner. public void setBluetoothContactSharingDisabled (ComponentName admin, boolean disabled) Called by a profile owner of a managed profile to set whether bluetooth devices can access enterprise contacts. The calling device admin must be a profile owner. If it is not, a security exception will be thrown. This API works on managed profile only. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. disabled boolean: If true, bluetooth devices cannot access enterprise contacts.

Throws SecurityException if admin is not a profile owner. public void setCameraDisabled (ComponentName admin, boolean disabled) Called by an application that is administering the device to disable all cameras on the device, for this user. After setting this, no applications running as this user will be able to access any cameras on the device. This method can be called on the DevicePolicyManager instance, returned by getParentProfileInstance(android.content.ComponentName), where the caller must be the profile owner of an organization-owned managed profile. If the caller is device owner, then the restriction will be applied to all users. If called on the parent instance, then the restriction will be applied on the personal profile. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_DISABLE_CAMERA to be able to call this method; if it has not, a security exception will be thrown. Note, this policy type is deprecated for legacy device admins since Build.VERSION_CODES.Q. On Android Build.VERSION_CODES.Q devices, legacy device admins targeting SDK version Build.VERSION_CODES.P or below can still call this API to disable camera, while legacy device admins targeting SDK version Build.VERSION_CODES.Q will receive a SecurityException. Starting from Android Build.VERSION_CODES.R, requests to disable camera from legacy device admins targeting SDK version Build.VERSION_CODES.P or below will be silently ignored. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the camera disabled policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with or null if the caller is not a device admin disabled boolean: Whether or not the camera should be disabled. Added in API level 23 Deprecated in API level 26 public void setCertInstallerPackage (ComponentName admin, String installerPackage) This method was deprecated in API level 26. From Build.VERSION_CODES.O. Use setDelegatedScopes(ComponentName, String, List) with the DELEGATION_CERT_INSTALL scope instead. Called by a profile owner or device owner to grant access to privileged certificate manipulation APIs to a third-party certificate installer app. Granted APIs include getInstalledCaCerts(ComponentName), hasCaCertInstalled(ComponentName, byte), installCaCert(ComponentName, byte), uninstallCaCert(ComponentName, byte), uninstallAllUserCaCerts(ComponentName) and installKeyPair(ComponentName, PrivateKey, Certificate, String).

Delegated certificate installer is a per-user state. The delegated access is persistent until it is later cleared by calling this method with a null value or uninstallling the certificate installer.

Note:Starting from Build.VERSION_CODES.N, if the caller application's target SDK version is Build.VERSION_CODES.N or newer, the supplied certificate installer package must be installed when calling this API, otherwise an IllegalArgumentException will be thrown. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. installerPackage String: The package name of the certificate installer which will be given access. If null is given the current package will be cleared. Throws SecurityException if admin is not a device or a profile owner. public void setCommonCriteriaModeEnabled (ComponentName admin, boolean enabled) Called by device owner or profile owner of an organization-owned managed profile to toggle Common Criteria mode for the device. When the device is in Common Criteria mode, certain device functionalities are tuned to meet the higher security level required by Common Criteria certification.

For example: Bluetooth long term key material is additionally integrity-protected with AES-GCM. WiFi configuration store is additionally integrity-protected with AES-GCM. Common Criteria mode is disabled by default. Note: if Common Critera mode is turned off after being enabled previously, all existing WiFi configurations will be lost.

Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin.

This value may be null. enabled boolean: whether Common Criteria mode should be enabled or not.

public void setConfiguredNetworksLockdownState (ComponentName admin, boolean lockdown) Called by a device owner or a profile owner of an organization-owned managed profile to control whether the user can change networks configured by the admin. When this lockdown is enabled, the user can still configure and connect to other Wi-Fi networks, or use other Wi-Fi capabilities such as tethering. WiFi network configuration lockdown is controlled by a global settings Settings.Global.WIFI_DEVICE_OWNER_CONFIGS_LOCKDOWN and calling this API effectively modifies the global settings. Previously device owners can also control this directly via setGlobalSetting(ComponentName, String, String) but they are recommended to switch to this API. Parameters admin ComponentName: admin Which DeviceAdminReceiver this request is associated with.

Null if the caller is not a device admin.

This value may be null.

lockdown boolean: Whether the admin configured networks should be unmodifiable by the user. Throws SecurityException if caller is not a device owner or a profile owner of an organization-owned managed profile. Added in API level 29 Deprecated in API level 34 public void setCrossProfileCalendarPackages (ComponentName admin, Set packageNames) This method was deprecated in API level 34. Use setCrossProfilePackages(android.content.ComponentName, java.util.Set). Allows a set of packages to access cross-profile calendar APIs. Called by a profile owner of a managed profile. Calling with a null value for the set disables the restriction so that all packages are allowed to access cross-profile calendar APIs. Calling with an empty set disallows all packages from accessing cross-profile calendar APIs. If this method isn't called, no package is allowed to access cross-profile calendar APIs by default. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with This value cannot be null. packageNames Set: set of packages to be allowlisted This value may be null. Throws SecurityException if admin is not a profile owner See also: getCrossProfileCalendarPackages(ComponentName) Added in API level 21 Deprecated in API level 34 public void setCrossProfileCallerIdDisabled (ComponentName admin, boolean disabled) This method was deprecated in API level 34. starting with Build.VERSION_CODES.UPSIDE_DOWN_CAKE, use setManagedProfileCallerIdAccessPolicy(android.app.admin.PackagePolicy) instead Called by a profile owner of a managed profile to set whether caller-Id information from the managed profile will be shown in the parent profile, for incoming calls. The calling device admin must be a profile owner. If it is not, a security exception will be thrown. Starting with Build.VERSION_CODES.UPSIDE_DOWN_CAKE, calling this function is similar to calling setManagedProfileCallerIdAccessPolicy(android.app.admin.PackagePolicy) with a PackagePolicy#PACKAGE_POLICY_BLOCKLIST policy type when disabled is false or a PackagePolicy#PACKAGE_POLICY_ALLOWLIST policy type when disabled is true. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. disabled boolean: If true caller-Id information in the managed profile is not displayed. Throws SecurityException if admin is not a profile owner. public void setCrossProfilePackages (ComponentName admin, Set packageNames) Sets the set of admin-allowlisted package names that are allowed to request user consent for cross-profile communication. Assumes that the caller is a profile owner and is the given admin. Previous calls are overridden by each subsequent call to this method. Note that other apps may be able to request user consent for cross-profile communication if they have been explicitly allowlisted by the OEM. When previously-set cross-profile packages are missing from packageNames, the app-op for INTERACT_ACROSS_PROFILES will be reset for those packages.

This will not occur for packages that are allowlisted by the OEM. Parameters admin ComponentName: the DeviceAdminReceiver this request is associated with This value cannot be null. packageNames Set: the new cross-profile package names This value cannot be null. public void setDefaultDialerApplication (String packageName) Must be called by a device owner or a profile owner of an organization-owned managed profile to set the default dialer application for the calling user. When the profile owner of an organization-owned managed profile calls this method, it sets the default dialer application in the work profile. This is only meaningful when work profile telephony is enabled by setManagedSubscriptionsPolicy(ManagedSubscriptionsPolicy). If the device does not support telephony (PackageManager#FEATURE_TELEPHONY), calling this method will do nothing. Parameters packageName String: The name of the package to set as the default dialer application. This value cannot be null. Throws SecurityException if admin is not a device or profile owner or a profile owner of an organization-owned managed profile. IllegalArgumentException if the package cannot be set as the default dialer, for example if the package is not installed or does not expose the expected activities or services that a dialer app is required to have. public void setDefaultSmsApplication (ComponentName admin, String packageName) Must be called by a device owner or a profile owner of an organization-owned managed profile to set the default SMS application. This method can be called on the DevicePolicyManager instance, returned by getParentProfileInstance(android.content.ComponentName), where the caller must be the profile owner of an organization-owned managed profile and the package must be a pre-installed system package. If called on the parent instance, then the default SMS application is set on the personal profile. Starting from Android Build.VERSION_CODES.UPSIDE_DOWN_CAKE, the profile owner of an organization-owned managed profile can also call this method directly (not on the parent profile instance) to set the default SMS application in the work profile. This is only meaningful when work profile telephony is enabled by setManagedSubscriptionsPolicy(ManagedSubscriptionsPolicy). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. packageName String: The name of the package to set as the default SMS application. This value cannot be null. public void setDelegatedScopes (ComponentName admin, String delegatePackage, List scopes) Called by a profile owner or device owner to grant access to privileged APIs to another app. Granted APIs are determined by scopes, which is a list of the DELEGATION_* constants. A broadcast with the ACTION_APPLICATION_DELEGATION_SCOPES_CHANGED action will be sent to the delegatePackage with its new scopes in an ArrayList extra under the EXTRA_DELEGATION_SCOPES key. The broadcast is sent with the Intent#FLAG_RECEIVER_REGISTERED_ONLY flag. Delegated scopes are a per-user state. The delegated access is persistent until it is later cleared by calling this method with an empty scopes list or uninstalling the delegatePackage. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. delegatePackage String: The package name of the app which will be given access. This value cannot be null. scopes List: The groups of privileged APIs whose access should be granted to delegatedPackage.

This value cannot be null. Throws SecurityException if admin is not a device or a profile owner. public void setDeviceOwnerLockScreenInfo (ComponentName admin, CharSequence info) Sets the device owner information to be shown on the lock screen. Device owner information set using this method overrides any owner information manually set by the user and prevents the user from further changing it. If the device owner information is null or empty then the device owner info is cleared and the user owner info is shown on the lock screen if it is set. If the device owner information contains only whitespaces then the message on the lock screen will be blank and the user will not be allowed to change it. If the device owner information needs to be localized, it is the responsibility of the DeviceAdminReceiver to listen to the Intent#ACTION_LOCALE_CHANGED broadcast and set a new version of this string accordingly. May be called by the device owner or the profile owner of an organization-owned device. Parameters admin ComponentName: The name of the admin component to check. This value cannot be null. info CharSequence: Device owner information which will be displayed instead of the user owner info. Throws SecurityException if admin is not a device owner. public void setEndUserSessionMessage (ComponentName admin, CharSequence endUserSessionMessage) Called by a device owner to specify the user session end message. This may be displayed during a user switch. The message should be limited to a short statement or it may be truncated. If the message needs to be localized, it is the responsibility of the DeviceAdminReceiver to listen to the Intent#ACTION_LOCALE_CHANGED broadcast and set a new version of this message accordingly. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with.

This value cannot be null. endUserSessionMessage CharSequence: message for ending user session, or null to use system default message. Throws SecurityException if admin is not a device owner. public void setFactoryResetProtectionPolicy (ComponentName admin, FactoryResetProtectionPolicy policy) Callable by device owner or profile owner of an organization-owned device, to set a factory reset protection (FRP) policy. When a new policy is set, the system notifies the FRP management agent of a policy change by broadcasting ACTION_RESET_PROTECTION_POLICY_CHANGED. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin This value may be null. policy FactoryResetProtectionPolicy: the new FRP policy, or null to clear the current policy. public int setGlobalPrivateDnsModeOpportunistic (ComponentName admin) Sets the global Private DNS mode to opportunistic. May only be called by the device owner. In this mode, the DNS subsystem will attempt a TLS handshake to the network-supplied resolver prior to attempting name resolution in cleartext. Note: The device owner won't be able to set the global private DNS mode if there are unaffiliated secondary users or profiles on the device. It's recommended that affiliation ids are set for new users as soon as possible after provisioning via setAffiliationIds(ComponentName, Set). Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with. This value cannot be null. Throws SecurityException if the caller is not the device owner. public int setGlobalPrivateDnsModeSpecifiedHost (ComponentName admin, String privateDnsHost) Sets the global Private DNS host to be used. May only be called by the device owner. Note that the method is blocking as it will perform a connectivity check to the resolver, to ensure it is valid. Because of that, the method should not be called on any thread that relates to user interaction, such as the UI thread.

In case a VPN is used in conjunction with Private DNS resolver, the Private DNS resolver must be reachable both from within and outside the VPN. Otherwise, the device may lose the ability to resolve hostnames as system traffic to the resolver may not go through the VPN. Note: The device owner won't be able to set the global private DNS mode if there are unaffiliated secondary users or profiles on the device. It's recommended that affiliation ids are set for new users as soon as possible after provisioning via setAffiliationIds(ComponentName, Set). This method may take several seconds to complete, so it should only be called from a worker thread. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with. This value cannot be null. privateDnsHost String: The hostname of a server that implements DNS over TLS (RFC7858). This value cannot be null. public void setGlobalSetting (ComponentName admin, String setting, String value) This method is mostly deprecated. Most of the settings that still have an effect have dedicated setter methods or user restrictions. See individual settings for details.

Called by device owner to update Settings.Global settings. Validation that the value of the setting is in the correct form for the setting type should be performed by the caller. The settings that can be updated with this method are: The following settings used to be supported, but can be controlled in other ways: Changing the following settings has no effect as of Build.VERSION_CODES.M: Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. setting String: The name of the setting to update. value String: The value to update the setting to. Throws SecurityException if admin is not a device owner. public boolean setKeyPairCertificate (ComponentName admin, String alias, List certs, boolean isUserSelectable) This API can be called by the following to associate certificates with a key pair that was generated using generateKeyPair(ComponentName, String, KeyGenParameterSpec, int), and set whether the key is available for the user to choose in the certificate selection prompt: Device owner Profile owner Delegated certificate installer Credential management app From Android Build.VERSION_CODES.S, the credential management app can call this API. If called by the credential management app, the componentName must be null. Note, there can only be a credential management app on an unmanaged

device. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if the caller is not a device admin. alias String: The private key alias under which to install the certificate. The alias should denote an existing private key. If a certificate with that alias already exists, it will be overwritten. This value cannot be null. certs List: The certificate chain to install. The chain should start with the leaf certificate and include the chain of trust in order. This will be returned by KeyChain.getCertificateChain(Context, String). This value cannot be null. isUserSelectable boolean: true to indicate that a user can select this key via the certificate selection prompt, false to indicate that this key can only be granted access by implementing DeviceAdminReceiver.onChoosePrivateKeyAlias(Context, Intent, int, Uri, String). Returns boolean true if the provided alias exists and the certificates has been successfully associated with it, false otherwise. Throws SecurityException if admin is not null and not a device or profile owner, or admin is null but the calling application is not a delegated certificate installer or credential management app. public boolean setKeyguardDisabled (ComponentName admin, boolean disabled) Called by a device owner or profile owner of secondary users that is affiliated with the device to disable the keyguard altogether.
Setting the keyguard to disabled has the same effect as choosing "None" as the screen lock type. However, this call has no effect if a password, pin or pattern is currently set. If a password, pin or pattern is set after the keyguard was disabled, the keyguard stops being disabled. As of Build.VERSION_CODES.P, this call also dismisses the keyguard if it is currently shown. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. disabled boolean: true disables the keyguard, false reenables it. Returns boolean false if attempting to disable the keyguard while a lock password was in place. true otherwise. Throws SecurityException if admin is not the device owner, or a profile owner of secondary user that is affiliated with the device. See also: isAffiliatedUser()getSecondaryUsers(ComponentName) public void setKeyguardDisabledFeatures (ComponentName admin, int which) Called by an application that is administering the device to disable keyguard customizations, such as widgets. After setting this, keyguard features will be disabled according to the provided feature list. A calling device admin must have requested DeviceAdminInfo#USES_POLICY_DISABLE_KEYGUARD_FEATURES to be able to call this method; if it has not, a security exception will be thrown. Calling this from a managed profile before version Build.VERSION_CODES.M will throw a security exception. From version Build.VERSION_CODES.M the profile owner of a managed profile can set: From version Build.VERSION_CODES.R the profile owner of an organization-owned managed profile can set: KEYGUARD_DISABLE_TRUST_AGENTS, KEYGUARD_DISABLE_FINGERPRINT, KEYGUARD_DISABLE_FACE, KEYGUARD_DISABLE_IRIS, KEYGUARD_DISABLE_SECURE_CAMERA and KEYGUARD_DISABLE_SECURE_NOTIFICATIONS can also be set on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile. KEYGUARD_DISABLE_SECURE_CAMERA can only be set on the parent profile instance if the calling device admin is the profile owner of an organization-owned managed profile. Requests to disable other features on a managed profile will be ignored. The admin can check which features have been disabled by calling getKeyguardDisabledFeatures(android.content.ComponentName) Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.
Null if the caller is not a device admin This value may be null.
which int: The disabled features flag which can be either KEYGUARD_DISABLE_FEATURES_NONE (default), KEYGUARD_DISABLE_FEATURES_ALL, or a combination of KEYGUARD_DISABLE_WIDGETS_ALL, KEYGUARD_DISABLE_SECURE_CAMERA, KEYGUARD_DISABLE_SECURE_NOTIFICATIONS, KEYGUARD_DISABLE_TRUST_AGENTS, KEYGUARD_DISABLE_UNREDACTED_NOTIFICATIONS, KEYGUARD_DISABLE_FINGERPRINT, KEYGUARD_DISABLE_FACE, KEYGUARD_DISABLE_IRIS, KEYGUARD_DISABLE_SHORTCUTS_ALL. public void setLocationEnabled (ComponentName admin, boolean locationEnabled) Called by device owners to set the user's global location setting. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with This value cannot be null. locationEnabled boolean: whether location should be enabled or disabled.
Note: on automotive builds, calls to disable will be ignored. Throws SecurityException if admin is not a device owner. public void setLockTaskFeatures (ComponentName admin, int flags) Sets which system features are enabled when the device runs in lock task mode. This method doesn't affect the features when lock task mode is inactive. Any system features not included in flags are implicitly disabled when calling this method. By default, only LOCK_TASK_FEATURE_GLOBAL_ACTIONS is enabled; all the other features are disabled. To disable the global actions dialog, call this method omitting LOCK_TASK_FEATURE_GLOBAL_ACTIONS. This method can only be called by the device owner, a profile owner of an affiliated user or profile, or the profile owner when no device owner is set or holders of the permission Manifest.permission.MANAGE_DEVICE_POLICY_LOCK_TASK. See isAffiliatedUser(). Any features set using this method are cleared if the user becomes unaffiliated. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the lock task features policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, lock task features and lock task packages are bundled as one policy. A failure to apply one will result in a failure to apply the other. See also: public void setLockTaskPackages (ComponentName admin, String[] packages) Sets which packages may enter lock task mode. Any packages that share uid with an allowed package will also be allowed to activate lock task. From Build.VERSION_CODES.M removing packages from the lock task package list results in locked tasks belonging to those packages to be finished. This function can only be called by the device owner, a profile owner of an affiliated user or profile, or the profile owner when no device owner is set or holders of the permission Manifest.permission.MANAGE_DEVICE_POLICY_LOCK_TASK. See isAffiliatedUser(). Any package set via this method will be cleared if the user becomes unaffiliated. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the lock task policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, lock task features and lock task packages are bundled as one policy. A failure to apply one will result in a failure to apply the other. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. packages String: The list of packages allowed to enter lock task mode This value cannot be null. public void setLogoutEnabled (ComponentName admin, boolean enabled) Called by a device owner to specify whether logout is enabled for all secondary users. The system may show a logout button that stops the user and switches back to the primary user. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. enabled boolean: whether logout should be enabled or not. Throws SecurityException if admin is not a device owner. public void setLongSupportMessage (ComponentName admin, CharSequence message) Called by a device admin to set the long support message. This will be displayed to the user in the device administrators settings screen. If the message is longer than 20000 characters it may be truncated. If the long support message needs to be localized, it is the responsibility of the DeviceAdminReceiver to listen to the Intent#ACTION_LOCALE_CHANGED broadcast and set a new version of this string accordingly. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. message CharSequence: Long message to be displayed to the user in settings or null to clear the existing message.
Throws SecurityException if admin is not an active administrator. See also: setShortSupportMessage(ComponentName, CharSequence) public void setManagedProfileCallerIdAccessPolicy (PackagePolicy policy) Called by a profile owner of a managed profile to set the packages that are allowed to lookup contacts in the managed profile based on caller id information. For example, the policy determines if a dialer app in the parent profile resolving an incoming call can search the caller id data, such as phone number, of managed contacts and return managed contacts that match. The calling device admin must be a profile owner of a managed profile. If it is not, a SecurityException will be thrown. A PackagePolicy#PACKAGE_POLICY_ALLOWLIST_AND_SYSTEM policy type allows access from the OEM default packages for the Sms, Dialer and Contact roles, in addition to the packages specified in PackagePolicy#getPackageNames() Parameters policy PackagePolicy: the policy to set, setting this value to null will allow all packages public void setManagedProfileContactsAccessPolicy (PackagePolicy policy) Called by a profile owner of a managed profile to set the packages that are allowed access to the managed profile contacts from the parent user. For example, the system will enforce the provided policy and determine if contacts in the managed profile are shown when queried by an application in the parent user.
The calling device admin must be a profile owner of a managed profile. If it is not, a SecurityException will be thrown. A PackagePolicy#PACKAGE_POLICY_ALLOWLIST_AND_SYSTEM policy type allows access from the OEM default packages for the Sms, Dialer and Contact roles, in addition to the packages specified in PackagePolicy#getPackageNames() Parameters policy PackagePolicy: the policy to set, setting this value to null will allow all packages public void setManagedProfileMaximumTimeOff (ComponentName admin, long timeoutMillis) Called by a profile owner of an organization-owned managed profile to set maximum time the profile is allowed to be turned off. If the profile is turned off for longer, personal apps are suspended on the device. When personal apps are suspended, an ongoing notification about that is shown to the user. When the user taps the notification, system invokes ACTION_CHECK_POLICY_COMPLIANCE in the profile owner package. Profile owner implementation that uses personal apps suspension must handle this intent. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with This value cannot be null. timeoutMillis long: Maximum time the profile is allowed to be off in milliseconds or 0 if not limited. The minimum non-zero value corresponds to 72 hours. If an admin sets a smaller non-zero vaulue, 72 hours will be set instead.
See also: setPersonalAppsSuspended(ComponentName, boolean) public void setMasterVolumeMuted (ComponentName admin, boolean on) Called by profile or device owners to set the global volume mute on or off. This has no effect when set on a managed profile. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. on boolean: true to mute global volume, false to turn mute off. Throws SecurityException if admin is not a device or profile owner. public void setMaximumFailedPasswordsForWipe (ComponentName admin, int num) Setting this to a value greater than zero enables a policy that will perform a device or profile wipe after too many incorrect device-unlock passwords have been entered. This policy combines watching for failed passwords and wiping the device, and requires that calling Device Admins request both DeviceAdminInfo#USES_POLICY_WATCH_LOGIN and DeviceAdminInfo#USES_POLICY_WIPE_DATA}. When this policy is set on the system or the main user, the device will be factory reset after too many incorrect password attempts. When set on any other user, only the corresponding user or profile will be wiped. To implement any other policy (e.g. wiping data for a particular application only, erasing or revoking credentials, or reporting the failure to a server), you should implement DeviceAdminReceiver#onPasswordFailed(Context, android.content.Intent) instead. Do not use this API, because if the maximum count is reached, the device or profile will be wiped immediately, and your callback will not be invoked. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set a value on the parent profile. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always empty and this method has no effect - i.e. the policy is not set. Requires the PackageManager#FEATURE_SECURE_LOCK_SCREEN feature which can be detected using PackageManager.hasSystemFeature(String).
Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. num int: The number of failed password attempts at which point the device or profile will be wiped.
public List setMeteredDataDisabledPackages (ComponentName admin, List packageNames) Called by a device or profile owner to restrict packages from using metered data. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with. This value cannot be null. packageNames List: the list of package names to be restricted. This value cannot be null. Returns List a list of package names which could not be restricted. This value cannot be null. Throws SecurityException if admin is not a device or profile owner. public void setMtePolicy (int policy) Called by a device owner, profile owner of an organization-owned device, to set the Memory Tagging Extension (MTE) policy. MTE is a CPU extension that allows to protect against certain classes of security problems at a small runtime performance cost overhead. The MTE policy can only be set to MTE_DISABLED if called by a device owner. Otherwise a SecurityException will be thrown. The device needs to be rebooted to apply changes to the MTE policy. public void setNetworkLoggingEnabled (ComponentName admin, boolean enabled) Called by a device owner, profile owner of a managed profile or delegated app with DELEGATION_NETWORK_LOGGING to control the network logging feature. Supported for a device owner from Android 8 and a delegated app granted by a device owner from Android 10. Supported for a profile owner of a managed profile and a delegated app granted by a profile owner from Android 12. When network logging is enabled by a profile owner, the network logs will only include work profile network activity, not activity on the personal profile. Network logs contain DNS lookup and connect() library call events. The following library functions are recorded while network logging is active: getaddrinfo() gethostbyname() connect() Network logging is a low-overhead tool for forensics but it is not guaranteed to use full system call logging; event reporting is enabled by default for all processes but not strongly enforced. Events from applications using alternative implementations of libc, making direct kernel calls, or deliberately obfuscating traffic may not be recorded. Some common network events may not be reported. For example: Applications may hardcode IP addresses to reduce the number of DNS lookups, or use an alternative system for name resolution, and so avoid calling getaddrinfo() or gethostbyname. Applications may use datagram sockets for performance reasons, for example for a game client. Calling connect() is unnecessary for this kind of socket, so it will not trigger a network event. It is possible to directly intercept layer 3 traffic leaving the device using an always-on VPN service. See setAlwaysOnVpnPackage(android.content.ComponentName, java.lang.String, boolean) and VpnService for details. Note: The device owner won't be able to retrieve network logs if there are unaffiliated secondary users or profiles on the device, regardless of whether the feature is enabled. Logs will be discarded if the internal buffer fills up while waiting for all users to become affiliated. Therefore it's recommended that affiliation ids are set for new users as soon as possible after provisioning via setAffiliationIds(ComponentName, Set). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if called by a delegated app. enabled boolean: whether network logging should be enabled or not. Throws SecurityException if admin is not a device owner or profile owner. Added in API level 24 Deprecated in API level 31 public void setOrganizationColor (ComponentName admin, int color) This method was deprecated in API level 31. From Build.VERSION_CODES.R, the organization color is never used as the background color of the confirm credentials screen. Called by a profile owner of a managed profile to set the color used for customization. This color is used as background color of the confirm credentials screen for that user. The default color is teal (#00796B). The confirm credentials screen can be created using KeyguardManager.createConfirmDeviceCredentialIntent(CharSequence, CharSequence). Starting from Android R, the organization color will no longer be used as the background color of the confirm credentials screen. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. color int: The 24bit (0xRRGGBB) representation of the color to be used. Throws SecurityException if admin is not a profile owner. public void setOrganizationId (String enterpriseId) Sets the Enterprise ID for the work profile or managed device.
This is a requirement for generating an enrollment-specific ID for the device, see getEnrollmentSpecificId(). It is recommended that the Enterprise ID is at least 6 characters long, and no more than 64 characters. Parameters enterpriseId String: An identifier of the organization this work profile or device is enrolled into. This value cannot be null. public void setOrganizationName (ComponentName admin, CharSequence title) Called by the device owner (since API 26) or profile owner (since API 24) to set the name of the organization under management. If the organization name needs to be localized, it is the responsibility of the caller to listen to the Intent#ACTION_LOCALE_CHANGED broadcast and set a new version of this string accordingly.
Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. title CharSequence: The organization name or null to clear a previously set name. Throws SecurityException if admin is not a device or profile owner. public void setOverrideApnsEnabled (ComponentName admin, boolean enabled) Called by device owner to set if override APNs should be enabled. Override APNs are separated from other APNs on the device, and can only be inserted or modified by the device owner. When enabled, only override APNs are in use, any other APNs are ignored. Note: Enterprise APNs added by managed profile owners do not need to be enabled by this API. They are part of the preferential network service config and is controlled by setPreferentialNetworkServiceConfigs(List). Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with This value cannot be null. enabled boolean: true if override APNs should be enabled, false otherwise Throws SecurityException if admin is not a device owner. public String[] setPackagesSuspended (ComponentName admin, String[] packageNames, boolean suspended) Called by device or profile owners to suspend packages for this user. This function can be called by a device owner, profile owner, or by a delegate given the DELEGATION_PACKAGE_ACCESS scope via setDelegatedScopes(ComponentName, String, List). A suspended package will not be able to start activities. Its notifications will be hidden, it will not show up in recents, will not be able to show toasts or dialogs or ring the device. The package must already be installed. If the package is uninstalled while suspended the package will no longer be suspended. The admin can block this by using setUninstallBlocked(ComponentName, String, boolean).
Some apps cannot be suspended, such as device admins, the active launcher, the required package installer, the required package uninstaller, the required package verifier, the default dialer, and the permission controller.
Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. packageNames String: The package names to suspend or unsuspend. This value cannot be null. suspended boolean: If set to true than the packages will be suspended, if set to false the packages will be unsuspended. Returns String[] an array of package names for which the suspended status is not set as requested in this method. This value cannot be null. Throws SecurityException if admin is not a device or profile owner. public void setPasswordExpirationTimeout (ComponentName admin, long timeout) Called by a device admin to set the password expiration timeout. Calling this method will restart the countdown for password expiration for the given admin, as will changing the device password (for all admins). The provided timeout is the time delta in ms and will be added to the current time. For example, to have the password expire 5 days from now, timeout would be 5 * 86400 * 1000 = 432000000 ms for timeout. To disable password expiration, a value of 0 may be used for timeout. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password expiration is always disabled. A calling device admin must have requested DeviceAdminInfo#USES_POLICY_EXPIRE_PASSWORD to be able to call this method; if it has not, a security exception will be thrown. Note that setting the password will automatically reset the expiration time for all active admins. Active admins do not need to explicitly call this method in that case. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile. Requires the PackageManager#FEATURE_SECURE_LOCK_SCREEN feature which can be detected using PackageManager.hasSystemFeature(String). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin This value may be null. timeout long: The limit (in ms) that a password can remain in effect. A value of 0 means there is no restriction (unlimited). public void setPasswordHistoryLength (ComponentName admin, int length) Called by an application that is administering the device to set the length of the password history. After setting this, the user will not be able to enter a new password that is the same as any password in the history.
Note that the current password will remain until the user has set a new one, so the change does not take place immediately. To prompt the user for a new password, use ACTION_SET_NEW_PASSWORD or ACTION_SET_NEW_PARENT_PROFILE_PASSWORD after setting this value. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password history length is always 0. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD to be able to call this method; if it has not, a security exception will be thrown. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile.
Requires the PackageManager#FEATURE_SECURE_LOCK_SCREEN feature which can be detected using PackageManager.hasSystemFeature(String). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. length int: The new desired length of password history. A value of 0 means there is no restriction. Added in API level 8 Deprecated in API level 31 public void setPasswordMinimumLength (ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. Called by an application that is administering the device to set the minimum allowed password length. After setting this, the user will not be able to enter a new password that is not at least as restrictive as what has been set. Note that the current password will remain until the user has set a new one, so the change does not take place immediately.
To prompt the user for a new password, use ACTION_SET_NEW_PASSWORD or ACTION_SET_NEW_PARENT_PROFILE_PASSWORD after setting this value. This constraint is only imposed if the administrator has also requested either PASSWORD_QUALITY_NUMERIC , PASSWORD_QUALITY_NUMERIC_COMPLEX, PASSWORD_QUALITY_ALPHABETIC, PASSWORD_QUALITY_ALPHANUMERIC, or PASSWORD_QUALITY_COMPLEX with setPasswordQuality(ComponentName, int). If an app targeting SDK level Build.VERSION_CODES.R and above enforces this constraint without settings password quality to one of these values first, this method will throw IllegalStateException. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always treated as empty.
The calling device admin must have requested DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD to be able to call this method; if it has not, a security exception will be thrown.
Apps targeting Build.VERSION_CODES.R and below can call this method on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile. Note: this method is ignored on {PackageManager#FEATURE_AUTOMOTIVE automotive builds}. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. length int: The new desired minimum password length. A value of 0 means there is no restriction.
Added in API level 11 Deprecated in API level 31 public void setPasswordMinimumLetters (ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. Called by an application that is administering the device to set the minimum number of letters required in the password. After setting this, the user will not be able to enter a new password that is not at least as restrictive as what has been set. Note that the current password will remain until the user has set a new one, so the change does not take place immediately. To prompt the user for a new password, use ACTION_SET_NEW_PASSWORD or ACTION_SET_NEW_PARENT_PROFILE_PASSWORD after setting this value. This constraint is only imposed if the administrator has also requested PASSWORD_QUALITY_COMPLEX with setPasswordQuality(ComponentName, int). If an app targeting SDK level Build.VERSION_CODES.R and above enforces this constraint without settings password quality to PASSWORD_QUALITY_COMPLEX first, this method will throw IllegalStateException. The default value is 1. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always treated as empty. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD to be able to call this method; if it has not, a security exception will be thrown. Apps targeting Build.VERSION_CODES.R and below can call this method on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile. Note: this method is ignored on {PackageManager#FEATURE_AUTOMOTIVE automotive builds}.
Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. length int: The new desired minimum number of letters required in the password. A value of 0 means there is no restriction. Added in API level 11 Deprecated in API level 31 public void setPasswordMinimumLowerCase (ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. Called by an application that is administering the device to set the minimum number of lower case letters required in the password. After setting this, the user will not be able to enter a new password that is not at least as restrictive as what has been set. Note that the current password will remain until the user has set a new one, so the change does not take place immediately. To prompt the user for a new password, use ACTION_SET_NEW_PASSWORD or ACTION_SET_NEW_PARENT_PROFILE_PASSWORD after setting this value. This constraint is only imposed if the administrator has also requested PASSWORD_QUALITY_COMPLEX with setPasswordQuality(ComponentName, int). If an app targeting SDK level Build.VERSION_CODES.R and above enforces this constraint without settings password quality to PASSWORD_QUALITY_COMPLEX first, this method will throw IllegalStateException. The default value is 0. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always treated as empty. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD to be able to call this method; if it has not, a security exception will be thrown. Apps targeting Build.VERSION_CODES.R and below can call this method on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile. Note: this method is ignored on {PackageManager#FEATURE_AUTOMOTIVE automotive builds}.
Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. length int: The new desired minimum number of lower case letters required in the password. A value of 0 means there is no restriction. Added in API level 11 Deprecated in API level 31 public void setPasswordMinimumNonLetter (ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. Called by an application that is administering the device to set the minimum number of non-letter characters (numerical digits or symbols) required in the password. After setting this, the user will not be able to enter a new password that is not at least as restrictive as what has been set. Note that the current password will remain until the user has set a new one, so the change does not take place immediately. To prompt the user for a new password, use ACTION_SET_NEW_PASSWORD or ACTION_SET_NEW_PARENT_PROFILE_PASSWORD after setting this value. This constraint is only imposed if the administrator has also requested PASSWORD_QUALITY_COMPLEX with setPasswordQuality(ComponentName, int). If an app targeting SDK level Build.VERSION_CODES.R and above enforces this constraint without settings password quality to PASSWORD_QUALITY_COMPLEX first, this method will throw IllegalStateException. The default value is 0. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always treated as empty. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD to be able to call this method; if it has not, a security exception will be thrown. Apps targeting Build.VERSION_CODES.R and below can call this method on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile. Note: this method is ignored on {PackageManager#FEATURE_AUTOMOTIVE automotive builds}. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. length int: The new desired minimum number of letters required in the password.
A value of 0 means there is no restriction. Added in API level 11 Deprecated in API level 31 public void setPasswordMinimumNumeric (ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. Called by an application that is administering the device to set the minimum number of numerical digits required in the password. After setting this, the user will not be able to enter a new password that is not at least as restrictive as what has been set. Note that the current password will remain until the user has set a new one, so the change does not take place immediately. To prompt the user for a new password, use ACTION_SET_NEW_PASSWORD or ACTION_SET_NEW_PARENT_PROFILE_PASSWORD after setting this value. This constraint is only imposed if the administrator has also requested PASSWORD_QUALITY_COMPLEX with setPasswordQuality(ComponentName, int). If an app targeting SDK level Build.VERSION_CODES.R and above enforces this constraint without settings password quality to PASSWORD_QUALITY_COMPLEX first, this method will throw IllegalStateException. The default value is 1. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always treated as empty. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD to be able to call this method; if it has not, a security exception will be thrown. Apps targeting Build.VERSION_CODES.R and below can call this method on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile. Note: this method is ignored on {PackageManager#FEATURE_AUTOMOTIVE automotive builds}. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. length int: The new desired minimum number of numerical digits required in the password. A value of 0 means there is no restriction. Added in API level 11 Deprecated in API level 31 public void setPasswordMinimumSymbols (ComponentName admin, int length) This method was deprecated in API level 31. see setPasswordQuality(android.content.ComponentName, int) for details. Called by an application that is administering the device to set the minimum number of symbols required in the password.
After setting this, the user will not be able to enter a new password that is not at least as restrictive as what has been set. Note that the current password will remain until the user has set a new one, so the change does not take place immediately. To prompt the user for a new password, use ACTION_SET_NEW_PASSWORD or ACTION_SET_NEW_PARENT_PROFILE_PASSWORD after setting this value. This constraint is only imposed if the administrator has also requested PASSWORD_QUALITY_COMPLEX with setPasswordQuality(ComponentName, int). If an app targeting SDK level Build.VERSION_CODES.R and above enforces this constraint without settings password quality to PASSWORD_QUALITY_COMPLEX first, this method will throw IllegalStateException. The default value is 1. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always treated as empty. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD to be able to call this method; if it has not, a security exception will be thrown.
Apps targeting Build.VERSION_CODES.R and below can call this method on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile. Note: this method is ignored on {PackageManager#FEATURE_AUTOMOTIVE automotive builds}. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. length int: The new desired minimum number of symbols required in the password. A value of 0 means there is no restriction. Added in API level 11 Deprecated in API level 31 public void setPasswordMinimumUpperCase (ComponentName admin, int length) This method was deprecated in API level 31.
see setPasswordQuality(android.content.ComponentName, int) for details. Called by an application that is administering the device to set the minimum number of upper case letters required in the password. After setting this, the user will not be able to enter a new password that is not at least as restrictive as what has been set. Note that the current password will remain until the user has set a new one, so the change does not take place immediately.
To prompt the user for a new password, use ACTION_SET_NEW_PASSWORD or ACTION_SET_NEW_PARENT_PROFILE_PASSWORD after setting this value. This constraint is only imposed if the administrator has also requested PASSWORD_QUALITY_COMPLEX with setPasswordQuality(ComponentName, int). If an app targeting SDK level Build.VERSION_CODES.R and above enforces this constraint without settings password quality to PASSWORD_QUALITY_COMPLEX first, this method will throw IllegalStateException. The default value is 0. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always treated as empty. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD to be able to call this method; if it has not, a security exception will be thrown. Apps targeting Build.VERSION_CODES.R and below can call this method on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile.
Note: this method is ignored on {PackageManager#FEATURE_AUTOMOTIVE automotive builds}. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null.
length int: The new desired minimum number of upper case letters required in the password. A value of 0 means there is no restriction. Added in API level 8 Deprecated in API level 31 public void setPasswordQuality (ComponentName admin, int quality) This method was deprecated in API level 31. Prefer using setRequiredPasswordComplexity(int), to require a password that satisfies a complexity level defined by the platform, rather than specifying custom password requirement. Setting custom, overly-complicated password requirements leads to passwords that are hard for users to remember and may not provide any security benefits given as Android uses hardware-backed throttling to thwart online and offline brute-forcing of the device's screen lock. Company-owned devices (fully-managed and organization-owned managed profile devices) are able to continue using this method, though it is recommended that setRequiredPasswordComplexity(int) should be used instead. Called by an application that is administering the device to set the password restrictions it is imposing. After setting this, the user will not be able to enter a new password that is not at least as restrictive as what has been set. Note that the current password will remain until the user has set a new one, so the change does not take place immediately. To prompt the user for a new password, use ACTION_SET_NEW_PASSWORD or ACTION_SET_NEW_PARENT_PROFILE_PASSWORD after calling this method. Quality constants are ordered so that higher values are more restrictive; thus the highest requested quality constant (between the policy set here, the user's preference, and any other considerations) is the one that is in effect. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the password is always treated as empty. The calling device admin must have requested DeviceAdminInfo#USES_POLICY_LIMIT_PASSWORD to be able to call this method; if it has not, a security exception will be thrown. Apps targeting Build.VERSION_CODES.R and below can call this method on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile.
Apps targeting Build.VERSION_CODES.S and above, with the exception of a profile owner on an organization-owned device (as can be identified by isOrganizationOwnedDeviceWithManagedProfile()), will get a IllegalArgumentException when calling this method on the parent DevicePolicyManager instance. Note: Specifying password requirements using this method clears the password complexity requirements set using setRequiredPasswordComplexity(int).
If this method is called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName), then password complexity requirements set on the primary DevicePolicyManager must be cleared first by calling setRequiredPasswordComplexity(int) with {@link #PASSWORD_COMPLEXITY_NONE) first. Note: this method is ignored on {PackageManager#FEATURE_AUTOMOTIVE automotive builds}. public boolean setPermissionGrantState (ComponentName admin, String packageName, String permission, int grantState) Sets the grant state of a runtime permission for a specific application. The state can be default in which a user can manage it through the UI, denied, in which the permission is denied and the user cannot manage it through the UI, and granted in which the permission is granted and the user cannot manage it through the UI. This method can only be called by a profile owner, device owner, or a delegate given the DELEGATION_PERMISSION_GRANT scope via setDelegatedScopes(ComponentName, String, List). Note that user cannot manage other permissions in the affected group through the UI either and their granted state will be kept as the current value. Thus, it's recommended that you set the grant state of all the permissions in the affected group. Setting the grant state to default does not revoke the permission. It retains the previous grant, if any. Device admins with a targetSdkVersion < Build.VERSION_CODES.Q cannot grant and revoke permissions for applications built with a targetSdkVersion < Build.VERSION_CODES.M. Admins with a targetSdkVersion ≥ Build.VERSION_CODES.Q can grant and revoke permissions of all apps. Similar to the user revoking a permission from a application built with a targetSdkVersion < Build.VERSION_CODES.M the app-op matching the permission is set to AppOpsManager.MODE_IGNORED, but the permission stays granted.
NOTE: On devices running Build.VERSION_CODES.S and above, control over the following, sensors-related, permissions is restricted: Manifest.permission.ACCESS_FINE_LOCATION Manifest.permission.ACCESS_BACKGROUND_LOCATION Manifest.permission.ACCESS_COARSE_LOCATION Manifest.permission.CAMERA Manifest.permission.RECORD_AUDIO Manifest.permission.RECORD_BACKGROUND_AUDIO Manifest.permission.ACTIVITY_RECOGNITION Manifest.permission.BODY_SENSORS A profile owner may not grant these permissions (i.e. call this method with any of the permissions listed above and grantState of #PERMISSION_GRANT_STATE_GRANTED), but may deny them. A device owner, by default, may continue granting these permissions. However, for increased user control, the admin may opt out of controlling grants for these permissions by including EXTRA_PROVISIONING_SENSORS_PERMISSION_GRANT_OPT_OUT in the provisioning parameters. In that case the device owner's control will be limited do denying these permissions.
NOTE: On devices running Build.VERSION_CODES.S and above, control over the following permissions are restricted for managed profile owners: Manifest.permission.READ_SMS A managed profile owner may not grant these permissions (i.e. call this method with any of the permissions listed above and grantState of #PERMISSION_GRANT_STATE_GRANTED), but may deny them.
Attempts by the admin to grant these permissions, when the admin is restricted from doing so, will be silently ignored (no exception will be thrown). Control over the following permissions are restricted for managed profile owners: Manifest.permission.READ_SMS A managed profile owner may not grant these permissions (i.e. call this method with any of the permissions listed above and grantState of #PERMISSION_GRANT_STATE_GRANTED), but may deny them. Returns boolean whether the permission was successfully granted or revoked. Throws SecurityException if admin is not a device or profile owner. public void setPermissionPolicy (ComponentName admin, int policy) Set the default response for future runtime permission requests by applications. This function can be called by a device owner, profile owner, or by a delegate given the DELEGATION_PERMISSION_GRANT scope via setDelegatedScopes(ComponentName, String, List). The policy can allow for normal operation which prompts the user to grant a permission, or can allow automatic granting or denying of runtime permission requests by an application. This also applies to new permissions declared by app updates. When a permission is denied or granted this way, the effect is equivalent to setting the permission * grant state via setPermissionGrantState(ComponentName, String, String, int).
As this policy only acts on runtime permission requests, it only applies to applications built with a targetSdkVersion of Build.VERSION_CODES.M or later. NOTE: On devices running Build.VERSION_CODES.S and above, an auto-grant policy will not apply to certain sensors-related permissions on some configurations. See setPermissionGrantState(android.content.ComponentName, java.lang.String, java.lang.String, int) for the list of permissions affected, and the behavior change for managed profiles and fully-managed devices. Throws SecurityException if admin is not a device or profile owner.
public boolean setPermittedAccessibilityServices (ComponentName admin, List packageNames) Called by a profile or device owner to set the permitted AccessibilityService. When set by a device owner or profile owner the restriction applies to all profiles of the user the device owner or profile owner is an admin for. By default, the user can use any accessibility service. When zero or more packages have been added, accessibility services that are not in the list and not part of the system can not be enabled by the user. Calling with a null value for the list disables the restriction so that all services can be used, calling with an empty list only allows the built-in system services. Any non-system accessibility service that's currently enabled must be included in the list. System accessibility services are always available to the user and this method can't disable them. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. packageNames List: List of accessibility service package names. Returns boolean true if the operation succeeded, or false if the list didn't contain every enabled non-system accessibility service. Throws SecurityException if admin is not a device or profile owner.
public boolean setPermittedCrossProfileNotificationListeners (ComponentName admin, List packageList) Called by a profile owner of a managed profile to set the packages that are allowed to use a NotificationListenerService in the primary user to see notifications from the managed profile. By default all packages are permitted by this policy.
When zero or more packages have been added, notification listeners installed on the primary user that are not in the list and are not part of the system won't receive events for managed profile notifications. Calling with a null value for the list disables the restriction so that all notification listener services be used. Calling with an empty list disables all but the system's own notification listeners. System notification listener services are always available to the user.
If a device or profile owner want to stop notification listeners in their user from seeing that user's notifications they should prevent that service from running instead (e.g. via setApplicationHidden(android.content.ComponentName, java.lang.String, boolean)) Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. packageList List: List of package names to allowlist This value may be null. Returns boolean true if setting the restriction succeeded. It will fail if called outside a managed profile Throws SecurityException if admin is not a profile owner.
See also: NotificationListenerService public boolean setPermittedInputMethods (ComponentName admin, List packageNames) Called by a profile or device owner or holder of the Manifest.permission.MANAGE_DEVICE_POLICY_INPUT_METHODS permission to set the permitted input methods services for this user. By default, the user can use any input method. This method can be called on the DevicePolicyManager instance, returned by getParentProfileInstance(android.content.ComponentName), where the caller must be a profile owner of an organization-owned device. If called on the parent instance: The permitted input methods will be applied on the personal profile Can only permit all input methods (calling this method with a null package list) or only permit system input methods (calling this method with an empty package list). This is to prevent the caller from learning which packages are installed on the personal side When zero or more packages have been added, input method that are not in the list and not part of the system can not be enabled by the user. This method will fail if it is called for a admin that is not for the foreground user or a profile of the foreground user. Any non-system input method service that's currently enabled must be included in the list. Calling with a null value for the list disables the restriction so that all input methods can be used, calling with an empty list disables all but the system's own input methods. System input methods are always available to the user - this method can't modify this. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin This value may be null. packageNames List: List of input method package names. Returns boolean true if the operation succeeded, or false if the list didn't contain every enabled non-system input method service. public void setPersonalAppsSuspended (ComponentName admin, boolean suspended) Called by a profile owner of an organization-owned managed profile to suspend personal apps on the device.
When personal apps are suspended the device can only be used for calls. When personal apps are suspended, an ongoing notification about that is shown to the user.
When the user taps the notification, system invokes ACTION_CHECK_POLICY_COMPLIANCE in the profile owner package. Profile owner implementation that uses personal apps suspension must handle this intent. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with This value cannot be null. suspended boolean: Whether personal apps should be suspended. public void setPreferentialNetworkServiceConfigs (List preferentialNetworkServiceConfigs) Sets preferential network configurations.
An example of a supported preferential network service is the Enterprise slice on 5G networks. For devices on 4G networks, the profile owner needs to additionally configure enterprise APN to set up data call for the preferential network service. These APNs can be added using addOverrideApn(ComponentName, ApnSetting). By default, preferential network service is disabled on the work profile and fully managed devices, on supported carriers and devices. Admins can explicitly enable it with this API. If admin wants to have multiple enterprise slices, it can be configured by passing list of PreferentialNetworkServiceConfig objects. Parameters preferentialNetworkServiceConfigs List: list of preferential network configurations. This value cannot be null.
See also: PreferentialNetworkServiceConfig public void setPreferentialNetworkServiceEnabled (boolean enabled) Sets whether preferential network service is enabled. For example, an organization can have a deal/agreement with a carrier that all of the work data from its employees\u2019 devices will be sent via a network service dedicated for enterprise use. An example of a supported preferential network service is the Enterprise slice on 5G networks. For devices on 4G networks, the profile owner needs to additionally configure enterprise APN to set up data call for the preferential network service. These APNs can be added using addOverrideApn(ComponentName, ApnSetting).
By default, preferential network service is disabled on the work profile and fully managed devices, on supported carriers and devices. Admins can explicitly enable it with this API. This method enables preferential network service with a default configuration. To fine-tune the configuration, use {@link #setPreferentialNetworkServiceConfigs) instead. Before Android version {@link android.os.Build.VERSION_CODES#TIRAMISU}: this method can be called by the profile owner of a managed profile. Starting from Android version {@link android.os.Build.VERSION_CODES#TIRAMISU}: This method can be called by the profile owner of a managed profile or device owner. Parameters enabled boolean: whether preferential network service should be enabled. Throws if the caller is not the profile owner or device owner. public void setProfileName (ComponentName admin, String profileName) Sets the name of the profile. In the device owner case it sets the name of the user which it is called from. Only a profile owner or device owner can call this. If this is never called by the profile or device owner, the name will be set to default values. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associate with. This value cannot be null. profileName String: The name of the profile. If the name is longer than 200 characters it will be truncated. Throws SecurityException if admin is not a device or profile owner. See also: isProfileOwnerApp(String)isDeviceOwnerApp(String) public void setRecommendedGlobalProxy (ComponentName admin, ProxyInfo proxyInfo) Set a network-independent global HTTP proxy. This is not normally what you want for typical HTTP proxies - they are generally network dependent. However if you're doing something unusual like general internal filtering this may be useful. On a private network where the proxy is not accessible, you may break HTTP using this. This method requires the caller to be the device owner. This proxy is only a recommendation and it is possible that some apps will ignore it. Note: The device owner won't be able to set a global HTTP proxy if there are unaffiliated secondary users or profiles on the device. It's recommended that affiliation ids are set for new users as soon as possible after provisioning via setAffiliationIds(ComponentName, Set). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. proxyInfo ProxyInfo: The a ProxyInfo object defining the new global HTTP proxy. A null value will clear the global HTTP proxy. Throws SecurityException if admin is not the device owner. public void setRequiredPasswordComplexity (int passwordComplexity) Sets a minimum password complexity requirement for the user's screen lock. The complexity level is one of the pre-defined levels, and the user is unable to set a password with a lower complexity level.
Note that when called on a profile which uses an unified challenge with its parent, the complexity would apply to the unified challenge. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile.
Note: Specifying password requirements using this method clears any password requirements set using the obsolete setPasswordQuality(android.content.ComponentName, int) and any of its associated methods. Additionally, if there are password requirements set using the obsolete setPasswordQuality(android.content.ComponentName, int) on the parent DevicePolicyManager instance, they must be cleared by calling setPasswordQuality(android.content.ComponentName, int) with PASSWORD_QUALITY_UNSPECIFIED on that instance prior to setting complexity requirement for the managed profile. public void setRequiredStrongAuthTimeout (ComponentName admin, long timeoutMs) Called by a device/profile owner to set the timeout after which unlocking with secondary, non strong auth (e.g. fingerprint, face, trust agents) times out, i.e. the user has to use a strong authentication method like password, pin or pattern. This timeout is used internally to reset the timer to require strong auth again after specified timeout each time it has been successfully used.
Fingerprint can also be disabled altogether using KEYGUARD_DISABLE_FINGERPRINT. Trust agents can also be disabled altogether using KEYGUARD_DISABLE_TRUST_AGENTS. A calling device admin can verify the value it has set by calling getRequiredStrongAuthTimeout(android.content.ComponentName) and passing in its instance. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set restrictions on the parent profile. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, calling this methods has no effect - i.e. the timeout is not set.
Requires the PackageManager#FEATURE_SECURE_LOCK_SCREEN feature which can be detected using PackageManager.hasSystemFeature(String). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin This value may be null. timeoutMs long: The new timeout in milliseconds, after which the user will have to unlock with strong authentication method. A value of 0 means the admin is not participating in controlling the timeout. The minimum and maximum timeouts are platform-defined and are typically 1 hour and 72 hours, respectively. Though discouraged, the admin may choose to require strong auth at all times using KEYGUARD_DISABLE_FINGERPRINT and/or KEYGUARD_DISABLE_TRUST_AGENTS. Throws SecurityException if admin is not a device or profile owner. public boolean setResetPasswordToken (ComponentName admin, byte[] token) Called by a profile or device owner to provision a token which can later be used to reset the device lockscreen password (if called by device owner), or managed profile challenge (if called by profile owner), via resetPasswordWithToken(ComponentName, String, byte, int). If the user currently has a lockscreen password, the provisioned token will not be immediately usable; it only becomes active after the user performs a confirm credential operation, which can be triggered by KeyguardManager#createConfirmDeviceCredentialIntent. If the user has no lockscreen password, the token is activated immediately.
In all cases, the active state of the current token can be checked by isResetPasswordTokenActive(ComponentName). For security reasons, un-activated tokens are only stored in memory and will be lost once the device reboots. In this case a new token needs to be provisioned again. Once provisioned and activated, the token will remain effective even if the user changes or clears the lockscreen password. This token is highly sensitive and should be treated at the same level as user credentials. In particular, NEVER store this token on device in plaintext. Do not store the plaintext token in device-encrypted storage if it will be needed to reset password on file-based encryption devices before user unlocks. Consider carefully how any password token will be stored on your server and who will need access to them. Tokens may be the subject of legal access requests.
On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, the reset token is not set and this method returns false. Requires the PackageManager#FEATURE_SECURE_LOCK_SCREEN feature which can be detected using PackageManager.hasSystemFeature(String). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. token byte: a secure token a least 32-byte long, which must be generated by a cryptographically strong random number generator. Returns boolean true if the operation is successful, false otherwise.
public void setRestrictionsProvider (ComponentName admin, ComponentName provider) Designates a specific service component as the provider for making permission requests of a local or remote administrator of the user. Only a device owner or profile owner can designate the restrictions provider.
Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. provider ComponentName: The component name of the service that implements RestrictionsReceiver. If this param is null, it removes the restrictions provider previously assigned. Throws SecurityException if admin is not a device or profile owner. public void setScreenCaptureDisabled (ComponentName admin, boolean disabled) Called by a device/profile owner to set whether the screen capture is disabled. Disabling screen capture also prevents the content from being shown on display devices that do not have a secure video output.
See Display.FLAG_SECURE for more details about secure surfaces and secure displays. This method can be called on the DevicePolicyManager instance, returned by getParentProfileInstance(android.content.ComponentName), where the calling device admin must be the profile owner of an organization-owned managed profile. If it is not, a security exception will be thrown. If the caller is device owner or called on the parent instance by a profile owner of an organization-owned managed profile, then the restriction will be applied to all users. From version Build.VERSION_CODES.M disabling screen capture also blocks assist requests for all activities of the relevant user. Parameters admin

ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. disabled boolean: Whether screen capture is disabled or not. Throws SecurityException if the caller is not permitted to control screen capture policy. public void setSecureSetting (ComponentName admin, String setting, String value) This method is mostly deprecated. Most of the settings that still have an effect have dedicated setter methods (e.g. setLocationEnabled(ComponentName, boolean)) or user restrictions. Called by profile or device owners to update Settings.Secure settings. Validation that the value of the setting is in the correct form for the setting type should be performed by the caller. The settings that can be updated by a profile or device owner with this method are: Settings.Secure.DEFAULT_INPUT_METHOD Settings.Secure.SKIP_FIRST_USE_HINTS A device owner can additionally update the following settings: Settings.Secure.LOCATION_MODE, but see note below. Note: Starting from Android O, apps should no longer call this method with the setting Settings.Secure.INSTALL_NON_MARKET_APPS, which is deprecated. Instead, device owners or profile owners should use the restriction UserManager#DISALLOW_INSTALL_UNKNOWN_SOURCES.
If any app targeting Build.VERSION_CODES.O or higher calls this method with Settings.Secure.INSTALL_NON_MARKET_APPS, an UnsupportedOperationException is thrown. Starting from Android Q, the device and profile owner can also call UserManager#DISALLOW_INSTALL_UNKNOWN_SOURCES_GLOBALLY to restrict unknown sources for all users. Note: Starting from Android R, apps should no longer call this method with the setting Settings.Secure.LOCATION_MODE, which is deprecated. Instead, device owners should call setLocationEnabled(android.content.ComponentName, boolean). This will be enforced for all apps targeting Android R or above. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. setting String: The name of the setting to update. value String: The value to update the setting to. Throws SecurityException if admin is not a device or profile owner. public void setSecurityLoggingEnabled (ComponentName admin, boolean enabled) Called by device owner or a profile owner of an organization-owned managed profile to control the security logging feature.
Security logs contain various information intended for security auditing purposes. When security logging is enabled by any app other than the device owner, certain security logs are not visible (for example personal app launch events) or they will be redacted (for example, details of the physical volume mount events). Please see SecurityEvent for details. Note: The device owner won't be able to retrieve security logs if there are unaffiliated secondary users or profiles on the device, regardless of whether the feature is enabled. Logs will be discarded if the internal buffer fills up while waiting for all users to become affiliated. Therefore it's recommended that affiliation ids are set for new users as soon as possible after provisioning via setAffiliationIds(ComponentName, Set). Non device owners are not subject to this restriction since all privacy-sensitive events happening outside the managed profile would have been redacted already. Parameters admin ComponentName: Which device admin this request is associated with, or null if called by a delegated app.
enabled boolean: whether security logging should be enabled or not. public void setShortSupportMessage (ComponentName admin, CharSequence message) Called by a device admin to set the short support message. This will be displayed to the user in settings screens where functionality has been disabled by the admin. The message should be limited to a short statement such as "This setting is disabled by your administrator.
Contact someone@example.com for support." If the message is longer than 200 characters it may be truncated. If the short support message needs to be localized, it is the responsibility of the DeviceAdminReceiver to listen to the Intent#ACTION_LOCALE_CHANGED broadcast and set a new version of this string accordingly. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. message CharSequence: Short message to be displayed to the user in settings or null to clear the existing message. Throws SecurityException if admin is not an active administrator. See also: setLongSupportMessage(ComponentName, CharSequence) public void setStartUserSessionMessage (ComponentName admin, CharSequence startUserSessionMessage) Called by a device owner to specify the user session start message. This may be displayed during a user switch. The message should be limited to a short statement or it may be truncated. If the message needs to be localized, it is the responsibility of the DeviceAdminReceiver to listen to the Intent#ACTION_LOCALE_CHANGED broadcast and set a new version of this message accordingly. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with. This value cannot be null. startUserSessionMessage CharSequence: message for starting user session, or null to use system default message. Throws SecurityException if admin is not a device owner. public boolean setStatusBarDisabled (ComponentName admin, boolean disabled) Called by device owner or profile owner of secondary users that is affiliated with the device to disable the status bar.
Disabling the status bar blocks notifications and quick settings. Note: This method has no effect for LockTask mode. The behavior of the status bar in LockTask mode can be configured with setLockTaskFeatures(android.content.ComponentName, int). Calls to this method when the device is in LockTask mode will be registered, but will only take effect when the device leaves LockTask mode. This policy does not have any effect while on the lock screen, where the status bar will not be disabled. Using LockTask instead of this method is recommended.
Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null.
disabled boolean: true disables the status bar, false reenables it. Returns boolean false if attempting to disable the status bar failed. true otherwise. Throws SecurityException if admin is not the device owner, or a profile owner of secondary user that is affiliated with the device. See also: isAffiliatedUser()getSecondaryUsers(ComponentName) Added in API level 11 Deprecated in API level 30 public int setStorageEncryption (ComponentName admin, boolean encrypt) This method was deprecated in API level 30. This method does not actually modify the storage encryption of the device. It has never affected the encryption status of a device. Called by an application that is administering the device to request that the storage system be encrypted. Does nothing if the caller is on a secondary user or a managed profile. When multiple device administrators attempt to control device encryption, the most secure, supported setting will always be used. If any device administrator requests device encryption, it will be enabled; Conversely, if a device administrator attempts to disable device encryption while another device administrator has enabled it, the call to disable will fail (most commonly returning ENCRYPTION_STATUS_ACTIVE).
This policy controls encryption of the secure (application data) storage area. Data written to other storage areas may or may not be encrypted, and this policy does not require or control the encryption of any other storage areas. There is one exception: If Environment.isExternalStorageEmulated() is true, then the directory returned by Environment.getExternalStorageDirectory() must be written to disk within the encrypted storage area. Important Note: On some devices, it is possible to encrypt storage without requiring the user to create a device PIN or Password. In this case, the storage is encrypted, but the encryption key may not be fully secured. For maximum security, the administrator should also require (and check for) a pattern, PIN, or password. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. encrypt boolean: true to request encryption, false to release any previous request public void setSystemUpdatePolicy (ComponentName admin, SystemUpdatePolicy policy) Called by device owners or profile owners of an organization-owned managed profile to to set a local system update policy. When a new policy is set, ACTION_SYSTEM_UPDATE_POLICY_CHANGED is broadcast. If the supplied system update policy has freeze periods set but the freeze periods do not meet 90-day maximum length or 60-day minimum separation requirement set out in SystemUpdatePolicy#setFreezePeriods, SystemUpdatePolicy.ValidationFailedException will the thrown. Note that the system keeps a record of freeze periods the device experienced previously, and combines them with the new freeze periods to be set when checking the maximum freeze length and minimum freeze separation constraints. As a result, freeze periods that passed validation during SystemUpdatePolicy#setFreezePeriods might fail the additional checks here due to the freeze period history. If this is causing issues during development, adb shell dpm clear-freeze-period-record can be used to clear the record. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.
All components in the package can set system update policies and the most recent policy takes effect. This should be null if the caller is not a device admin. policy SystemUpdatePolicy: the new policy, or null to clear the current policy. See also: SystemUpdatePolicySystemUpdatePolicy.setFreezePeriods(List) public boolean setTime (ComponentName admin, long millis) Called by a device owner or a profile owner of an organization-owned managed profile to set the system wall clock time. This only takes effect if called when Settings.Global.AUTO_TIME is 0, otherwise false will be returned. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. millis long: time in milliseconds since the Epoch Returns boolean true if set time succeeded, false otherwise. Throws SecurityException if admin is not a device owner or a profile owner of an organization-owned managed profile. public boolean setTimeZone (ComponentName admin, String timeZone) Called by a device owner or a profile owner of an organization-owned managed profile to set the system's persistent default time zone. This only takes effect if called when Settings.Global.AUTO_TIME_ZONE is 0, otherwise false will be returned. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. timeZone String: one of the Olson ids from the list returned by TimeZone.getAvailableIDs() Returns boolean true if set timezone succeeded, false otherwise. Throws SecurityException if admin is not a device owner or a profile owner of an organization-owned managed profile. See also: AlarmManager.setTimeZone(String) public void setTrustAgentConfiguration (ComponentName admin, ComponentName target, PersistableBundle configuration) Sets a list of configuration features to enable for a trust agent component. This is meant to be used in conjunction with KEYGUARD_DISABLE_TRUST_AGENTS, which disables all trust agents but those enabled by this function call. If flag KEYGUARD_DISABLE_TRUST_AGENTS is not set, then this call has no effect. For any specific trust agent, whether it is disabled or not depends on the aggregated state of each admin's KEYGUARD_DISABLE_TRUST_AGENTS setting and its trust agent configuration as set by this function call. In particular: if any admin sets KEYGUARD_DISABLE_TRUST_AGENTS and does not additionally set any trust agent configuration, the trust agent is disabled completely. Otherwise, the trust agent will receive the list of configurations from all admins who set KEYGUARD_DISABLE_TRUST_AGENTS and aggregate the configurations to determine its behavior. The exact meaning of aggregation is trust-agent-specific. A calling device admin must have requested DeviceAdminInfo#USES_POLICY_DISABLE_KEYGUARD_FEATURES to be able to call this method; if not, a security exception will be thrown. This method can be called on the DevicePolicyManager instance returned by getParentProfileInstance(android.content.ComponentName) in order to set the configuration for the parent profile. On devices not supporting PackageManager#FEATURE_SECURE_LOCK_SCREEN feature, calling this method has no effect - no trust agent configuration will be set. Requires the PackageManager#FEATURE_SECURE_LOCK_SCREEN feature which can be detected using PackageManager.hasSystemFeature(String). Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin This value may be null.
target ComponentName: Component name of the agent to be configured.
This value cannot be null.
configuration PersistableBundle: Trust-agent-specific feature configuration bundle. Please consult documentation of the specific trust agent to determine the interpretation of this bundle. public void setUninstallBlocked (ComponentName admin, String packageName, boolean uninstallBlocked) Change whether a user can uninstall a package. This function can be called by a device owner, profile owner, or by a delegate given the DELEGATION_BLOCK_UNINSTALL scope via setDelegatedScopes(ComponentName, String, List) or holders of the permission Manifest.permission.MANAGE_DEVICE_POLICY_APPS_CONTROL. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the set uninstall blocked policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not.
This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed.
Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. packageName String: package to change. uninstallBlocked boolean: true if the user shouldn't be able to uninstall the package. public void setUsbDataSignalingEnabled (boolean enabled) Called by a device owner or profile owner of an organization-owned managed profile to enable or disable USB data signaling for the device. When disabled, USB data connections (except from charging functions) are prohibited. This API is not supported on all devices, the caller should call canUsbDataSignalingBeDisabled() to check whether enabling or disabling USB data signaling is supported on the device. Parameters enabled boolean: whether USB data signaling should be enabled or not. Throws SecurityException if the caller is not permitted to set this policy IllegalStateException if disabling USB data signaling is not supported or if USB data signaling fails to be enabled/disabled. public void setUserControlDisabledPackages (ComponentName admin, List packages) Called by a device owner or a profile owner or holder of the permission Manifest.permission.MANAGE_DEVICE_POLICY_APPS_CONTROL to disable user control over apps. User will not be able to clear app data or force-stop packages. When called by a device owner, applies to all users on the device. Packages with user control disabled are exempted from App Standby Buckets. Starting from Build.VERSION_CODES#UPSIDE_DOWN_CAKE, after the user control disabled packages policy has been set, PolicyUpdateReceiver#onPolicySetResult(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin on whether the policy was successfully set or not. This callback will contain: If there has been a change to the policy, PolicyUpdateReceiver#onPolicyChanged(Context, String, Bundle, TargetUser, PolicyUpdateResult) will notify the admin of this change. This callback will contain the same parameters as PolicyUpdateReceiver#onPolicySetResult and the PolicyUpdateResult will contain the reason why the policy changed. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. Null if the caller is not a device admin. This value may be null. packages List: The package names for the apps. This value cannot be null. public void setUserIcon (ComponentName admin, Bitmap icon) Called by profile or device owners to set the user's photo.
Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with.
This value cannot be null. icon Bitmap: the bitmap to set as the photo.
Throws SecurityException if admin is not a device or profile owner. public void setWifiSsidPolicy (WifiSsidPolicy policy) Called by device owner or profile owner of an organization-owned managed profile to specify the Wi-Fi SSID policy (WifiSsidPolicy). Wi-Fi SSID policy specifies the SSID restriction the network must satisfy in order to be eligible for a connection. Providing a null policy results in the deactivation of the SSID restriction Parameters policy WifiSsidPolicy: Wi-Fi SSID policy This value may be null. public int startUserInBackground (ComponentName admin, UserHandle userHandle) Called by a device owner to start the specified secondary user in background. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. userHandle UserHandle: the user to be started in background. This value cannot be null. Returns int one of the following result codes: UserManager#USER_OPERATION_ERROR_UNKNOWN, UserManager#USER_OPERATION_SUCCESS, UserManager#USER_OPERATION_ERROR_MANAGED_PROFILE, UserManager#USER_OPERATION_ERROR_MAX_RUNNING_USERS, Value is UserManager.USER_OPERATION_SUCCESS, UserManager.USER_OPERATION_ERROR_UNKNOWN, UserManager.USER_OPERATION_ERROR_MANAGED_PROFILE, UserManager.USER_OPERATION_ERROR_MAX_RUNNING_USERS, UserManager.USER_OPERATION_ERROR_CURRENT_USER, UserManager.USER_OPERATION_ERROR_LOW_STORAGE, UserManager.USER_OPERATION_ERROR_MAX_USERS, or android.os.UserManager.USER_OPERATION_ERROR_USER_ACCOUNT_ALREADY_EXISTS Throws SecurityException if admin is not a device owner. See also: getSecondaryUsers(ComponentName) public int stopUser (ComponentName admin, UserHandle userHandle) Called by a device owner to stop the specified secondary user. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with. This value cannot be null. userHandle UserHandle: the user to be stopped. This value cannot be null. Returns int one of the following result codes: UserManager#USER_OPERATION_ERROR_UNKNOWN, UserManager#USER_OPERATION_SUCCESS, UserManager#USER_OPERATION_ERROR_MANAGED_PROFILE, UserManager#USER_OPERATION_ERROR_CURRENT_USER Value is UserManager.USER_OPERATION_SUCCESS, UserManager.USER_OPERATION_ERROR_UNKNOWN, UserManager.USER_OPERATION_ERROR_MANAGED_PROFILE, UserManager.USER_OPERATION_ERROR_MAX_RUNNING_USERS, UserManager.USER_OPERATION_ERROR_CURRENT_USER, UserManager.USER_OPERATION_ERROR_LOW_STORAGE, UserManager.USER_OPERATION_ERROR_MAX_USERS, or android.os.UserManager.USER_OPERATION_ERROR_USER_ACCOUNT_ALREADY_EXISTS Throws SecurityException if admin is not a device owner. See also: getSecondaryUsers(ComponentName) public void transferOwnership (ComponentName admin, ComponentName target, PersistableBundle bundle) Changes the current administrator to another one. All policies from the current administrator are migrated to the new administrator. The whole operation is atomic - the transfer is either complete or not done at all. Depending on the current administrator (device owner, profile owner), you have the following expected behaviour: A device owner can only be transferred to a new device owner A profile owner can only be transferred to a new profile owner Use the bundle parameter to pass data to the new administrator. The data will be received in the DeviceAdminReceiver#onTransferOwnershipComplete(Context, PersistableBundle) callback of the new administrator. The transfer has failed if the original administrator is still the corresponding owner after calling this method. The incoming target administrator must have the tag inside the tags in the xml file referenced by DeviceAdminReceiver#DEVICE_ADMIN_META_DATA. Otherwise an IllegalArgumentException will be thrown. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with. This value cannot be null. target ComponentName: which DeviceAdminReceiver we want the new administrator to be. This value cannot be null. bundle PersistableBundle: data to be sent to the new administrator. This value may be null. public void uninstallAllUserCaCerts (ComponentName admin) Uninstalls all custom trusted CA certificates from the profile.
Certificates installed by means other than device policy will also be removed, except for system CA certificates. Parameters admin ComponentName: Which DeviceAdminReceiver this request is associated with, or null if calling from a delegated certificate installer. public boolean updateOverrideApn (ComponentName admin, int apnId, ApnSetting apnSetting) Called by device owner or managed profile owner to update an override APN. This method may returns false if there is no override APN with the given apnId. This method may also returns false if apnSetting conflicts with an existing override APN. Update the existing conflicted APN instead. See addOverrideApn(ComponentName, ApnSetting) for the definition of conflict. Before Android version Build.VERSION_CODES.TIRAMISU: Only device owners can update APNs. Starting from Android version Build.VERSION_CODES.TIRAMISU: Both device owners and managed profile owners can update enterprise APNs (ApnSetting#TYPE_ENTERPRISE), while only device owners can update other type of APNs. Parameters admin ComponentName: which DeviceAdminReceiver this request is associated with This value cannot be null. apnId int: the id of the override APN to update apnSetting ApnSetting: the override APN to update This value cannot be null. Returns boolean true if the required override APN is successfully updated, false otherwise. Throws SecurityException If request is for enterprise APN admin is either device owner or profile owner and in all other types of APN if admin is not a device owner. See also: setOverrideApnsEnabled(ComponentName, boolean) public void wipeData (int flags, CharSequence reason) Ask that all user data be wiped. If called as a secondary user or managed profile, the user itself and its associated user data will be wiped. In particular, If the caller is a profile owner of an organization-owned managed profile, calling this method will relinquish the device for personal use, removing the managed profile and all policies set by the profile owner.
Calling this method from the primary user will only work if the calling app is targeting SDK level Build.VERSION_CODES#TIRAMISU or below, in which case it will cause the device to reboot, erasing all device data - including all the secondary users and their data - while booting up. If an app targeting SDK level Build.VERSION_CODES#UPSIDE_DOWN_CAKE and above is calling this method from the primary user or last full user, IllegalStateException will be thrown. If an app wants to wipe the entire device irrespective of which user they are from, they should use wipeDevice(int) instead. See also: wipeDevice(int)wipeData(int) Android Device Policy is a built-in device policy controller enabling IT administrators to directly manage Android devices via enterprise mobility management (EMM) providers that use the Android Management API. In addition to configuring the work profile or fully managed device, Android Device Policy also provides employees visibility into the policies enforced by IT admins, and helps users resolve any policy requirements that require employee interaction, like setting a password or updating to the latest Android version. To provide IT administrators with effective management and troubleshooting tools, Android Device Policy collects certain information from your device. What information is collected and how it is shared with you IT administrator depends on the management set configured on your device, as well as whether you or your organization owns the device.   If your device has a work profile, your organization can view and manage your work apps and data.
Your personal apps, data, and usage details aren’t visible or accessible to your organization or Android Device Policy. Learn more about what data Android Device Policy collects about your work profile on behalf of your IT administrator. If your device is fully managed, your organization can view and manage apps and data throughout the entire device. Learn more about the data on your fully managed device that the Android Device Policy makes visible to your IT administrator. Regardless of which management set you use, Android Device Policy also collects crash diagnostics, temporary remote session-level logs, and other performance data about the Android Device Policy app for aggregated analytics and troubleshooting purposes. All the data Android Device Policy collects is encrypted in transit, both back to Google and to your organization’s EMM. Related Articles: What policies is my organization enforcing on my device? Full device management What is a device policy controller? Enterprise features & capabilities