KIRK Release Note
KWS300

Firmware Version PCS03_
Q1/2009

Table of Contents

1. General

This release note applies to the released versions of the KWS300 Firmware. This version specifically applies to version PCS03_ of the kWS300 Firmware. This release replaces the PCS02_ release as the latest generally available (GA) release.

1.1 Important Notes

If upgrading from PCS01B_ to a newer version and subsequently downgrading from the newer version back to PCS01B_ the user database will be lost. It will however be possible to restore a backup made while running PCS01B_.

1.2 Feature License and Platform Limitations

None.

1.3 System Requirements

Hardware Platform:	Description
KWS300 HW PCS 10 or newer	KWS300 Server

2. Terms and Definitions

WCAG: Web Content Accessibility Guidelines, W3C Recommendation. These guidelines explain how to make Web content accessible to people with disabilities.

3. Distribution Files

Click here >> to find the firmware image PCS03_ of the KWS300.

4. Changes

4.1 Version PCS03_ (Q1/2009)

4.1.1 Added or Changed Features

- Optional individual ports per handsets for SIP signaling. Extend support to SIP PBXs using per port registration.
- Cisco Unified Call Manager 6.1 support.
- Auto provisioning: Possible to centralize configuration and maintenance.
- Users export to XML and CSV format: Decrease installation and maintenance cost.
- Allow adding users with unspecified IPEI: Option of adding handsets without knowing the IPEI of the handset. Decrease installation and maintenance cost by allowing field subscription of handset(s) and possibility for remote configuration.

- Added system wide DECT access code: Possible to create a default DECT access code for all users – instead of per user (access code in user will overrule the system default value)
- Added automatic standby text update. When the standby text is updated (either through the GUI or through auto-provisioning) the change appears instantly on the handset (no power-cycle of the handset is needed).
- In overlap dialing send digits when # is pressed (optional). Optional: Default is disabled.
- When a user is deleted, unsubscribe the handset. When the user is deleted the handset is signaled to remove the subscription to the system.
- Added RFC3896 Referred-By handling.
- BMC Allow dummy bearer on neighbor slot.
- BMC Do not scan RSSI - only move dummy bearer based on timer.
- BMC Do not ask RFP IP process for dummy bearer.
- BMC Added BMC/radio configuration.

4.1.2 Removed Features

- No longer use local number – the SIP user name is now used for MSF.

4.1.3 Corrections

- Fix RTP handling when call is on hold.
- Fix DTMF payload type.
- Fix order in route sets for SIP dialogs.
- Fix statistics for failed MSF calls.
- Fix handling of escaped SIP URI parameters.
- Pass all parameters and headers from REFER to the sent INVITE.
- BMC EEPROM read bug fixed.
- BMC Remove bug stopping dummy bearer.
- BMC Do not print from interrupt.

4.1.4 Configuration File Parameter Changes

File	Action	Parameter	Description
config.xml	Added	provisioning.server.method	Specifies how the KWS300 will obtain the boot server address. dhcp – obtain from DHCP option 66. static – use static configured. disabled – do not check for updates. Default: dhcp
config.xml	Added	provisioning.server.url	Specifies the static boot server URL from where the KWS will retrieve configuration information. The format is <protocol>://[<user>:<password>@]<host>/<path>. Protocol can be either tftp, ftp or

File	Action	Parameter	Description
			http. Example: ftp://kws:ip6000@boot.example.com/phones Default: Empty
config.xml	Added	provisioning.check.interval	Specifies an interval for checking for updates. 0 – do not check for updates periodically. >1 – interval in minutes. Default: 0
config.xml	Added	provisioning.check.time	Specifies a specific time for checking each day. The format is HH:MM. 00:00 – 23:59 Default: Empty
config.xml	Added	provisioning.check.check_sync	Specifies how the KWS300 will react to SIP NOTIFY check-sync events. disabled – do nothing if a check-sync event is received.. reboot – reboot and check for updates. update – check for updates and reboot if necessary. Default: disabled
config.xml	Added	provisioning.users.check	Specifies if the KWS300 will try to download and import users from the provisioning server. false – do not check for users. true – check for users. Default: false
config.xml	Added	provisioning.firmware.kws	Specifies the name of the firmware image to use for the KWS300. The KWS300 will check for a version file and a binary file. They must be located as <URL>/<firmware>.ver and <URL>/<firmware> Example: kws300-flash.bin Default: Empty

File	Action	Parameter	Description
config.xml	Added	sip.send_to_current_ registrar	Specifies how requests outside a dialog are sent if a list of SIP servers is received via DNS SRV. false – perform a DNS SRV lookup for each request and determine the destination from this. true – send each request to the server currently holding the registration. Default: false
config.xml	Added	sip.separate_endpoint_ports	Specifies if each user should use an individual UDP for its signalling or all users should use the local port defined in the SIP configuration. false – use one UDP port for all users. true – use individual UDP ports for each user. Default: false
config.xml	Added	sip.pound_dials_overlap	Specifies if pressing # while off hook dialling will dial the entered extension. false – do not dial when # is pressed. true – dial when # is pressed. Default: false
config.xml	Added	dect.accesscode	Specifies a system wide DECT access code required for subscribing handsets. The access code is from 0 to 8 decimal digits. Access codes assigned for specific users will override this setting. Example: 1234 Default: Empty

4.2 Version PCS02_ (Q4/2008)

4.2.1 Added or Changed Features

- Added auto creation of users on subscription attempt.

- Allow insecure HTTP traffic to be redirected to HTTPS.

- Improved GUI, new icons for better user experience. Improved WCAG compliance. Status icons on WEB-gui now distinguishable even for the colour blind.

- NTP server is now obtained via DHCP if provided. Multiple DNS servers are now also supported.

- Encrypt Admin GUI password.

- Log when an unknown IPEI tries to subscribe.

- DTMF sending improved. When DTMF tones are overlapping, terminate tones correctly.

- Added enable/disable send date and time to handsets.

- Add distinctive alerting by interpreting the Alert-Info SIP header. Use external ring tone as default.

- Update MWI when a handset subscribes or makes a location registration.

- Always respond with 200 OK when a MWI NOTIFY is received. This is done to avoid terminating an existing subscription.

- Added MWI retransmission.

- Allow for special characters like &_ in authentication user/password.

- Allow alphanumeric SIP username.

- Implement RFC4235 Dialog state event package. Used for e.g. call pickup support.

- Allow for receiving asymmetric RTP (option). This is required to operate with e.g. a Mitel NuPoint voice mail server.

- Detect merged invites after a fork and respond with "482 Loop Detected".

- Added full system backup facility. Instead of separate backups of configuration, users etc. everything is now in one backup and it is optional how much is restored.

- Standby text length increased from 16 to 24 characters.

- Implemented Type-of-Service/DiffServ. Replaced old Quality-of Service approach with new Type-of-Service approach.

4.2.2 Removed Features

None

4.2.3 Corrections

- Corrected error in subscription statistics (subscriptions which failed due to e.g. wrong or missing DECT access code was logged as a success).

- Release MSF-call correctly when no CR is assigned.

- Fixed problems with ntp and the clock which could cause the clock to drift.

- Send opaque param in authorization reply.

- Fix reversed time zones. GMT time zones were reversed – GMT+2 meant GMT-2. This has now been fixed.

*4.3 Version PCS01B_*

Initial KWS300 version.

5. Outstanding Issues

The following issues will be fixed in a subsequent release

- None identified.