

# Release Notes for SPA942 and SPA962 IP Phones Firmware Version 6.1.3

**September 2008**

These Release Notes describe the new features and enhancements in the SPA942 and SPA962 firmware version 6.1.3.

## Contents

This document includes the following topics:

- “Changes Since SPA942 and SPA962 Firmware Version 5.2.8,” on page 1
- “Related Documentation,” on page 6
- “Downloading the Firmware,” on page 6
- “Technical Support,” on page 6

## Changes Since SPA942 and SPA962 Firmware Version 5.2.8

New features were added, and problems were fixed.

### New Features

The following new features were added.

- Secure Real Time Protocol (SRTP) enhancements for secure calling

The security methods for VoIP calls were enhanced to incorporate a standard base SRTP Key Negotiation called Security Description (RFC 4568).

- Contact header in 18X messages for Application Server features

The Contact Header is now included in all 18X messages. This enhancement improves the interoperability of the phones with Application Server features that use the contact header to identify the endpoint interaction.

- Busy display information for 486 Busy Here message

This feature enables the phone to display the word “Busy” when receiving a 486 Busy Here message as response to an INVITE.

- VLAN and priority tagging on phone data port (802.1p/q)

This feature facilitates tagging of the VLAN ID (802.1Q) and priority bits (802.1p) of the traffic coming from the PC port of the SPA9x2 phone. Three new parameters are included with the feature:

| Parameter                       | Description  |
|---------------------------------|--|
| <Enable_PC_Port_VLAN_Tagging>   | Yes/No (default No). Enables or disables the tagging algorithm.  |
| <PC_Port_VLAN_ID>               | 0-4095 (default 0). Value of the VLAN ID. The phone tags all the untagged frames coming from the PC (it will not tag frames with an existing tag).                             |
| <PC_Port_VLAN_Highest_Priority> | 0-7 (default 0). The priority applied to all frames, tagged and untagged. The phone modifies the frame priority only if the incoming frame priority is higher than this value. |

- LDAP Corporate Directory Search

The SPA9x2 phones now incorporate the LDAPv3 Corporate Directory Search Menu as in other Cisco Phones to enable the retrieval of directory information based on LDAP, an Active Directory Technology. SPA9x2 phones support the following parameters:

| Parameter              | Description   |
|------------------------|---|
| <LDAP_Dir_Enable>      | Yes/No (default No). Enables the LDAP functionality.  |
| <LDAP_Corp_Dir_Name>   | String (default is Corporate Directory). The name of the Service to be displayed in the Directory menu when LDAP Corporate directory is active. |
| <LDAP_Server>          | String (default blank). Server address or name. Can be an IP address or FQDN.   |
| <LDAP_Port>            | String (default blank). Server port. If blank, the default LDAP port will be selected.  |
| <LDAP_Search_Base>     | String (default blank). LDAP Search base object according to LDAP specifications.   |
| <LDAP_Username>        | String (default blank). Username of the LDAP database.  |
| <LDAP_Password>        | String (default blank). User Password of the LDAP database.   |
| <Last_Name_Filter>     | String (default blank). Last Name search filter, according to LDAP specification.   |
| <First_Name_Filter>    | String (default blank). First Name search filter, according to LDAP specification.  |
| <Search_item_3_Name>   | String (default blank). Name to be displayed on the Phone-Corporate Directory-Advanced Search menu. If blank, this option is not displayed.     |
| <Search_item_3_Filter> | String (default blank). Item 3 search filter, according to LDAP specification.  |

| Parameter                 | Description   |
|---------------------------|---|
| <Search_Item_4_Name>      | String (default blank). Name to be displayed on the Phone-Corporate Directory-Advanced Search menu. If blank, this option is not displayed.   |
| <Search_Item_4_Filter>    | String (default blank). Item 4 search filter, according to LDAP specification.  |
| <Display_Name_Attributes> | String (default blank). Attributes to be returned for each record in the database.  |
| <Number_Attributes>       | Comma separated list (default blank). Attributes to be returned for each record in the database.  |
| <Number_mapping>          | Dial plan (default blank). Similar to the incoming caller ID map option. Used for mapping the format of the number in the database to a telephone number that can be processed by the phone or network. |

- **Attended transfer enhancements**

The SPA9x2 phones now support the transfer of a call that is on hold.

- **Programmable line keys**

Idle line keys on the SPA942 and SPA962 can be used for Busy Lamp Field, Speed Dial, and Call Pickup functions, as described below.

- **Busy Lamp Field:** The line button is used to monitor activity on another station. The LED indicates the line status:
  - Red: Busy
  - Red Fast Blink: Ringing
  - Amber: Failed to subscribe (received 4xx response)
  - Amber Slow Blink: Undefined (may be no response to subscribe, or BLF not specified)
- **Call Pickup:** The user can press the line button to answer a call that is ringing on the other station. This feature is available only when BLF is enabled.

- Speed Dial: The user can press the line button to place a call to the other station.

To program a line key:

- a. Start Internet Explorer, and enter the IP address of the phone. Click the **Admin Login** link and then click **advanced**.
- b. Click the Phone tab.
- c. Find the Line Key that you want to configure, such as Line Key 1. Enter the following settings:
  - From the Extension drop down list, choose **Disabled**.
  - From the Share Call Appearance drop-down list, choose **shared**.
  - Enter the rule in the Extended Function field, as described below.

|                        |   |             |
|------------------------|---|-------------|
| Line Key 2             |   |             |
| Extension:             | <input type="text" value="Disabled"/>   | Short Name: |
| Share Call Appearance: | <input type="text" value="shared"/>   |             |
| Extended Function:     | <input type="text" value="fnc=blf+sd+cp;sub=Accounting@\$PROXY;ext=103@\$PROXY"/> |             |

**SYNTAX:** `fnc=type;sub=stationname@$PROXY;ext=extension#@$PROXYvid=#`

**Example 1: Busy Lamp Field and Speed Dial:**

`fnc=blf+sd+cp;sub=Accounting@$PROXYext=103@$PROXY`

In this example, the line key is programmed as a shared line with extension 103, Accounting. The button can be used for Busy Lamp Field, speed dial, and call pickup.

- Configuration of missed call display per extension

The user can configure the missed call log function for each extension, to avoid collecting unneeded missed call messages for shared lines. This option is found on the *Phone > User* tab of the Web UI. The *Log Missed Calls for EXT N* field can be set to **Yes** (missed calls are displayed) or **No** (missed calls are not displayed).

## Other Updates

The following problems were fixed in firmware version 6.1.3:

- One-way audio between SPA phones with different firmware versions (CSCsr86185)

- Omission of user parameters from the TO and FROM headers (CSCsu42465)
- Improper decoding of early media, such as ring tone (CSCsu25715)

### Known Issues

- In some instances, inband DTMF may not be recognized correctly when the speakerphone is in use. If an interactive voice response menu is not responding as expected to the keys that a user is pressing, the user can press the Mute button to avoid this issue. (CSCsm85917)

## Related Documentation

For more information, refer to the following documents:

- *SPA9000 Voice System Administration Guide*
- *SPA Phone Administration Guide*
- *SPA Phone User Guide*

For these documents and more, visit the following URL:

[www.cisco.com/go/smallbiz](http://www.cisco.com/go/smallbiz)

## Downloading the Firmware

To obtain current firmware for Cisco Small Business and Small Business Pro products, visit the following URL:

[www.cisco.com/go/smallbiz](http://www.cisco.com/go/smallbiz)

## Technical Support

To obtain current support contact information for Cisco Small Business and Small Business Pro products, visit the following URL:

[www.cisco.com/go/smallbiz](http://www.cisco.com/go/smallbiz)

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