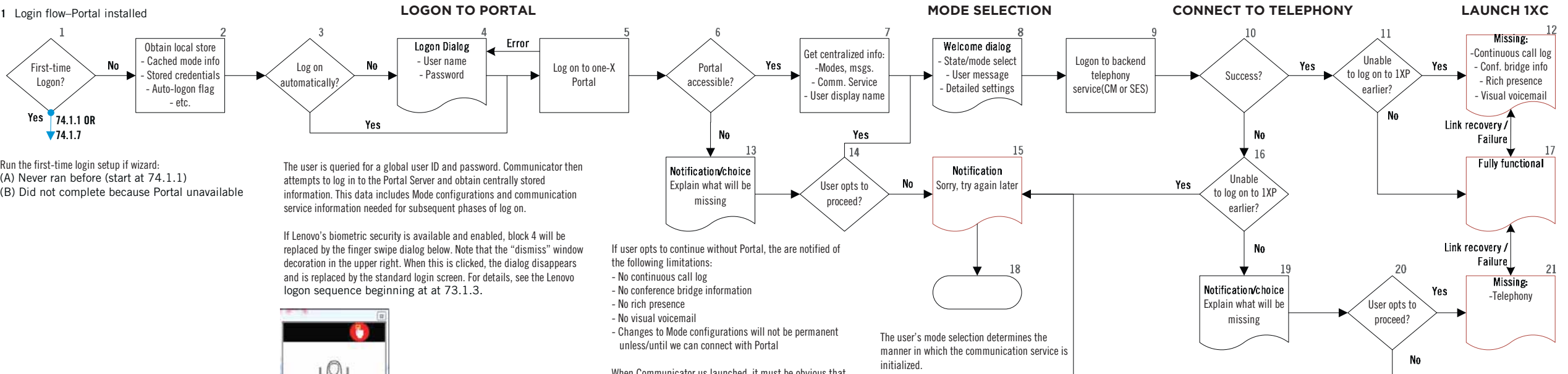


71.1 Login flow-Portal installed



Run the first-time login setup if wizard:
 (A) Never ran before (start at 74.1.1)
 (B) Did not complete because Portal unavailable

The user is queried for a global user ID and password. Communicator then attempts to log in to the Portal Server and obtain centrally stored information. This data includes Mode configurations and communication service information needed for subsequent phases of log on.

If Lenovo's biometric security is available and enabled, block 4 will be replaced by the finger swipe dialog below. Note that the "dismiss" window decoration in the upper right. When this is clicked, the dialog disappears and is replaced by the standard login screen. For details, see the Lenovo logon sequence beginning at 73.1.3.



If user opts to continue without Portal, they are notified of the following limitations:
 - No continuous call log
 - No conference bridge information
 - No rich presence
 - No visual voicemail
 - Changes to Mode configurations will not be permanent unless/until we can connect with Portal

When Communicator is launched, it must be obvious that these features have been compromised. In the background, Communicator will continually attempt to connect with the Portal server. When successful, the UI should respond by showing these features as fully functional.

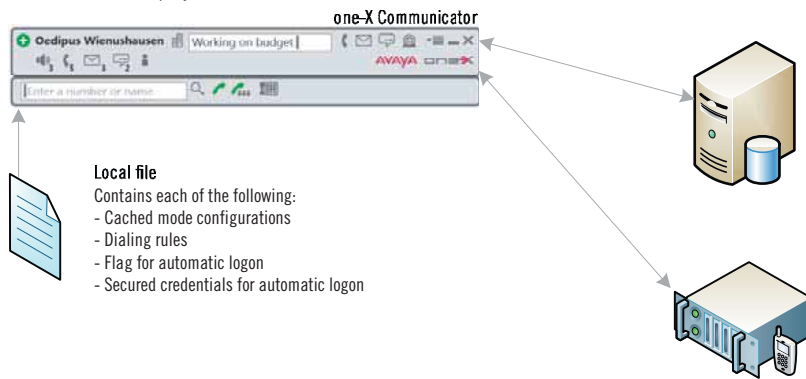
The user's mode selection determines the manner in which the communication service is initialized.

Login will result in one of four outcomes:

- Communicator be launched and fully operational
 At any point however, loss of backend services may render 1XC considerably less functional.
- Communicator will be launched without Portal services
 - The call log will reflect only those calls observed while 1XC has been running
 - There will be no visual voicemail/messaging
 - Bridge conference details will be absent
 - H.323 clients will lose all presence information
 - SIP clients will be limited to what SES provides

 In the background, the system will continually attempt to connect to the Portal Server. When successful, all these features will be restored. Ideally, the UI will give clear indication of compromised features.
- Communicator will be launched without telephony services
 The user will still be able to retrieve messages, access the contacts directory, and review the call. Again, Communicator will continually attempt to connect to telephony services in the background. Until success, the UI should clearly show affected features as compromised.
- Either the user or the system will opt not to proceed
 The user is free to abort the session if either the Portal Server or communications service are unavailable. When neither is accessible, the system will automatically abort.

71.2 Elements of the deployment



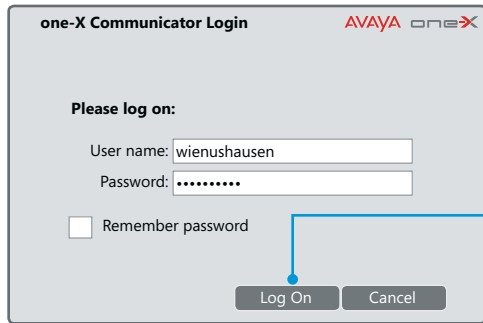
Local file
 Contains each of the following:
 - Cached mode configurations
 - Dialing rules
 - Flag for automatic logon
 - Secured credentials for automatic logon

one-X Portal Server
 Repository for each of the following:
 - Mode configurations (including a bandwidth setting)
 - Communications service to connect to
 E.G. SIP proxy IP / H.323 destination, with credentials
 - User's display name
 - Continuous call log
 - Messages: Voicemail, text, fax and file attachments
 - Contacts

Communications service
 One of the following will be chosen at installation:
 - SIP
 - H.323

Communicator may fail to establish connectivity with either the Portal Server or communications service. Initial connection is no guarantee of continued service. Consequently, Communicator must be capable of accommodating failures through user notifications and graceful degradation.

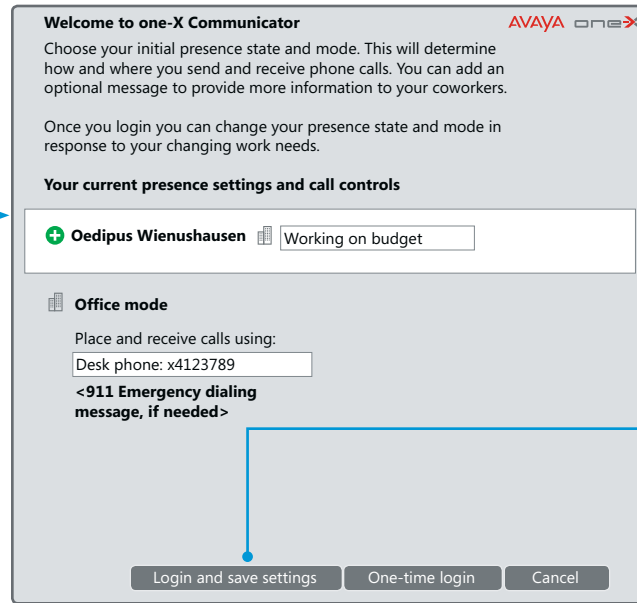
72.1 User logs in



Although the one-X Portal version is shown here, the actual dialog would be entitled "one-X Communicator." Additionally, there would be a checkbox enabling the user to forego log on in the future. The finger swipe dialog below may be substituted if Lenovo's biometric security is present and enabled,



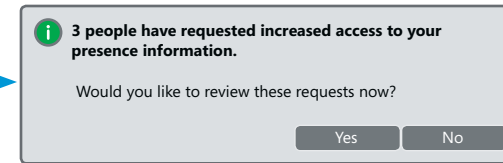
72.2 Mode selection



The existing "one-X Communicator Login" screen must take the following into account:

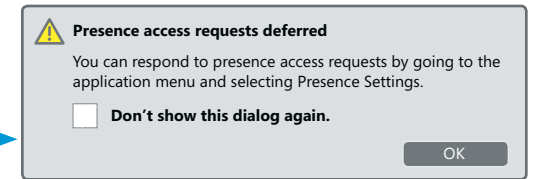
- **Title**
 Since the user has already logged on, the title might be better rephrased as "Welcome to one-X Communicator".
- **Road warrior mode**
 When the choice for "Place and receive calls using:" is "This computer", a provision for bandwidth is needed. The label would be "Connection type", and the selections are (1) LAN (2) Cable, DSL, or ISDN (3) 28800 bps or faster modem.

72.3 Optional notification



The user will be notified of any pending requests for access to his Presence information.

72.4 Optional instructional dialog



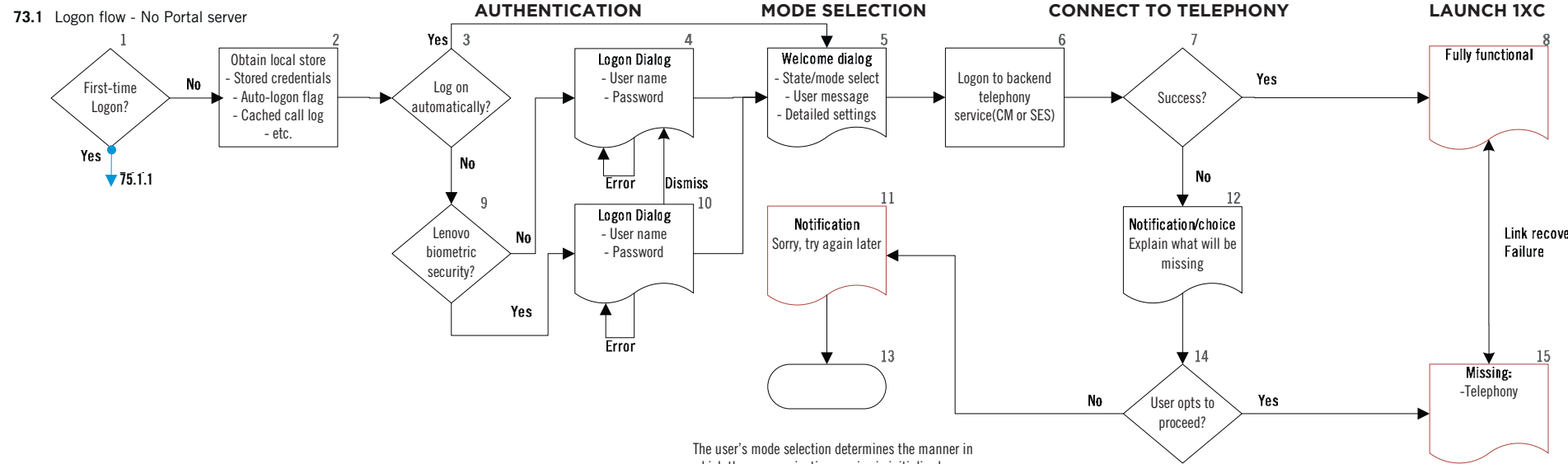
Instructions are given for reviewing pending requests should the user opt to ignore them.

Note: Error paths are not shown

Without the Portal Server, Communicator is less capable, but the login sequence is greatly simplified. The lack of a central repository means that the contact history is entirely local. In other words, Communicator will only be able to record call activity it observed while it was running. Also conspicuously absent are:

- Visual voicemail / messaging
- Conference bridge details
- Rich presence

In the non-error case, the only dialog to appear will be for mode selection as shown in Figure 72.2.

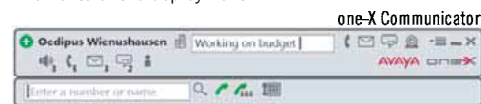


The user's mode selection determines the manner in which the communication service is initialized.

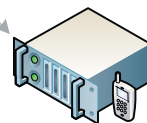
Login will result in one of three outcomes:

1. Communicator be launched and fully operational
 At any point however, loss of backend services may render 1XC considerably less functional. The UI will give clear indication that telephony is unavailable until connection with communication services has been reestablished.
2. Communicator will be launched without telephony services
 Contact records and history will still be available, as these are stored locally. Telephony will remain disabled unless and until Communicator can connect with communication services.
3. The user will opt not to proceed
 The user is free to abort the session if either the communications service is unavailable. When neither is accessible, the system will automatically abort.

73.2 Elements of the deployment



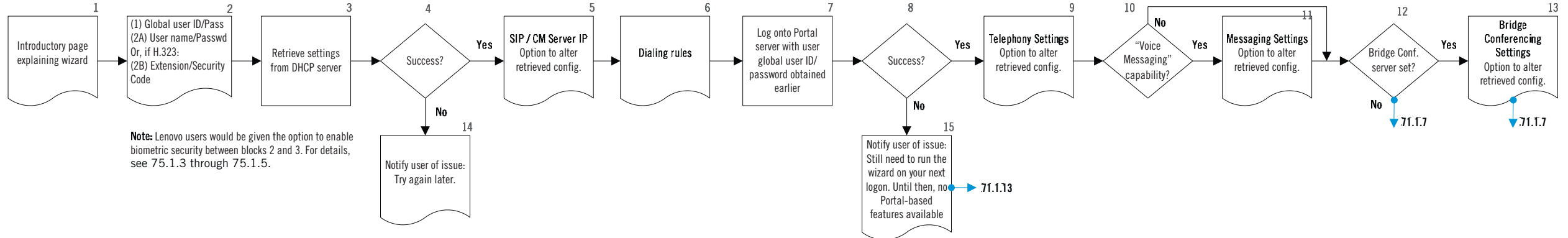
- Local file**
 Contains each of the following:
- Dialing rules
 - Call history
 - Contact records
 - Details needed to connect to communication service
 - Mode configurations
 - User's display name (SIP-only)



- Communications service**
 One of the following will be chosen at installation:
- SIP
 - H.323

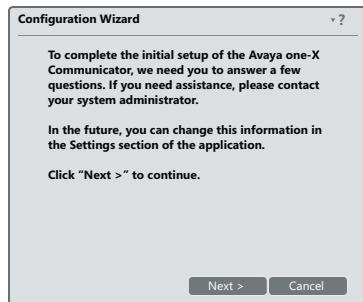
Local storage has grown to encompass data that would otherwise have been centrally stored within the Portal Server. Unfortunately, each of a user's Communicator clients will thus maintain separate mode settings, call history, contact records, and so on. Without central storage, there is no mechanism to keep these in synch. Further, installation of each additional client requires that the user repeat the same steps, and provide the same information as for other clients.

74.1 Flow of wizard



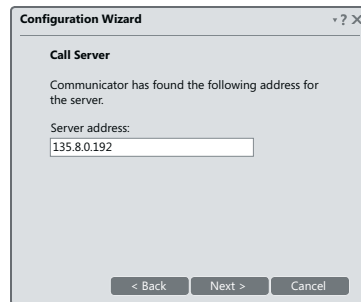
RELATED SCREENS FROM OTHER PRODUCTS

74.1.1 Introductory page



Let the user know what's about to happen.

74.1.5 Server page



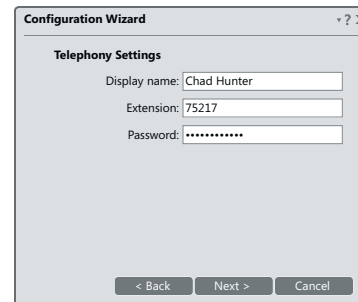
For SIP, obtain the SIP server address. For H.323, obtain the address of the Communication Manager (CM). The value will be pre-populated, but the user may provide a different address.

74.1.6 Dialog rules



Dialing rules govern outgoing calls. The administrator may have provided values with which to pre-populate this page as well.

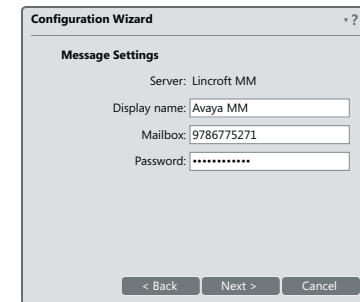
74.1.9 Telephony settings



The telephony settings shown here come from the Portal server. Changeable items are: (1) The name of the user as it will appear to others (2) his phone extension (3) the security code for logging into the phone itself.

Note: The values shown here from Portal server may not agree with those given by the user in 74.1.2. This will be the case if the Portal administrator entered the wrong settings.

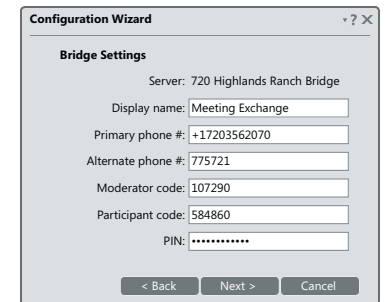
74.1.11 Messaging settings



The messaging settings shown here come from the Portal server. They will appear only if the "Voice Messaging" capability is enabled. There will be one set of values for each messaging mailbox the user has. In all likelihood however, there will be only one.

The administrator may have provided all necessary values. At a minimum, the mailbox is commonly filled in. Changeable items are: (1) The arbitrary display name the user wishes to assign for this messaging account (2) his mailbox extension (3) the password for logging into the messaging account.

74.1.13 Bridge settings

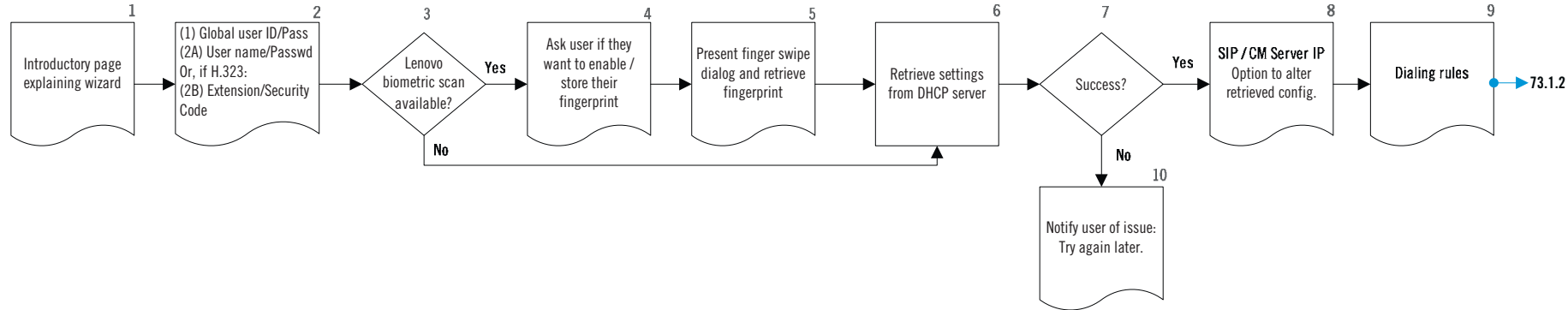


The bridge conferencing settings shown here come from the Portal server. They will appear only if the a server setting is detected. For example, here the server is given as "720 Highlands Ranch Bridge". Therefore, bridge conferencing is available to configure.

The administrator may have provided all necessary values, some, or none at all. Changeable items are: (1) The arbitrary display name the user wishes to assign for this bridge conferencing account (2) his desk phone extension (3) moderator code for hosting the conference (4) code for participants wishing to join (5) numeric password.

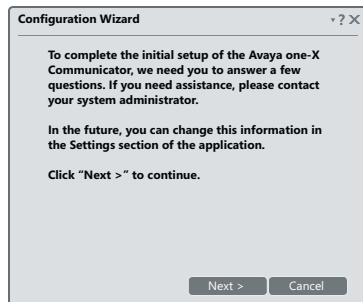
Note: Numbers given for screens correspond to blocks in flowchart above. For example, screen 74.1.5 corresponds to block 5 in flow

75.1 Flow of wizard



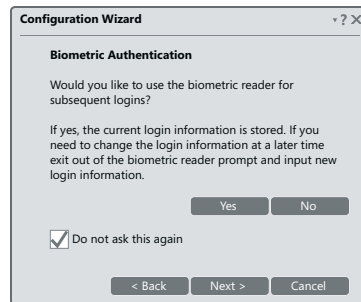
RELATED SCREENS FROM OTHER PRODUCTS

75.1.1 Introductory page



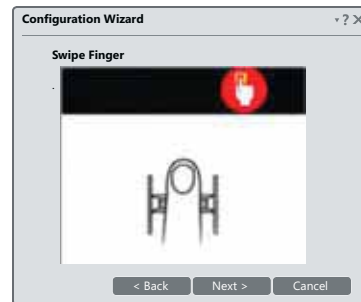
Let the user know what's about to happen.

75.1.4 Ask: Use biometric authentication?



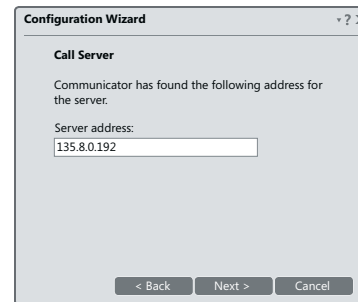
The dialog above is taken from the IP Soft phone, where it is part of the normal log on sequence. In our case, we would like to move this to the startup wizard.

75.1.5 Obtain fingerprint



Notice that, as at logon time, a window decoration is provided to dismiss the dialog. In this case, a notification is given that biometric authentication has not been activated, but may be at any time through the application's settings. In this way, the user has an escape hatch should the biometric reader prove uncooperative.

75.1.8 SIP server page



For SIP, obtain the SIP server address. For H.323, obtain the address of the Communication Manager (CM). The value will be pre-populated, but the user may provide a different address.

75.1.8 Dialing rules page



Dialing rules govern outgoing calls. The administrator may have provided values with which to pre-populate this page as well.

Note: Numbers given for screens correspond to blocks in flowchart above. For example, screen 75.1.5 corresponds to block 5 in flow

LOGIN DIALOG

76.1 User launches one-X Communicator

Due to time constraints the one-X Communicator login process is not yet fully documented visually. Furthermore, there are differences between R1 and R2 implementations. A mix of both are included in this spec.

R1 Implementation: First-time login

The user will need to provide their extension and extension password on first-time login. The user will be able to select from either their deskphone, their computer, or both for use sending and receiving calls. Additional phones such as Home or Mobile will not initially appear as options. The user defines these and other phones after first login. The user will also have to provide information about their computer, including information about networking (cable, landline, etc.).

Changes to R1 login with R2 in mind

Prior one-X modes such as telecommuter and road warrior have been renamed as four default modes: Office, Home, Mobile, and Travelling. (**Note:** The user may need to provide additional information before they can use the Home or Mobile modes. Details TBD.) The overall functionality should be unchanged but the name changes are a step in the direction of future R2 rich presence functionality.

A proposed mapping of one-X Communicator modes to previous login states:

- Office = Shared
- Home = Telecommuter
- Travel = Road warrior
- Mobile = A variation of one of the above modes.

