Objectworld[™]

Objectworld Unified Communications Server®

snom 320 User Guide

© 2001-2009 Objectworld Communications Corp.

All rights reserved. Published February 18, 2009

Objectworld, Objectworld Unified Communications Server, Objectworld UC Server, Objectworld UC Client, Objectworld Connect, Objectworld Connect PLUS, IT Telephony, and The IT Telephony Company are either trademarks or registered trademarks of Objectworld Communications Corp. in the United States and/or other countries.

snom is a registered trademark of snom, Inc.

All other trademarks or registered trademarks are property of their respective owners.

Part No. UCS-1011-000-v4.4

Table of Contents

1	snom 320 VolP Business Phone Overview	. 1
2	Using snom 320 Phone Features	3
	Features List	. 3
	Key Descriptions	. 4
	Placing Calls	. 6
	Answering Calls	
	Holding and Resuming Calls	
	Muting and Unmuting Calls	
	Conferencing	
	Transferring Calls	
	Ending Calls	
	Redialing	
	Forwarding Calls	
	Changing the Volume	
	Setting Do Not Disturb	
	Changing the Ring Tone	
	Listing Calls	
	Speed Dialing	
	Accessing Voice Mail	12
3	Using UC Server Features 1	13
	Using the UC Server Call Feature Access Codes	13
	Parking Calls and Picking up Parked Calls	16
	Picking up Calls Ringing at Another Extension	17
	Using the UC Server Conference Bridge	18
	Queuing Calls	19
	Paging	21

1 snom 320 VoIP Business Phone Overview

This document outlines the features and functions of the snom 320 VoIP Business Phone in relation to the Objectworld Unified Communications ServerTM. It covers the following topics:

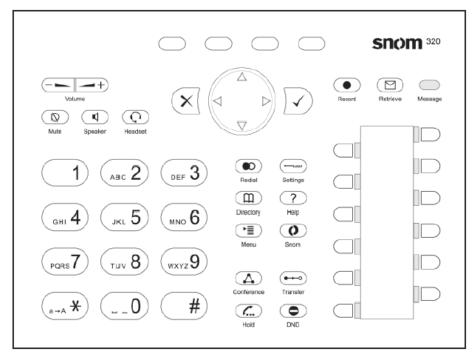
- <u>Overview</u>
- Key Features

For information about installing and configuring this product, see the Installation and Configuration Guide provided by Objectworld.

1.1 Overview

This document is not intended to replace the snom 320 VoIP Business Phone User Manual. For more detailed information about the product, particularly its operation in the absence of UC Server, please refer to the snom User Manual.

1.2 Key Features



Use the numeric keypad with the keys 0 to 9, *, and #, to enter digits and letters.

Depending on the operating mode, you can perform different actions.

- Entering digits only (for example, when dialing a phone number)
- Typing in letters and digits by pressing the keys repeatedly (similar to a cellular phone), etc.

Use the **Menu** key to call up the menu. To cancel actions or input, use the **Cancel** key. The **Enter** key confirms actions, selections, and input. For navigation, use the large round navigation key in the middle.

Depending on the operating mode, the keys can have context-specific meanings, which are described in the manual.

The four keys located below the display are context-sensitive function keys. Their current mapping is depicted with symbols in the bottom line on the display.

The twelve keys on the right with LEDs next to them are the programmable function keys onto which you can map different functionalities.

2 Using snom 320 Phone Features

This chapter outlines the keys and features that are available on the snom 320 phone. UC Server supports all the telephone features that are outlined in this chapter. For snom 320 key descriptions see the following section:

<u>Key Descriptions</u>

2.1 Features List

UC Server supports the following main features of the snom 320 phone:

- Placing Calls
- <u>Answering Calls</u>
- Holding and Resuming Calls
- <u>Muting and Unmuting Calls</u>
- <u>Conferencing</u>
- <u>Transferring Calls</u>
- Ending Calls
- <u>Redialing</u>
- Forwarding Calls
- Changing the Volume
- <u>Setting Do Not Disturb</u>
- Changing the Ring Tone
- Listing Calls
- Speed Dialing
- <u>Accessing Voice Mail</u>

2.2 Key Descriptions

Key	Digits	Lower case	Upper case
0	0	(SPC)_0	(SPC)_0
1	1	.@1,?!- /():;&%*#+<=>\$[]	.@1,?!- /():;&%*#+<=>\$[]
(asc 2)	2	abc2	ABC2
DEF 3	3	def3	DEF3
(он 4)	4	ghi4	GHI4
(JRL 5)	5	jkl5	JKL5
(MND 6)	6	mno6	MNO6
(ross7)	7	pqrs7\$	PQRS7\$
(TUY 8)	8	tuv8	TUV8
(WXYZ 9)	9	wxyz9	WXYZ9
#	"#" or "." after timeout, if not numeric	Number guessing	
(*** *	*	Toggles upper and lower case	

In different operating modes, the keys of the numeric keypad represent the following:

Key	Description
	Mute microphone on/off
	Casing speaker on/off
\bigcirc	Headset on/off
(- - +)	Adjust volume (lower/higher)
(II)	Open phone book
?	Help
	Menu
	Redial
	Settings menu
0	XML Add-on (planned)
	Establish 3-party conference
	Do not disturb mode on/off
()	Call hold/resume call
••••	Call transfer
	Record a call (with server support only!)
	Connect to Mailbox
\bigcirc	LED for MWI (Message waiting indication)

Additionally, the following keys are available:

← / ³ ****	Moves the cursor to the left	
\rightarrow / $\frac{1}{2}$	Moves the cursor to the right	
€←	Deletes the character to the left of the cursor	
123	Changes input mode to numbers	
ABC	Changes input mode to capital letters	
abc	Changes input mode to small letters	
D	Dials the SIP address if entered correctly	
\mathbf{x}	Aborts the dialing	

Figure 2–1: Key mapping

2.3 Placing Calls

There are two methods to begin a call from the idle state of the snom 320. You can either dial with the handset resting in the cradle and then pick it up or press the speakerphone key, or you can pick up the handset or press the speakerphone key and then dial the number. In the latter case, press the **check mark** key to start dialing.

The snom 320 displays the current communication status.

During a call, it is possible to switch between both modes by pressing the handset/ headset function keys or the **speaker** key on the upper left side.

Dial a phone number using the numeric keypad. If the user has not pressed a key for several seconds, the phone reminds the user to press the check mark key to start the call. You can also dial using a SIP address or IP address.

To dial a SIP address

• Enter the SIP address using the numeric keypad.

To find the @ symbol, press the numeric key "1" twice to find the dot, press the hash "#" key until it changes to a dot.

To dial an IP address

• Enter the IP address using the numeric keypad.

Use the "*" key instead of a dot or press the hash "#" key until it changes to a dot.



NOTE: If IP address dialing produces an error message, make sure both the phones involved are using local port 5060 for SIP signaling.

TIP: When you dial an IP address, the called phone or computer cannot determine which user you want to reach. The phone or computer assumes that you are calling "anonymous." This is the case with many phones and applications. You should use this method only in exceptional cases because entering IP addresses is cumbersome.

The **number guessing** functionality allows you to choose from dialed numbers, missed calls, received calls, or numbers in the address book that match the beginning of a number you have begun to enter.

If the displayed number is not the one that you want, you can either keep pressing the "#" key (in alphanumeric mode) to get the next matching number, continue typing the number, or press the back function key to temporarily switch off number guessing for this session of editing a phone number.

2.4 Answering Calls

You can answer a call or deny a call. When the phone signals an incoming call, you can deny the call using the **deny** key. Pressing the **deny all** key puts the caller on the deny list, which always automatically denies that caller. If the **deny all** key is not available, it is switched off in the settings. You can enable the **deny all** key using the Web interface ("Deny All" feature).

To answer a call using the handset

• Pick up the handset or press the **check mark** key.

2.5 Holding and Resuming Calls

You can hold and resume calls. While a call is on hold, you can make another phone call by dialing the number that you want. When more than one call is on hold, it is indicated in the display.

To use the call hold and resume feature

1 During a call, press the **Hold** key.

Hold means that neither party can hear the other.

2 Press the **Flash** key to resume the call.

2.6 Muting and Unmuting Calls

To mute the microphone during a call, press the soft key "Mute" or the mute button. Press the soft key "Unmute" or the mute button to enable the microphone again.

2.7 Conferencing

If the phone is connected to two calls, one on hold and one active, you can connect all three phones in a conference by pressing either of the conference keys.

By pressing either of the keys again, the conference is disconnected and the calls are

Conference



all put on hold.

NOTE: Only the conference originator can send dual-tone multifrequency (DTMF) or touch tone dialing to conference parties. DTMF tones can be used to interact with voice mail systems and automated



NOTE: Hanging up the handset, or going on hook during a conference call does not disconnect the snom phone from the conference call, but

2.8 Transferring Calls

You can transfer a call using a direct transfer or a consultation transfer.

To perform a direct transfer



Call transfer keys

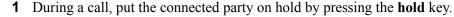
(🦾) , 🖪 or 🛃

Call hold keys

1 During a call, press the **transfer** key. The connected party is on hold.

- **2** Dial the number to which you want to directly transfer the call.
- **3** Press the **check mark** key to transfer the held party to the number you specified.

To perform a consultation transfer



- **2** While the call is on hold, you can establish a second call by dialing the number and pressing the check mark key.
- **3** Consult the second party.

attendants.



instead switches the snom phone to speakerphone mode.

4 Connect the two parties by pressing the transfer key.



NOTE: This behavior is available only if the option "Call join on Xfer" on the "advanced" web page is enabled. If this option is disabled, select the party you want to transfer the call to by pressing the arrow keys to move the cursor left or right, followed by pressing the call transfer keys.

🗕 / 🚽 or 🔿 /

Move cursor left/right

2.9 Ending Calls

End calls by putting the handset on the cradle, pressing the hook switch, or pressing the x key. The snom 320 ends the call and returns to the idle state.

2.10 Redialing



You can dial the last call placed from your phone by pressing the redial key.

2.11 Forwarding Calls



You can forward calls to another extension. Press the **Call Forwarding** button to access the Call Forwarding menu.

The currently active setting is preceded by an asterisk "*."

÷ C	all Fo	orwardir	ig ÷
*Off	Time	Always	Busy

To forward all calls

- 1 Press the Call Forwarding button to access the Call Forwarding menu.
- 2 From the Call Forwarding menu, select Always.

Every incoming call is immediately forwarded to the number set in the following window "Redirect target," without the phone ringing.

To cancel call forwarding

- 1 Press the Call Forwarding button to access the Call Forwarding menu.
- 2 From the Call Forwarding menu, select Off.

To forward calls when busy

- 1 Press the Call Forwarding button to access the Call Forwarding menu.
- 2 From the Call Forwarding menu, select Busy.

When another call is already in progress, all incoming calls will be forwarded to the number set in "Redirect target."

To forward calls when unanswered

- 1 Press the Call Forwarding button to access the Call Forwarding menu.
- **2** From the Call Forwarding menu, select **Time**.
- **3** Enter the number of seconds after which every incoming unanswered call is forwarded to the number set in "Redirect target."

2.12 Changing the Volume

In idle state, or while making a call, you can use the volume keys to increase or lower the volume. You can also adjust the volume of the audio device (casing speaker, handset, headset) that you are using.

2.13 Setting Do Not Disturb

Do Not Disturb functionality is available in the snom menu. If you activate DND mode using the DND key, incoming calls do not come through to the phone, except for VIP calls. If there is a mailbox set up for you, the call is redirected to that mailbox. Before you activate this mode, the phone prompts you confirm that you want to change the mode.

In idle mode, "DND active!" is displayed in the bottom left-hand corner of the screen when DND is activated.

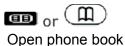


NOTE: Remember that the contact type "VIP" overrides the DND mode, which means that a call from a number that you define as contact type "VIP" is put through to your phone even when DND is active.

2.14 Changing the Ring Tone

The snom 320 offers a selection of different ring tones using the phone's Preferences web page.

2.15 Listing Calls



Edit key The snom 320 contains an internal phone book that can be accessed from the phone's idle state by pressing the phone book keys.

To add an entry

- **1** Select the list item <New item>.
- **2** Press the edit key.
- **3** Enter the name and phone number.
- **4** Confirm each entry by pressing the **check mark** key.



NOTE: The title of the window indicates which input is expected (for example, the name or number).

To edit an entry

- **1** Press the edit key on the entry that you want to edit.
- **2** Change the information that you want.
- **3** Confirm each entry, the name and phone number, by pressing the **check mark** key.

To delete the entire address book

• Click the **Delete** button on the web interface page of the address book.

2.16 Speed Dialing

The snom 320 supports speed dial of up to 33 numbers. These are mapped onto the number 0 to 30, and the * and # keys. Set up the speed dial numbers on the built-in web interface page of your phone.

To initiate a speed dial

1 Type a number.

The mapped numbers are 0 to 30, *, and #.

2 Press the check mark key.



NOTE: In this way, 33 speed dial numbers can be called up without having to look at the display.

2.17 Accessing Voice Mail

See the snom User Guide for information about using the Voice Mail feature.

3 Using UC Server Features

This chapter outlines the phone features that are available with UC Server. The UC Server call feature access codes are summarized in the following section:

<u>Using the UC Server Call Feature Access Codes</u>

UC Server supports the following features listed below.

- <u>Parking Calls and Picking up Parked Calls</u>
- <u>Picking up Calls Ringing at Another Extension</u>
- <u>Using the UC Server Conference Bridge</u>
- Queuing Calls
- <u>Paging</u>

3.1 Using the UC Server Call Feature Access Codes

To access various call features, key press sequences are provided by UC Server.



NOTE: Some features may be unavailable depending on the particular system configuration. See your system administrator for more information.

UC Server Call Features	Key Codes	Examples and Notes
Transferring Calls		
<i>Transfer a call to another user's voice mail</i> Allows you to transfer a current call to another user's voice mail/PA/PBA service. This features is useful when the intended recipient is away from their desk or out of the office.	*86 + extension	To transfer to extension 300's voice mail, dial: *86300
Note : The extension dialed must be at least 3 digits long.		

UC Server Call Features	Key Codes	Examples and Notes	
<i>Transfer a call to a call queue</i> Use this feature to transfer a caller to a preconfigured departmental call queue.	*80 + queue#	To enter queue 500, dial: *80500	
If no agents logged into the queue are available to take the call, the caller is put on hold until an agent is available.		To transfer a caller to queue 500: 1. Press Transfer 2. Dial *80500 3. Press Send	
Queuing Calls			
<i>Log into a call queue</i> Allows you to start receiving calls for the specified queue.	*81 + queue#	To login as an agent to receive calls directed to queue 500, dial: *81500	
Log out of a call queue Allows you to stop receiving calls for the specified queue.	*82 + queue#	To logout as an agent to no longer receive calls for queue 500, dial: *82500	
Temporarily Stop Accepting Queued Calls Temporarily makes yourself unavailable for accepting queued calls, while not resetting the longest idle agent status.	*83 + <1 - 9>	Dial: *83 Press a number from 1 to 9 to indicate your reason for being unavailable.	
<i>Reset agent status to available</i> Make yourself available again to accept queued calls	*83 + 0	Dial: *83 Press "0" at the prompt.	
Check agent status in a call queue Check your agent status to verify whether you're currently logged into a call queue, temporarily unavailable, or currently logged out of a call queue.	*84 + queue#	To check your agent status in a call queue with queue number 500, dial: *84500	
Picking up Other Calls			
<u>Picking up Calls Ringing at Another</u> <u>Extension</u> Ringing call pickup allows you to pickup a call that is ringing at a different extension.	*78 + extension	To pickup a call that is ringing at extension 300, dial: *78300	
<i>Pickup a connected call</i> Connected call pickup allows you to pickup a call that is currently connected to a different extension.	*27 + extension	To pickup a call that is currently connected to extension 300, dial: *27300	

UC Server Call Features	Key Codes	Examples and Notes
Using the UC Server Conference Bridge		
<i>Conference Server</i> Note: The bridge number must be 4 digits long.	7050 + bridge#	To automatically connect to the conference server bridge number 1234, dial: 70501234
Conference Server - Prompt Caller This feature is used for external callers to connect to a conference bridge.	7050	To connect to the conference server, dial: 7050 You will then be prompted to enter a bridge number.
Parking Calls and Picking up Parked Calls	<u>1</u>	
Park a call using a specific park number Allows you to park a call so that you can pickup the call using a different phone. This feature is useful if you need to switch phones while on a call.	*99 + park#	To park a currently connected call at park number 1234: 1. Put the current call on hold. 2. Establish a new call. 3. Dial *991234 The call is automatically parked at 1234.
Park a call at a park number selected by UC Server This feature is the same as above, except that the call is parked at a number chosen by UC Server instead of you choosing the number to park the call. This is useful if you are uncertain whether another call has already been parked at a particular number.	*99	To park a currently connected call: 1. Put the current call on hold. 2. Establish a new call. 3. Dial *99. The system will tell you what number the call is parked at.
<i>Pickup a parked call</i> Enables a user to pick up a parked call	*98 + park#	To pickup a call parked at 1234, dial: *981234
Paging		Contact your system administrator for instructions on sending recorded pages.
<i>Sending a Live Page</i> You can send a live page.	*72	To send a live page 1. Dial *72 (or *PA) 2. After you hear the tone, begin speaking. 3. When you are finished with the page, hang up or use the end call function on your phone.

3.2 Parking Calls and Picking up Parked Calls

You can park an active call, and then have the parked call picked up on another phone. This feature is useful if you want to change phones during a call.



NOTE: Call park/pickup is a feature that must be enabled by your system administrator for use on your phone.

There are two methods of parking calls. In one method, UC Server selects the next available park number. Alternatively, you can select your own park number. Having UC Server select the park number is useful if you are uncertain whether a call is already parked at a particular number.

If more than one identity (for example, more than one extension number) is assigned to your phone, then transfer the call rather than putting the active call on hold.



NOTE: If a person whose call has been parked then puts the call on hold, the person retrieving the parked call will hear dead air or silence until the other party resumes the call.

To park a call at the next available park number

1 Put the current call on hold.



NOTE: If your phone has more than one identity assigned to it, then **Transfer** the call instead of putting it on hold.

- 2 Dial *99.
- **3** Note the **hold position** that plays over the telephone.

The hold position is used by the person who answers the parked call. UC Server selects the park number for the caller starting at 1, or the next available higher number.

4 Press DIAL.

The call is removed from the hold position, and put in the system park position.

To park a call at a selected park number

1 Put the current call on hold.



NOTE: If your phone has more than one identity assigned to it, then **Transfer** the call instead of putting it on hold.

2 Dial *99.

3 Enter the number that you want to use as the park number.

The hold position is used by the person who answers the parked call. For example, if you enter 1234, then the call is parked at 1234, and can be picked up at 1234.

4 Press DIAL.

The call is removed from the hold position, and put in the park position.

To answer a parked call

- 1 Typically, a company announcement informs you that a call is on hold for you.
- 2 Dial *98.

The system prompts you for the park hold position.

3 Dial the number of the park hold position.

The system disconnects the current call and presents a new call.

4 Answer the new call to speak to the parked caller.



NOTE: If nobody answers the parked call, the call rings the extension that originally put the call on system park.

3.3 Picking up Calls Ringing at Another Extension

Ringing call pick up allows you to answer other ringing telephones, which means that you no longer have to run to answer another person's telephone. You can divert a ringing call from another telephone, typically within earshot, to your own telephone to answer.

To use ringing call pick up, you must know the extension of the phone that is ringing.

This feature also allows for night bell support. Many small companies have an audible bell that rings after business hours. Night bell support can also allow employees to contact security after hours. This feature can allow employees, for example on manufacturing floors, who are not stationed at a particular desk to answer any telephone.



NOTE: To use ringing call pick up, your phone must be configured to receive incoming calls. Make sure that such features as **call forwarding** and **do not disturb** are *not* enabled on the phone.

To answer a call on another user's phone

1 When you hear a phone that you want to answer, dial *78<Extension>.

Make sure that you dial, on your own phone, *78 plus the extension of the phone that is ringing.

2 If the phone has stopped ringing by the time you dial the *78 code, the system prompts you to enter your pickup ID.



NOTE: If the pickup ID that you enter is invalid, the system prompts you with "That is not a valid pickup ID," and asks you to enter a valid pickup ID.

3.4 Using the UC Server Conference Bridge

UC Server has the ability to support a limited-sized conference bridge application. The number of participants is limited to the number of licenses available, however additional conference expansion licenses can be purchased. Use your SIP phone during the conference to access several options, such as muting or adding participants.

To access the conference bridge

1 From an internal telephone, dial 7050.



TIP: You can also dial 7050 to access the conference bridge from the **dial by extension** or **dial by name** directory.

- 2 Enter the 4-digit conference ID.
- **3** Follow the prompts to access the conference bridge.



TIP: To access the list of options, you can **press** * while the conference is in progress.

Conference option list

When you press * during a conference, the following options are available. The available options depend on at which point during the conference you press *. Only relevant options are available.

- Press 1 to mute yourself. Response: "You are now muted."
- Press 2 to unmute yourself. Response: "You are now unmuted."
- **Press 3** to disable entry and exit notifications. Response: "Entry and exit notifications have been disabled."
- Press 4 to mute all other participants. Response: "All others have been muted."



NOTE: When you press 4 to mute all participants, this does not apply to new callers who join the conference. To mute new callers, press 4 again.

- **Press 5** to unmute all other participants. Response: "All others have been unmuted."
- **Press 7** to toggle between closing and opening the conference to additional participants. Response: "The conference is now closed to additional participants." Response: "The conference is now reopened to additional participants."
- **Press 9** to end the conference.
- **Press 0** to report the number of participants. Response: "Including yourself, there are x participants."
- **Press** # to return to the conference.

3.5 Queuing Calls

Call queuing allows callers to remain in a queue while they wait for their call to be answered. If callers know the queue number, they can dial directly into the queue.

The company agent is typically associated with a particular area of expertise, for example, sales or support. A support agent who is ready to answer calls can log into the support agent queue and receive support calls in order of arrival. Call queuing allows calls to be distributed evenly among the agents that are logged into the queue.

For more information on queuing calls see the following sections:

- Logging in and out of a call queue
- <u>Temporarily stop accepting queued calls</u>
- Checking your agent status in a call queue

Logging in and out of a call queue



NOTE: The call queuing codes, in particular, the code to *Log out of a call queue* (*82) conflicts with one of the Grandstream feature codes, *Send Caller ID*. Therefore your system administrator may have changed the call queuing codes from their default values listed below. For more information see your system administrator.

To log in to a queue as an agent

- **1** Dial *81<QueueNumber>.
- **2** Hang up.

To log out of a queue as an agent

1 Dial *82<QueueNumber>.

As previously noted, your system administrator may have changed the code number from the default value of *82. For more information see your system administrator.

2 Hang up.

To dial directly into a queue as a caller

- **1** Dial *80<QueueNumber>.
- **2** Hang up.



NOTE: Contact your system administrator to obtain the queue number for your queue.

Temporarily stop accepting queued calls

If you are logged into a queue to accept incoming queued calls, there may be times when you wish to temporarily stop accepting queued calls, without logging out of the queue. You can manually set your status to unavailable to prevent accepting further incoming queued calls, without logging out of the queue.

Temporarily setting your status to unavailable does not change your "longest idle" position in the agent group. When you make yourself available again by logging back into the queue, your idle time is based on the time since your last call, including the time that you were unavailable.

To set your agent status to unavailable

- **1** Dial *83.
- **2** Press a number from 1 to 9 to indicate your reason for being unavailable.
- **3** Hang up.

To set your agent status to available

- **1** Dial *83.
- **2** Press "0" at the prompt.
- **3** Hang up.

Checking your agent status in a call queue

You can check your agent status to verify whether you're currently logged into a call queue, whether your status is set to temporarily unavailable, or whether you're currently logged out of the call queue.

To check your agent status

- **1** Dial *84<QueueNumber>.
- **2** Ensure that you enter the correct queue number.

The system will indicate your current status as:

- Logged in
- The agent is not available, service code <#>
- Not Logged in
- **3** Hang up.

3.6 Paging

You can send a live page, which allows you to instantly broadcast a page. For instructions on sending recorded pages, see your system administrator.



NOTE: In order to send a live page, your system administrator must have enabled access for you to do so. For more information see your system administrator.

Sending a live page

To send a live page

- 1 From your phone, dial *72 (or *PA).
- **2** After you hear the tone, begin speaking.
- **3** When you are finished with the page, hang up or use the end call function on your phone.



308 Legget Drive Ottawa, Ontario K2K 1Y6 Canada

Voice: (613) 599-9698 Fax: (613) 599-7457