

Spectralink IP-DECT Server 200/400/6500 Spectralink Virtual IP-DECT Server One

Dstny

Interoperability Guide

Copyright Notice

© 2022 Spectralink Corporation All rights reserved. SpectralinkTM, the Spectralink logo and the names and marks associated with Spectralink's products are trademarks and/or service marks of Spectralink Corporation and are common law marks in the United States and various other countries. All other trademarks are property of their respective owners. No portion hereof may be reproduced or transmitted in any form or by any means, for any purpose other than the recipient's personal use, without the express written permission of Spectralink.

All rights reserved under the International and pan-American Copyright Conventions. No part of this manual, or the software described herein, may be reproduced or transmitted in any form or by any means, or translated into another language or format, in whole or in part, without the express written permission of Spectralink Corporation.

Do not remove (or allow any third party to remove) any product identification, copyright or other notices.

Notice

Spectralink Corporation has prepared this document for use by Spectralink personnel and customers. The drawings and specifications contained herein are the property of Spectralink and shall be neither reproduced in whole or in part without the prior written approval of Spectralink, nor be implied to grant any license to make, use, or sell equipment manufactured in accordance herewith.

Spectralink reserves the right to make changes in specifications and other information contained in this document without prior notice, and the reader should in all cases consult Spectralink to determine whether any such changes have been made.

NO REPRESENTATION OR OTHER AFFIRMATION OF FACT CONTAINED IN THIS DOCUMENT INCLUDING BUT NOT LIMITED TO STATEMENTS REGARDING CAPACITY, RESPONSE-TIME PERFORMANCE, SUITABILITY FOR USE, OR PERFORMANCE OF PRODUCTS DESCRIBED HEREIN SHALL BE DEEMED TO BE A WARRANTY BY SPECTRALINK FOR ANY PURPOSE, OR GIVE RISE TO ANY LIABILITY OF SPECTRALINK WHATSOEVER.

Warranty

The Product Warranty and Software License and Warranty and other support documents are available at http://support.spectralink.com/.

Contact Information

<u>US Location</u>	<u>Denmark Location</u>	<u>UK Location</u>
+1 800-775-5330	+45 7560 2850	+44 1344 206591
Spectralink Corporation	Spectralink Europe ApS	Spectralink Europe UK
2560 55th Street	Bygholm Soepark 21 E Stuen	The Lightbox, Willoughby
Boulder, CO 80301	8700 Horsens	Rd, Bracknell, RG12 8FB
USA	Denmark	United Kingdom
info@spectralink.com	infoemea@spectralink.com	infoemea@spectralink.com

Contents

Chapter 1: About This Guide	4
Environment InformationRelated Documentation	
Chapter 2: Feature List	6
Chapter 3: Configuration and Feature Details	7
Chapter 4: Dstny	
Chapter 5: Spectralink IP-DECT Server	9
Configuring the Spectralink IP-DECT ServerAdding Users and Handsets	

Chapter 1: About This Guide

This guide describes how to configure a Spectralink IP-DECT Server 200/400/6500 or a Virtual IP-DECT Server One for connecting to the Dstny Gateway.

In the following the servers will be referred to as "Spectralink IP-DECT Server".

This guide is intended for qualified technicians and the reader is assumed to have a basic knowledge about the Spectralink IP-DECT Server and Dstny. It is also assumed, that you have an installed and functioning Spectralink IP-DECT Server.

The guide is divided into two parts:

- Dstny
- Spectralink IP-DECT Server

Each part describes the general configuration and the user administration.

Environment Information

- Dstny https://www.dstny.com/.
- Spectralink IP-DECT Server 200/400/6500 (must have firmware version PCS 22BA or newer).
- Spectralink Virtual IP-DECT Server One (must have firmware PCS 22BA or newer).
- Spectralink DECT Handsets 72x2, 75x2, 76x2, 77x2 (must have firmware PCS 22BA or newer).
- Spectralink network and security requirements see description of communication ports for the relevant server in the Server Installation and Configuration Guide.

Related Documentation

All Dstny technical configuration and system administration documents are available at https://mizone.telepo.com/home.

All Spectralink documents are available at http://support.spectralink.com/.

Spectralink Documentation

Subject	Documentation
Spectralink DECT Handsets	For more information about the handset, refer to the user guide available online at http://support.spectralink.com/products .
Site Survey Function in Handset	For more information about the site survey function in handset, refer to the guide available online at http://support.spectralink.com/products .

Subject	Documentation
Synchronization and Deployment Guide	For more information about synchronization and deployment, refer to the guide available online at http://support.spectralink.com/products .
Spectralink IP-DECT Server	For more information about the server, refer to the guide available online at http://support.spectralink.com/products .
Provisioning	For more information about provisioning, refer to the guide available online at http://support.spectralink.com/products .
Spectralink Technical Bulletins	Available online at http://support.spectralink.com/products .
Release Notes	Document that describes software changes, bug fixes, outstanding issues, and hardware compatibility considerations for new software releases. Available online at http://support.spectralink.com/products .
Spectralink DECT Training material	In order to gain access to the Spectralink training material, you must attend training and become Spectralink Certified Specialist. Please visit http://partneraccess.spectralink.com/training/classroom-training for more information and registration.

Chapter 2: Feature List

The following features are supported:

The fellening feducine dispersed.			
	Supported features		
Telephony	Basic Calling		
, ,	Call Hold		
	Call Transfer		
	Call Waiting		
	Caller Forward (all endpoints)		
	Music on Hold (MOH)		
	Call Completed Elsewhere		
	 Message Waiting Indication (MWI) 		
User experience	Centralized phone book via Active Directory and LDAP		
·	• SIP URI Support Phone Book (75x2, 76x2, 77x2 only)		

Chapter 3: Configuration and Feature Details

Supported features	Description/Setting
Basic Calling	Allows user to make and answer calls.
Call Hold	Allows user to place active calls on hold.
Call Transfer (warm, blind)	Allows user to transfer the active call to some other number.
Speed Dial	Assign a number to one of the speed-dialing keys.
Call Waiting	Allows user to answer another incoming call when already in an active call.
	For more information, see Configuration > SIP > Call status and parameter description in the web-based Administration Page of the server.
Call Forwarding	Allows the user to:
	 Call forward unconditional - enable
	Enable Call forward unconditional by dialing this code *21*, followed by the desired extension (\$ = extension) and #. E.g.: *21*\$#
	Call forward unconditional - disable
	Disable Call forward unconditional by dialing this code #21# .
	For more information, see "Enabling Feature Codes".
Music on Hold (MOH)	Play music to callers on hold.
Centralized Phonebook	Supports integration with LDAP and pulls contact names, numbers, titles and other information to form a phonebook.
	There is also an option to generate a local phonebook from the IP-DECT server, using only DECT handset numbers, if no LDAP server is configured.
Message Waiting Indication (MWI)	Notifies users that they have a new or unheard voice mail message.

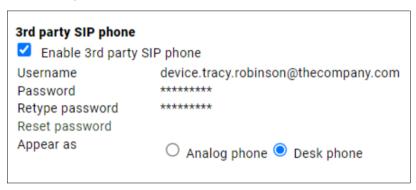
Chapter 4: Dstny

Each individual DECT handset must be assigned to a Dstny user extension. Spectralink DECT Handsets have to be configured as 3rd party SIP phones in the BCS portal.

Activating a Third-Party SIP Phone in BCS

To activate a 3rd party phone in BCS, do the following:

1 Access the BCS Portal, navigate to the **User details** page, and then go to the **Personal phones** section.



- 2 Tick the Enable 3rd party SIP phone checkbox.
- **3** Set up a new password.
- 1 Click **Save** at the bottom of the page to save your settings.

Chapter 5: Spectralink IP-DECT Server

Below is a description of how to configure the Spectralink IP-DECT Server and how to add users and handsets to the system.



Note:

It is assumed that you have installed and configured the Spectralink IP-DECT Server solution including deployment and administration of base stations before continuing the configuration described below.

You can access the web-based Administration Page of the Spectralink IP-DECT Server through a standard web browser by entering the IP address discovered by UPnP, along with the username and password.

- Default username of the system is: admin
- Default password of the system is: admin

For configuration required to integrate Spectralink IP-DECT Server 200/400/6500 or Virtual IP-DECT Server One with Dstny you will need information about IPEI of the handset and ARI of the server:

You can identify the unique ARI number on the server in the following ways:

- Spectralink IP-DECT Server 6500: See label on the bottom of the server.
- Spectralink IP-DECT Server 200/400: See label on the rear side of the server.
- Spectralink IP-DECT Server 200/400/6500 and Virtual IP-DECT Server One: From the web-based Administration Page > Status > Wireless Server.

You can identify the unique IPEI number on a handset in two ways:

- From the handset: Menu > Status > General
- From label by removing the battery cover and battery

Configuring the Spectralink IP-DECT Server

Basic Network Settings

Basic network settings can be obtained the following ways:

• From a DHCP server

Using DHCP the device requests and obtains an available IP address from a DHCP server. The device also obtains other parameters such as the default gateway, subnet mask, DNS server, Time server and other IP parameters from the DHCP server.

Entered manually through web-based Administration Page > Configuration >
General > General Configuration page.

Using manual network configuration, the IP-addresses and other networking parameters are entered manually through the web-based Administration Page.

Recommended Network Configuration

When configuring a Spectralink IP-DECT Server solution, Spectralink recommends doing it the following way:

 Spectralink IP-DECT Server 200/400/6500 and Virtual IP-DECT Server One using a static IP address

This is to avoid sudden change of the IP address which would temporarily affect all base stations and thus the entire installation.

- Spectralink DECT Media Resources using a static IP address
 Like with the servers, this is to avoid sudden change of the IP address.
- Spectralink IP-DECT Base Stations using DHCP
 This makes it easy to manage many base stations without having to keep track of many IP addresses.



Note:

When the base stations are set up to DHCP, you can use UPnP to discover all the Wireless devices on the local network. In Windows Explorer the devices will appear under **Network** and **Other Devices** as "<device name>-<Serial number>" (e.g. KWS6500-8442621, MR6500-84532341).



Note:

Spectralink IP-DECT Base Stations, Spectralink DECT Media Resources can be managed from the web-based Administration Page of the Spectralink IP-DECT Server.

To discover the IP address of an IP-DECT Server, you can use a handset that is subscribed to the system. Dial ***999*00 + Off Hook key, and the handset will display the IP address of the server.

If the Spectralink IP-DECT Server 6500 solution is configured as recommended above, it is possible to assign options to the DHCP server making it extremely easy to configure all media resources and base stations. If the Spectralink IP-DECT Server is configured using DHCP, it is necessary to assign a reservation for the device on the DHCP server.

SIP Settings

The Spectralink IP-DECT Server requires a few SIP settings to be adjusted in order to connect properly to the Dstny Gateway.



Note:

SIP settings not mentioned below should be left at their default values.

To modify the SIP settings from the web-based Administration Page:

- 2 Click Configuration, and then click SIP.
- **3** Modify the settings below.

Field	Setting		
SIP Configuration - General			
Local port	5061		
Transport	TLS		
DNS method	A records		
Default domain	Enter your organization's domain.		
NAT keepalive	CRLF (rfc5626) [TCP only]		
SIP Configuration - Proxies			
Proxies	Set Proxy 1 to your Dstny Outbound Proxy IP Address Note: Proxy URL provided by Dstny.		
SIP Configuration - Media			
Codec priority Codec AAL2-G726-32/8000 is not supported should be removed from the codec priority li			

Example of SIP configuration:

SIP Configuration General 5061 Local port * Transport * TLS 🕶 DNS method * A records ▼ Default domain * Organisational Domain Name NAT keepalive CRLF (rfc5626) [TCP only] > Proxies Priority Weight URI Proxy 1 100 SIP:Service provider proxy name 1: PCMU/8000 2: PCMA/8000 ~ ~ 3: None Codec priority * 4: None ~ 5: None 6: None

4 Click **Save**, and then reboot the system.

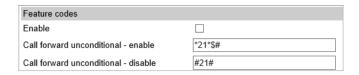
Enabling Feature Codes

The advanced feature, **Call forward unconditional**, is accessed by dialing special feature codes from the DECT handsets. To provide access to the **Call forward unconditional** feature, the feature codes must be enabled.

To Enable Feature Codes from the Web-Based Administration Page

- 1 Go to Configuration -> Wireless Server
- 2 Under Feature Codes, do the following:

Field	Setting		
Wireless Server Configuration - Feature codes			
Enable (Optional)	Enable this to make the server react to the feature codes.		
Call forward unconditional (DECT endpoints only) - enable (Optional)	Enable Call forward unconditional by dialing this code *21*, followed by the desired extension (\$ = extension) and #. E.g.: *21*\$#		
	Note: It is possible to change the code *21* on the server to fit your standard. For more information, see the relevant documentation available at http://support.spectralink.com/products .		
Call forward unconditional – disable (Optional)	Disable Call forward unconditional by dialing this code #21#.		



3 Click Save.

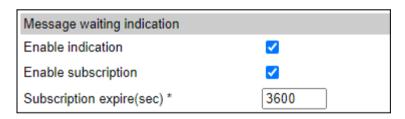
Enabling Message Waiting Indication

You can enable MWI in order to be notified of the presence of any new voicemail messages.

To Enable MWI from the Web-Based Administration Page

- 1 Go to Configuration -> SIP
- 2 Under Message waiting indication, do the following:

Field	Setting		
SIP Configuration – Message waiting indication			
Enable indication (Optional)	If enabled, MWI is displayed in the handset.		
Enable subscription (Optional)	If enabled, you can subscribe to MWI indications from the SIP proxy.		
Subscription expire (sec)	Enter the number of seconds before MWI subscription will be renewed. Default value: 3600 sec		



3 Click Save.

Adding Users and Handsets

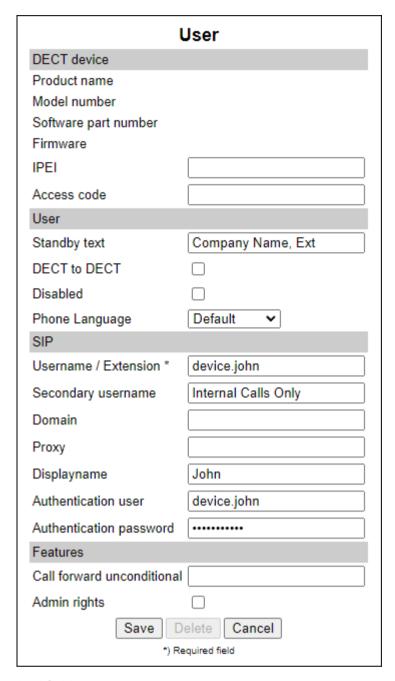
Each individual DECT handset/user must be added to the Spectralink IP-DECT Server and also on to the BCS Portal. This section describes how to add the handsets to the Spectralink IP-DECT Server.

To Add Users to the Spectralink IP-DECT Server from the Web-Based Administration Page

- 1 Click Users, click List Users, and then click New.
- **2** Enter the required information:

Field	Setting
DECT device	
IPEI (Optional)	If a specific handset is being subscribed for this extension, enter the IPEI number of the actual handset. (The IPEI number is readable from the label on the product). If this is not the case this field can be left empty and it will auto-fill when the handsets subscribe. Note: A SIP REGISTER will not be sent before there is an IPEI number present.
Access code (Optional)	Administrators can define a system wide or individual access code as extra wireless security during the subscription process.
	Note : Some third-party phones may need an Access code to register to the Spectralink IPDECT/DECT/Virtual IP-DECT Server.
Configuration group (Optional)	If using handset configuration, enter the Group ID of the Configuration Group.
User	
Standby text (Optional)	Standby text is a fixed label shown in the top left part of the screen on the DECT handset when in idle state. E.g.: Ext 101, John Smith
	Note: Disallowed characters: <>\"
	Note : This feature is only available if Spectralink DECT handsets are being used. If third-party DECT handsets are being subscribed, this feature is not supported.
Disabled (Optional)	If enabled, the user is disabled.
	Ensure that this is not enabled.
	Note : A disabled user cannot make calls from the handset.
DECT to DECT (Optional)	If enabled, the user will only be able to call, and be called from, other users that are subscribed to the same IP-DECT server; the user cannot communicate externally.
SIP	
Username/Extension	Enter the Dstny Username provided with the SIP Settings for the extension.
	Note : Allowed characters: a-z, A-Z, 0-9,!~*'()&=+\$,;?/
Secondary username (Optional)	If defined, the Secondary username can be used to make voice calls in case the connection to the SIP PBX is lost. The Secondary username must be globally unique.
	Note: Allowed characters: a-z, A-Z, 0-9,!~*'()&=+\$,;?/
	In some PBXs there is a mapping between username and number (e.g. Username = hz2539jk, Number = 1234). If the connection to the SIP PBX is lost, then it is possible to make the mapping internally by defining a Secondary username.
Domain (Optional)	Enter the domain part of a SIP URI. Note: Allowed characters: a-z, A-Z, 0-9,

Field	Setting
	Note : If not configured, the default domain entered under SIP configuration will be used.
Display name (Optional)	The name of the user can be entered here (or the same as entered as Standby Text).
	E.g.: Ext 101, John Smith
	Note: Disallowed characters: <>\"
Authentication user	Enter the Dstny Authorization ID provided with the SIP Settings for the extension.
	Note: Disallowed characters: <>\"
Authentication password	Enter the Dstny Password provided with the SIP Settings for the extension.
	Note: Disallowed characters: <>\"
Features	
Call forward unconditional	A Call Forward Unconditional can be added/removed via the web-based Administration Page.
	Note: Allowed characters: a-z, A-Z, 0-9,!~*¹()&=+\$,;?/
Admin rights (Optional)	If enabled, the user becomes an admin rights user with the ability to replace a broken handset.



- **3** The required fields are:
 - a. Username / Extension
 - b. Authentication User
 - c. Authentication Password
- 4 Click Save.
- When the users have been added to the Spectralink IP-DECT Server, the handsets must be DECT subscribed in order to be able to communicate with the Spectralink IP-DECT Server. Please refer to the relevant handset documentation for this.



Note:

You can subscribe up to 12 handsets for Spectralink IP-DECT Server 200, up to 60 handsets for Spectralink IP-DECT Server 400, or up to 4096 handsets for both Spectralink IP-DECT Server 6500 and Virtual IP-DECT Server One to register to Dstny; typically, the same number of users configured with Existing Devices.



Note:

To check if your phone is online after manual provisioning, go to Admin Portal > **Phone System > Phones & Devices > User Phones**. Your phone is online when you see a Green Check User.

User	Displayname	♦ IPEI	♦ Handset	Firmware	Registration
device.anma	Andy	05003 0522863			~
device.brwe	Brian	05003 0745087	Spectralink 7202	22B	~
device.dini	Dion	05003 0749626	Spectralink 7642	22B	~
device.jala	Jacob	05003 0746031	Spectralink 7212	22B	~