

## FortiVoice Multilocation Configuration Guide

FortiVoice Multilocation Configuration Guide

April 8, 2013

26-730-201297-20130408

Copyright© 2013 Fortinet, Inc. All rights reserved. Fortinet<sup>®</sup>, FortiGate<sup>®</sup>, and FortiGuard<sup>®</sup>, are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance metrics contained herein were attained in internal lab tests under ideal conditions, and performance may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet's General Counsel, with a purchaser that expressly warrants that the identified product will perform according to the performance metrics herein. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet's internal lab tests. Fortinet disclaims in full any guarantees. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.

Technical Documentation	docs.fortinet.com
Knowledge Base	kb.fortinet.com
Customer Service & Support	support.fortinet.com
Training Services	training.fortinet.com
FortiGuard	fortiguard.com
Document Feedback	techdocs@fortinet.com

# FortiVoice<sup>™</sup> Multilocation Configuration

## **Configuring FortiVoice systems in multiple locations**

FortiVoice systems in different locations can be integrated for seamless collaboration and improved customer service. Calls can be transferred between locations and extensions in one location can call extensions in another.

FortiVoice systems can also integrate with off-site telephones for small locations that don't require a full telephone system. For information about integrating offsite phones, refer to the user guide for the system.

If you are connecting only 200-series systems, you can skip the first section and proceed directly to "Configuring a 200-series system" on page 6.

## Configuring an FVC-40S, 40, 70 or 100

FortiVoice systems in multiple locations can be connected over the public internet or a closed network such as a VPN. Extensions in any office can call any other office by using a location code prefix. Calls can be transferred and conferenced between locations.

The global dial plan is set by the central administrator and instantly broadcast to all other locations.

#### Setting up the global dial plan: master system

1. Select the Global Dial Plan page in the FortiVoice management software.

User Key: Ske	iy123		
Password: Pas	isword		
Lo	ocation code:	View Directory	
Lo	cation name:		
Hobel dial plan config	juration date: Dec 20 16:07		
all Handling			
Mode 1 Mod	e 2   riskosy Mode		
When a call come	s in on this phone number, perform	the following action:	
go to auto attenda	srit 🔽 1	×	

- 2. Check the Global dial plan server checkbox.
- **3.** Check the *This site is the master location* checkbox. Enter your public IP address. If you're using a VPN, enter the IP address of the system.
- 4. Create an 8-character user key. The user key will be shared among the locations.
- 5. Create a password. The password is for authentication of the plan and should be known to the central administrator only.

#### Add the locations

1. Click on the Create dial plan file button. The Create Dial Plan File window opens.

A CONTRACTOR OF A CONTRACTOR O	IF/FGDIN	SIP Port	HTTP Port	Numbering Plan	ID
			Add	Edit F	Remove

2. Click the Add button. The Add Location window opens.

Add Locat	ion 🛛 🔀
Name:	Location Code:
IP/FQDN:	Numbering Plan: 3 digits 🗸
SIP Port:	HTTP Port:
	Done Cancel

- 3. Enter the name of the master location.
- 4. Assign a location code. Location codes can be 2 or 3 digits. Each location code must have the same number of digits.
- 5. Enter the IP address or Fully Qualified Domain Name of the location.
- 6. Select the number of digits in the master location's dialing plan.
- 7. Enter the SIP port and HTTP port values. The defaults are 5060 for SIP and 8484 for HTTP.
- 8. Click Done.
- 9. Repeat for all other locations.
- 10. Save settings to the system.

#### Setting up the global dial plan: all other FVC-40S, 40, 70 and 100 systems

1. Select the Global Dial Plan page in the FortiVoice management software at each location.

Jobal dal plan server		
Automatic synchronization		
This site is the master location		
Server address: 192.168.1.200		
User Key: Skey123		
		_
Location code:	View Directory	
Location name:		
Global dial plan configuration date: Dec 20 16:07		
Global dial plan configuration date. Dec 20 16:07		
Global dial plan configuration date. Dec 20 16:07		
Global dial plan configuration date: Dec 20 16:07		
Clobal dial plan configuration date: Dec 20 16:07	following action:	
Global dial plan configuration date: Dec 20 16:07 Cell Handling Mode 1 Mode 2 Fill Handling Mode 1 When a cell comes in on this phone number, perform the op to auto attendent	following action:	
Clobal dial plan configuration date: Dec 20 16:07 Call Handling Mode 1 Mode 2 Functory Mode Vhen a call comes in on this phone number, perform the go to auto attendant	r following action:	
Clobal dial plan configuration date: Dec 20 16:07 Call Handling Mode 1 Mode 2 Hinklay Mode   When a call comes in on this phone number, perform the go to auto attendant	r following action:	
Clobal dial plan configuration date: Dec 20 16:07 Coll Handling Mode 1 Mode 2 Hinklay Mode   When a call comes in on this phone number, perform the go to auto attendant	following action.	
Clobal dial plan configuration date: Dec 20 16:07 Coll Handling Mode 1 Mode 2 Hinklay Mode   When a call comes in on this phone number, perform the go to auto attendant	r following action:	
Clobal dial plan configuration date: Dec 20 16:07 Coll Handling Mode 1 Mode 2 Hinklay Mode   When a call comes in on this phone number, perform the go to auto attendant	following action:	
Clobal dial plan configuration date: Dec 20 16:07 Coll Handling Mode 1 Mode 2 Hinklay Mode   When a call comes in on this phone number, perform the go to auto attendant	following action.	
Clobal dial plan configuration date: Dec 20 16:07 Coll Handling Mode 1 Mode 2 Hinklay Mode 1 When a call comes in on this phone number, perform the go to auto attendant 1	following action.	
Clobal dial plan configuration date: Dec 20 16:07 Coll Handling Mode 1 Mode 2 Hinklay Mode:   When a call comes in on this phone number, perform the go to auto attendant	following action:	

- 2. Check the Global dial plan server checkbox.
- **3.** Enter the public IP address of the master system. If you're using a VPN, enter the private IP address of the master system.
- **4.** Enter the user key.
- 5. Save settings to the system.

#### Using the directory

Click the *View Directory* button for the full directory of all extensions in all locations. Each location's directory can be exported as a comma-separated file by clicking the *Export* button.

#### **Call Handling**

If a user dials a location code without an associated extension number, the call will go through to that location. You can set the way a location handles those calls in the *Call Handling* section.

## **Configuring a 200-series system**

Follow these steps for each location you want to connect to:

- 1. Login to the FVC200D/200D-T web administration.
- **2.** Go to *Trunk* > *Office Peer* and click *New*.

FortiVoice 2	00D-T
Monitor 🕢 🕀	Office Peer
System 🛨	Trunk Settings
PBX + Extension + Extension + Irunk  PSTN / PRI SIP Office Peer Dial Plan +	Name:       Location 1         Enabled:       ✓         Type:       SIP         Remote server:       192.168.1.10         Remote port:       5060         SIP setting       sip_setting_default         Fetch directory       New
Service 🕀	Authentication Settings
Log Settings	<ul> <li>Incoming authentication</li> <li>Inbound name: FortiVoice</li> <li>Outgoing authentication</li> <li>Outbound name: FortiVoice</li> <li>Shared password: Password</li> </ul>
	Create Cancel

- 3. In the Name field, enter a name for the other location.
- 4. In the *Remote server* field, enter the IP address of the system in the other location.
- 5. In the *Remote port* field, enter the SIP signaling port of the other location. The default is 5060, but we recommend you change the port in all locations for enhanced system security.
- 6. In the SIP setting pull-down menu, select SIP\_settings\_default. If you wish to adjust the default settings, consult the system's user guide.
- 7. Under Authentication Settings, check the Incoming authentication box.
- 8. In the Inbound name field, enter FortiVoice.
- 9. Check the Outgoing authentication box.
- 10. In the Outbound name field, enter FortiVoice.
- 11. In the Shared password field:
  - **a.** If the system you're connecting has an FVC-200D or 200DT, assign a password that both systems will use.
  - **b.** If the system you're connecting has an FVC-40S, 40, 70 or 100, use the global dial plan password of that system.

**12.** Go to *Dial Plan > Outbound* and click *New*.

Vonitor          Outbound          Vonitor          Dialplan Setting          8%            6%            6%           6%           6%           6%           6%           6%           6%           6%           6%           6%           6%           6%           finbound           DiD Mapping           ervice           fall Report           og Settings           explication	FortiVoice	200D-T	
ystem	Aonitor		
Frunk     Image: State of the s	System ( PBX ( Extension (	Dialplan Setting Name: Location 1 Foohled: D	
Inbound     DID Mapping       DID Mapping     Match Pattern       ervice     +       fall Report     +       og Settings     +       Call Handling Action	runk I Dial Plan I Outbound	Emergency call:	
all Report	Inbound DID Mapping Service	Image: Second	Strip Prefix Postfix
	all Report og Settings	Call Handling Action	
		Create Cancel	
Create			

- **13.** In the *Name* field, enter a label for the other location.
- 14. Under Dialed Number Match, click New > New.
- **15.** In the *Match Pattern* field, enter the location code of the other location and an X for each digit in the other location's dial plan for extension numbers. If the other location has an FVC-40S, 40, 70 or 100, the location code must match the code in the global dial plan.
- 16. Under Call Handling Action, click New.
- 17. In the Schedule pull-down menu, select the appropriate schedule.
- **18.** In the Action pull-down menu, select Allow.
- **19.** In the *Outgoing trunk* pull-down menu, select the name you assigned in step 3.

stem 🛨 📻 X 🕀	Dialplan Setting					
x 🛨 tension 🕀	Name: Location					
tension 🕀		11				
USER CONTRACTOR CONTRACTOR	Enabled:					
nk 🕀	Emergency call: 🔲					
al Plan 🛛 🚍 💻						
Dutbound	Dialed Number Match					
Inbound DID Menning	🖾 New   🖾 Edit   🕯	Delete				
DiD Mapping	Match Pattern			Ism	n Prefix Postfix	
rvice 🗄	Create New Record					
l Report 😫	Call Handling Action					
) Settings 🛛 🛨 🗧	Schedule:	any_time	~	New	Edit	
	Action:	Allow	~			
	Outgoing trunk:	Location (office-peer)	~	Edit	New	
	Caller ID modification:	None	~	New	Edit	
	Warning message:	-None	~	New	Edit	
1	Delay:	0 (Sec	onds)			
	,.		,			

**20.** Go to *Dial Pan > Inbound* and click *New*.

Fortivoice 2		
Monitor 🗄	Inbound	
System 🛨	From Trunk	
PBX 🛨	Available : (3/4)	Selected : (1/4)
Extension 🛛 🕀	GDP	Location
Trunk 🛨	nri1	
Dial Plan 🛛 😑	e	
Outbound		
Inbound		
DID Mapping		
Service 🛨	· · · · · · · · · · · · · · · · · · ·	×
Call Report 🛛 🕀		
Log Settings 🛛 😁	Dialed Number Match	
	- Caller ID Match	
	El New   Edit   Delete	
	Caller ID pattern	
	Caller ID Modification	
	Apply modification profile:None	New Edit
	Call Handling	
	Action type: Dial local number	×
	Dial Pattern	
	🔂 New 🖾 Edit 🛍 Delete	
	Match Pattern	Strin Prefix Postfix
	100xxx	3
	Create Cancel	

- **21.** In the *Name* field, enter a label for the other location.
- **22.** Under *From Trunk*, select the name you assigned in step 3.
- 23. Under Call Handling, select Dial local number for the Action type.
- **24.** Under *Dial Pattern*, click *New* and add the location code of this location followed by an *X* for each of the digits in this location's extensions.
- **25.** Under *Strip*, enter the number of digits in the location code of this location. For example, if your location code is 100, enter *3*.