ForwardT Software

FDOnAir: Function of Mirroring, Remote Control



Configuration of Network Connection Between Machines

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User's Guide

 \bigcirc SoftLab-NSK

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FCC ID:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Shielded cables and I/O cards must be used for this equipment to comply with the relevant FCC regulations. Changes or modifications not expressly approved in writing by SoftLab-NSK Ltd. may void the user's authority to operate this equipment.

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This warranty is in lieu of any other warranty expressed or implied. In no event shall we be held liable for incidental or consequential damages, such as lost revenue or lost business opportunities arising from the purchase of this product.

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Introduction

To use in FDOnAir a function of mirroring or function of remote control (RemoteOnAir) you need to customize network connection between used machines.

The present document provides with instruction on configuration of network connection.



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Configuration of Network Connection Between Machines

1. General Workflow

Working in mirroring mode or having a remote control over FDOnAir require at least 2 machines. Complete the following steps to configure each of the machines for further dealing:

- 1. Log in using accounts that satisfy specified requirements.
- 2. Customize firewall.
- 3. Configure function of messages exchange in FDOnAir. If you customize remote control you should implement this only on controllable machine.

Detailed information on each step is given below in corresponding sections.

2. Logging-In

1. Be sure that the following requirements are preliminary met:

1. Machines are in one local network group.

2. There is at least one user account that in pair with the second one on another machine meet the following requirements:

- both accounts are created for the same user (the same user name is specified);
- both accounts have the same configuration:
 - presence of administrative rights;
 - request of a password when entering the system.
- 2. Log in on each used machine under name that meets item 1.

Example: User names on both machines can be different. Let there are several created accounts with administrative rights and password protection on 2 machines:

- machine №1 User1, User2, User3;
- machine №2 User1, User3, User5, User7.

In this case logging in on each machine must be implemented under the User1 or User3 names for further working.

It is not obligatory to have identical user names on both machines, for example, on the first machine it can be User1, on the second – User3.

3. Configuration of Firewall

For remote control and mirroring configure Firewall (switch it off/customize exceptions for the SLMessageServer2 service).

Complete the following on each machine if Firewall is on:

- 1. Open Control panel via Start: Settings > Control Panel.
- 2. Double-click Windows Firewall (1).



3. Be sure that On (2) is selected in the appeared window on the General tab.

The following steps should be implemented in this window.



4. Pass to the Exceptions tab (3) and click the Add port... button (4).

🐱 Windows Firewall	X
Advanced	
Windows Firewall is blocking incoming network connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.	
Programs and Services:	
Name	
Bonjour File and Printer Sharing File and Printer Sharing Karata Salarian Salarian Salarian Salarian Salarian UPnP Framework Windows Messenger	
Add Program Add Port Edit Delete Display a notification when tindows Firewall blocks a program 4 What are the risks of allowing exceptions?)
OK Cancel	

- 5. In the Add a Port window:
 - 1. Be sure that TCP (5) is selected.
 - 2. Specify name of a service in the Name field (6):
 - SLMessage-Server2.
 - 3. Specify SLMessageServer2 port number in the Port number field (7).
 - Port 51051 is used by default.
 - 4. Click OK(8) to apply the settings and close the window.

	Add a Port 🔀					
	Use these settings to open a port through Windows Firewall. To find the port number and protocol, consult the documentation for the program or service you want to use.					
	6 <u>Name:</u> SLMessageServer2					
\bigcirc						
	(5)—⊙ICP OUDP					
	What are the risks of opening a port?					
	Change scope OK Cancel					
	8					

6. Specified service is added to the Programs and Services list (9).

	🖗 Windows Firewall
	General Exceptions Advanced
	Windows Firewall is blocking incoming network connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.
	Programs and Services:
	Name
9-	Bonjour File and Printer Sharing Microsoft Office Outlook Remote Assistance Remote Desktop SLgraph SLgraph U SLMessageServer2
	☑ Windows Messenger ▲dd Program ▲dd Pgrt ☑ Display a gotification when Windows Firewall blocks a program
	What are the risks of allowing exceptions?
	OK Cancel
ľ	

7. Click OK (10) to save the settings and close the window.

4. Configuration of FDOnAir for Message Exchange

Complete the following steps for each of the used FDOnAir application instances:

 Launch necessary FDOnAir application instance via shortcut or the Start menu command: Programs > ForwardT Software > OnAir.

/ Important: Remember that FDOnAir application instances launched on both machines have the same numbers to implement mirroring.

🮐 #1: our channel FDOnAir 1.21.100				
F1 F2 F3 😽 F4 😼 F5	F6 -96 dB ▼ <<	F7 📅 F8 🔃	0,	
	0 48 0 48 0 48 0 48 0 48 0 48 0 48 0 48		: :	T <u>x</u>
		F9	F10 F11	F12
1 · · ·				
::		^F9	^F10 ^F11	^F12
		: :	::	:: :
		Show 1st frame	1 Settings	Log-book 🖉 <table-cell></table-cell>
State Start 🔂 Length 🗙 🔞	Name	Start →	💿 🗹 🎞 💻	
15:20:33.31 =0:00:00.00	****		Schedule1	
À State - Start - 🔂 Langth - 🕶 🕅 🗖	Name	Pause III	🗏 🔏 स	

2. Click Settings (1) in the main application window.

- 3. Pass to the Mirroring tab (3) in the Settings window (2).
- 4. Put the Receive and execute commands check mark (4).
- 5. Put the Send commands to machines check mark (5) to allow this program instance sending commands to other program instances launched on machines listed below (6).
- 6. Click Browse (7) to add machine to the list (6).



7. Specify necessary machine in the Browse for Computer window (8) and click OK (9).



8. Then click Add (10).



9. Machine name is added to the list (11). Click Close (12) to apply settings and to close the window.



10. Two buttons are activated in the FDOnAir main application window (13). One button enables/disables FDOnAir instance to receive and execute external commands. The second button enables/disables FDOnAir instance to send commands to another applications (including other FDOnAir instances).



Additional Information

Modifying of Port Number for the SLMessageServer2 Service

There is a possibility of modifying default port number. For this you should use the regedit.exe utility (Windows registry editor).

1. Click Start, then Run... (1).



2. Specify regedit in the appeared window in the Open field (2). Then click OK (3).

	Run 🤶 🔀	Run
2)—	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.	Open:
	3 OK Cancel Browse	3

3. Regedit.exe is launched and the Registry Editor window appears.

🗊 Registry Editor					
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>H</u> elp					
🗈 🧰 (null)	^	Name	Туре	Data	
⊕ · ⊡ AppEvents ⊕ · ⊡ CLSID	-	•••)(Default)	REG_SZ	(value not s	
Console					
🕀 🧰 Control Panel					
Environment					
🖻 📃 Identities					
🕀 🦳 Keyboard Layout					
<		<		>	
My Computer\HKEY_CURRENT_USER\Software\SoftLab-NSK\SLTelephone\Settings					

Additional Information

4. In the appeared window:

1. Pass to the HKEY_LOCAL_MACHINE > SOFTWARE > Softlab-NSK > SLMessageServer2 section (4).

2. Double-click parameter that you want to modify: HTTP or NetTCP (5).



5. Specify new value data in the appeared window (6). Then click OK (7).

	💣 Regi	stry Editor				
	File Edi	t View Favorites Help				
		SLGraphSchedule	r 🔥	Name	Туре	Data
			-	(Default)	REG_SZ	(value n
		Edit String			? 🔀	localhos
6)—	Value <u>n</u> ame: NetTCP Value data: <mark>localhost:51051</mark>				
<u> </u>				ОК	Cancel	
	±	HKEY_CURRENT_CONFIG	~			
	<		>	< (7)		>
	My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\SoftLab-NSK\SLMessageServer2					

- 6. Close registry editor window. Made modifyings will be saved after clicking OK.
- 7. Do not forget to adjust Firewall exceptions after modifying port number.

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Useful Links

Forward T Product Line: Description, Software Delivery, Documentation, Ready Solutions

http://www.softlab-nsk.com/forward/index.html

Support

http://www.softlab-nsk.com/forward/support.html e-mail: forward@sl.iae.nsk.su forward@softlab-nsk.com forward@softlab.tv

Forum

http://www.softlab-nsk.com/forum (currently available in Russian only)

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