How to configure WebMux in OOP(DSR) mode for Microsoft LCS servers

To not make big changes to the network, Out-of-path (OOP)mode – also called Direct Server Response (DSR) mode is desired. In OOP mode, the imcoming traffic from clients send to the farm address, WebMux then forward those client requests to the proper LCS server. If WebMux detected any LCS server down, it will only send client to the available LCS server, so that the communication will interrupted. Since OOP mode has WebMux in the same internal network address range, there is no need to change the IP address settings of LCS servers.

To minimise the impact of the addition of WebMux and secondary of LCS servers, it is recommend to work with the WebMux and newly added LCS server first. Once that is working fine, then add the original LCS server to the LCS farm, so that they are load balanced. There are three main steps to take for this configuration: 1) Using pushbotton to configure WebMux for OOP mode; 2) Using browser to configure farms and server; 3) Configure LCS servers to join the farm.

We assume you already have FQDN for the LCS server running. If you are doing a fresh installation, you will need to configure each FARM address with FQDN in your LDAP server or your DNS server and populated to all the potential users' computer. In this document, we use LCSPOOL.PREY.BIRDS.NET as FQDN, which is mapped at IP address 10.51.32.231. You can replace the FQDN with your LCSPOOL and your internal IP address defined for the LCSPOOL in your LDAP/DNS servers.

1) Configure WebMux basic settings using pushbuttons

First power on WebMux, please allow a minute or two before it boot up into operation. Do not keep flip the power switch, which could cause damage to the WebMux. It is recommended using browser interface to shutdown the WebMux, if needed.

WebMux will come up with version number, then instruction flying on the LCD display. The instruction is to tell you hold check mark key to start configuration. You will be prompt for the following questions:

WebMux's host name without domain	S2098_test
WebMux's domain name	
dispatch method	OOP (out of path)
Router LAN gateway IP address	
WebMux's server LAN IP address	
WebMux's server LAN network mask	
Remake password file with default passwords?	
WebMux administration HTTP port	
WebMux administration HTTPS port	
Is this WebMux a primary (or solo) WebMux?	
Is this WebMux running solo without a secondary?	
Server LAN gateway IP address on WebMux (not same as server LAN IP address above!) (required for NAT, optional for OOP, use 0.0.0.0 to omit)	
Reinitialize configuration with admin entries only? (destroys existing configuration!)	<b>_</b>
Reboot immediately after submitting this form?	<b>•</b>
Submit when satisfied or cancel and log out.	submit

Once those questions are answered and submitted, WebMux will reboot into OOP mode.

2) Configure LCS farm and servers on WebMux

First, add farm for TCP port 5060:

	ity Solution Help built-in scalabilitywebserver loadbalancer
CAI Networks, Inc	

## add farm

The services tcp, udp and ip (both of tcp and udp) are generic. Bad server detection is less rigorous for such services. A blank port number (default) means to use the default well-known port for the specified service. For the generic services, a port number of 0, \*, or all denotes the wild specification of all ports. The wild port specification is not allowed for other services.

IP address	10	51	32	231
label			port number	5060
service	generic (TCP	)		
scheduling method	weig	phted round robin - p	persistent	•
SSL termination	(none)	•	SSL port	
block non-SSL access to farm		N	0 -	
tag SSL- terminated HTTP requests		Ν	0 🗸	

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Then, click on the farm, select the button "add Addr & Port" to add TCP port 5061 using MAP feature of WebMux:

	ade farm	d IP address/ : 10.51.32.231	port I:5060	
IP address	10	51	32	231
label			port number	5061
service	generic (TCP)			•
SSL termination	(none)	(none) • SSL port		
block non-SSL access to farm		N	0 🕶	
tag SSL- terminated HTTP requests		N	0 -	

Then click on the first line of the farm, and then select the "Add Server" button to add the LCS

	far	add serve m: 10.51.32.2	er 31:5060	
P address	10	51	32	227
label			port number	same
weight		1		
run state		ACTIVE	÷	

And then add server two into the farm:

servers. First add server 1:



## add server farm: 10.51.32.231:5060

IP address	10	51	231	241
label			port number	same
weight		1		
run state		ACTIVE		



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Configure LCS servers to work in the LCS farm.

First, add loopback adapter to each LCS server:

```
- 0 ×
ex C:\WINDOW5\system32\cmd.exe
Microsoft Windows [Version 5.2.3790]
(C) Copyright 1985-2003 Microsoft Corp.
                                                                                        *
C:\Documents and Settings\osinstaller.PREY>ipconfig /all
Windows IP Configuration
  Node Type . . . . . . . . . . . . . . . . . . Unknown
IP Routing Enabled. . . . . . . . . . No
WINS Proxy Enabled. . . . . . . . . . No
DNS Suffix Search List. . . . . . . . birds.net
                                     prey.birds.net
                                     eng.sc.rolm.com
Ethernet adapter Local Area Connection 2:
  Connection-specific DNS Suffix .
  Microsoft Loopback Adapter
                                   : 02-00-4C-4F-4F-50
  Default Gateway . . . . . . . . . . . . .
Ethernet adapter Local Area Connection:
  DNS Servers . . . . . . . . . . . . .
                                   : 10.51.32.210
 :\Documents and Settings\osinstaller.PREY>
                                                                                        •
4
                                                                                      ×
```

Microsoft Office Live Communications Server 2005	Status Resources				
Domains     D	Live Communications Ser	ver 2005			
Archiving Services     Archiving Services     Archiving Services     Archiving Services     Dive Communications servers and p	Domain				-
<ul> <li></li></ul>	prey, birds.net Prep state: Ready Domain Add to Forest Root: Ready				
😟 🚺 director 🕀 🫄 Archiving Services	Archiving settings:		Default certificate settings:		
Proxy Servers     Tory Servers     Tory Servers     Tory Servers     Tory Servers     Tory Server 2003	Live Communications server: Icspool2.prey.birds.net Icspool1.prey.birds.net serverone.prey.birds.net Ics4.prey.birds.net proxyg.prey.birds.net director.prey.birds.net	Archiving server: <empty> <empty> <empty> <empty> <empty> <empty></empty></empty></empty></empty></empty></empty>	Live Communications server: lcspool2.prey.birds.net lcspool1.prey.birds.net serverone.prey.birds.net lcs4.prey.birds.net proxyg.prey.birds.net director.prey.birds.net		
	<u>a</u> l			_	1
	Available Tasks:       Unprep     Unprepares the domain I       Domain Add     Grants permissions to a s       Domain Remove     Revokes permissions for	by removing groups and permissions pecified domain in order to access th a specified domain on this domain.	required for Live Communications Se nis domain.	rver 2005.	

In LCS configuration, first configure the subdomain for LCS:

licrosoft Office Live Communications Server 200	5			
Help				
Microsoft Office Live Communications Server 2005	Status Resources			
	Miles growing			
E birds.net	ELive Communications S	erver 2006		
Live Communications servers and pools			-	
E prey.birds.net				
E- Live Communications servers and p	pool1.prey.birds.net			
Dippool1	SQL server instance:	lcsbackend\pool1db		
E Icspool2.prey.birds.net	Enterprise Edition servers:	2		
🚊 🌉 lcspool1.prey.birds.net	Number of devices users are logged on:	353		
E pool10	Federation overwrite:	<b>*</b>		
	Network address:	director1.prey.birds.net		
Archiving Services	Authentication scheme:	Kerberos		
exotic.birds.net	Archiving:	0		
Unassigned users				
ive Communications Server 2003	Server-to-Server compression settings:			Client-to-Server compression settings
	C Request compression on outgoing server	-to-server connections	_	Enable compression on client-to-server connection
	Maximum number of server-to-server co	nnections:	1024	
	and a final second s			and a sector to business
	Archiving settings:	A . AND A		Default certificate settings:
	Live Communications server:	Archiving <empty></empty>	server:	Live Communications server:
	lcspool1.prey.birds.net	<empty></empty>		lcspool_prey.birds.net
	Outbound static routes:			Address Book Links;
	Enabled: Matching URI: Next Hop:	Port:	Transport:	URL:
	<ul> <li>SIP:*@mcu1pool mcu1pool.pr</li> <li>SIP:*@mc2pool.p.</li> </ul>	ey, birds, net 5060	TCP	file:\\lcsbackend\LC AB DataStore
	SIP:*@birds.net prozvo.nrev	birds.net 5061	TLS	
	SIP:*@prey.birds proxyg.prey	.birds.net 5061	TLS	
	SIP:*@mcu2pool mcu2pool.pr	ey.birds.net 5060	TCP	
	SIP:*@ms1pool.p ms1pool.pre	y.birds.net 5060	тср	1
	4	and the second sec		



You are done! Congratulations, you have configured LCS working with WebMux in OOP mode.