

NetPBX

Product Documentation

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Home Legal & copyright notices

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Customers without a maintenance contract will be charged for any software upgrades they require, as well as for any technical assistance needed during the upgrade procedure.

System requirements

Hardware

Any modern standalone PC will comfortably run a copy of NetPBX. The following specification are preferred:

- 2 GHz Dual-Core x86/x86-64 CPU
- 1 GB memory
- 40 GB hard disk
- Ethernet TCP/IP network
- Serial RS232-C where required by PBX

Software

NetPBX can be installed on any PC with a Microsoft Windows 2000 - Windows 7 (Server editions up to 2003).

A web browser is required to operate the software and, whilst any standards-compliant browser should be compatible, we have extensively tested the following ones:



- Microsoft Internet Explorer 6+
- Mozilla Firefox 2+
- Apple Safari
- Google Chrome
- Opera

What is NetPBX?

Overview

NetPBX is a stand-alone software utility that can be used to replace or extend the in-built data collection methods in our TIM Professional, TIM Plus and TIM Enterprise call logging products.

Its main purpose is to acquire call records from PBXs, routers and other telecom signalling equipment and send these across to a specified output location - the call logging software - using any of the following methods:

- Serial (RS232) connections
- Client socket connections
- · Server socket connections

When and where you should use NetPBX

NetPBX is always required for serial connections to PBX equipment, since this ensures a separate data buffer between the PBX and the call logging software.

Additionally, where your infrastructure spans multiple geographical locations, NetPBX can be installed at each one to provide remote buffering and delivery of data back to the central site, where your call logging software is installed.

Installing NetPBX

To obtain a copy of the NetPBX software, contact our Technical Support team.

To install the software, double-click on the setup package and follow the setup wizard in order to complete the installation:



Once installed, you can access NetPBX via any standard web browser. To configure your controllers to collect and deliver your call logging data, refer to the Controllers section below.

Accessing the system

NetPBX can be accessed via a standard web browser from any PC on your network.

To access NetPBX, open a web browser, go to the IP address or host name of the PC running NetPBX and log in using the following credentials:

- username: netpbx
- password: netpbx

Firefox Connecting +	
Image: Constraint of the second se	jle 👂 🖡 🏠 🗖 🗖
Authentication Required	
A username and password are being requested by http://localhost:8090. The si	te says: "NetPBX"
User Name: netpbx	
Password:	
OK Cancel	
Waiting for localhost	

The main interface of NetPBX will be displayed, where you can view a list of the currently-configured controllers, as shown below:

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NetPBX			
All controllers			
Ŭ	All controllers		
O London			
	NAME	STATUS BUFFER AGE	
	London	S No data	
	Manchester	😣 📃 No data	
+ New controller			
Settings			

When you first install the software, the All controllers list will be empty. To add a controller, refer to the Adding a controller section.

Controllers

8

What is a controller?

A controller is the system object that allows you to collect and deliver your call logging data from a data source to an output location. The controller can encompass one or more inputs or outputs, and each input/output instance can invoke a different type of connection.

To see a list with all the controllers configured in the system, click on the All controllers button, as shown below:

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Birmingham	All controllers				
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London	Birmingham	8		No data	
Manchester	London	8		No data	
	Manchester	8		No data	
+ New controller					
Settings					

To view or edit the settings of a controller, refer to the Configuring a controller section.

Firefox *						×
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O London	Birmingham	8		No data		
Manchester	London	8		No data		_
	Manchester	8		No data		
New controller						
Settings						

To add a new controller to the system, refer to the Adding a controller section.

Adding a controller

To add a controller to the system, click on the New controller tab at the bottom-left corner of the screen, as shown below:

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	All controllers			
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	Manchester	😵 📃 No da	ta	
+ New controller				
Settings				

A new window will appear, allowing you to name your controller. Click on the Add button to add the new controller to the system, as shown below:

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NetPBX			
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Manchester	London	8 No dat	J
	Manchester	😢 📃 No da	а
	New controller	0	
	Name	Sirmingham	
		Add	
+ New controller			
Settings			

The summary screen will be displayed, allowing you to enter the details of your controller. For information on how to configure these details, check the Configuring a controller section.

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NetPBX	+	
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		Bookmarks
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Birmingham	Summary	birmingham
Dimingham	Inputs	
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Manchester		
		All inputs
		NAME TYPE STATUS LAST RECEIVED
		Add new
		All outputs
		NAME ТҮРЕ
		<u></u>
New controller		Add new
Settings	🔅 Settings	
•		III

Configuring a controller

Overview

To configure a controller, select it from the All controllers list, as shown below:

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	NAME	STATUS BUFFER AGE	
London	Birmingham	S No data	
Manchester	London	8 No data	
	Manchester	S No data	
Hew controller			
🔅 Settings			

The Summary screen will be displayed, allowing you to configure the inputs and outputs of the selected controller.

Summary

The summary screen gives you an overview of all the inputs and outputs configured for the selected controller. From here you can add new inputs/outputs to the controller or navigate to the configuration section of each particular input/output and modify their settings.

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		Add new							
		All outputs							_
		NAME			ТҮРЕ				
		London output			clientsocket				
		Add new							
+ New controller									
🔅 Settings	🔅 Settings								

When you first set up the system, the Summary screen will be empty. For information on how to add an input or output to a controller, refer to the Inputs or Outputs sections below.

Inputs

An Input is the system object that connects to a data source, such as PBXs, routers and other telecom signalling equipment, in order to collect the call logging data.

Inpu	ts
2	Adding an input
2	Configuring an input
2	Input types
2	Deleting an input

Adding an input

To add a data input, click on the Add new button from either the summary or the Inputs screen, as shown below:

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All controllers	E Back	All inp	uts					
Birmingham	Summary							
O London	Inputs	NAME	ТҮРЕ	STATUS	LAST RECEIVED			
Manchester		Add new						
+ New controller								
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A new window will open, allowing you to name the input. Click on the Add button to add the input to the system, as shown below:

Firefox	
Calhost:8090	Ţ ☆ ▼ C 8 - Google P + ↑ II -
NetPBX All controllers Back Summary London Manchester 	Apply changes All inputs NAME TYPE STATUS LAST RECEIVED Add new New input Name Breinigham serial Image: Image and the image and
+ New controller	

The input-configuration screen will be displayed. For information on how to configure these settings, refer to the Configuring an input section below.



Configuring an input

To configure a data input, select it from the All inputs list, as shown below:

Firefox •						- C X
NetPBX		+				
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All controllers	🔶 Back	🔶 Back	Birmingham serial	
Birmingham	Summary	ريم) Birmingham serial	Diriningham senai	
	Inputs	O	Name Riminsham serial	
	Outputs		Type Serial port	
			Port name No Serial port found Baud rate 9600 Parity None Data bits 8 Handshake None Buffer size 8132 Buffer threshold 4096 Stop bits 1 Set Data Terminal E Ready Save	
+ New controller				
🔅 Settings	🔅 Settings	+ New input		

The settings displayed in this window will be described below:

Name

The Name field allows you to view or edit the name of the selected input. To rename, overtype the current entry.

Туре

The Type field allows you to specify the connection method you want to use to collect the data from the phone system. The following connection methods are supported in NetPBX:

- Listener
- Serial port
- · Client socket
- Pipe server
- BCM SSH
- XML file
- File reader
- BCM DCOM

Input types

Listener

This method creates a socket and binds it to a specific port, accepting any data received on the connection without challenge.

Name	Birmingham serial
[ype	Listener
Connection messag	ge
Port	7000
Address family	IPv4
Socket type	Stream
Protocol type	TCP

Field	Description
Connection message	An optional greeting message which is sent to any connecting socket. This message can include one or more of the following variables:
	 {remoteip} - the IP address of the remote party
	 {remoteport} - the remote party's source port
Port	The port that the listener should bind to
Address family	The address family of the socket
Socket type	The type of data flow the socket expects
Protocol type	The type of protocol the listener will use

Serial port

This method allows the connection of a serial (RS-232) device.

Name	Birmingham serial	
Туре	Serial port	
Port name	No Cariol part found	
Raud rate		
Parity	None	i -
Data bits	8	i -
Handshake	None	i
Buffer size	8192	1
Buffer threshold	4096	j .
Stop bits	1	
Set Data Terminal		
Ready		

Field	Description
Port name	The name of the serial port device, e.g. COM 1, COM 2
Baud rate	The serial port's speed

Parity	 The parity check regime none - no parity checking is performed odd - odd bits parity checking is performed even - even bits parity checking is performed
Data bits	The number of data bits, between 5 and 8
Handshake	The type of handshake the serial port requires: none - no handshake required rts - request to Send xonxoff - X-On/X-Off rtsxonxoff - either RTS or X-On/X-Off is used
Buffer size	The size of the data buffer of the serial port
Buffer threshold	The size that the buffer must first reach before being empty
Stop bits	The number of stop bits used

Client socket

This method creates a TCP socket and connects to a remote host.

Name	Birmingham serial	
Туре	Client socket	
Address	192.168.0.1	
Address family	IPv4	
Port	7000	
Username	Alcatel OmniOffice Enter	
Password		
IP script	•••••	
Trickle frequency	0	
	*	

Field	Description
Address	The IP address or hostname to which the socket should connect
Address family	The address family of the socket
Port	The port that the listener should bind to
Username	The username required by the data source, if applicable
Password	An optional password which is sent upon successful connection
IP script	The script file used by NetPBX to check for new data

Trickle frequency	When the system becomes inactive, NetPBX sends a string of data back to the remote host in order to test the connection. Sending the trickle back data will emit a detectable error in case a disconnection has occurred and, thus, will cause the connection to reset. The Trickle frequency option allows you to configure the amount of inactivity that must occur (in miliseconds) before a trickle back is performed.
Trickle data	A string containing the data to be sent back

Pipe server

This method opens a global named pipe and accepts any data that is sent to it.

Name Type	Birmingham serial Pipe server
Pipe name	\\.\pipe\NetPBX
Buffer size	4096
Delete	Save

Field	Description
Pipe name	The name of the pipe that is created
Buffer size	The size of the buffer, in bytes, that is allocated to the pipe

BCM SSH

This method registers a connection with the Nortel CDRClient.dll library and receives data-callbacks whenever the PBX produces data.

Name	Birmingham serial	
Туре	BCM SSH	
Host	192.168.0.1	
Username	nnadmin	
Password	•••••	
App ID	0	
Delete	Save	

Field	Description
Host	The IP address or hostname of the BCM PBX
Username	The username required to access the CDR events
Password	The password required to access the CDR events
App ID	The unique ID number given to each source of data.

XML file

This method monitors an XML file for new nodes. To specify which nodes to monitor, an XPath query is used; to identify which nodes are new, a unique element is required. Default properties are designed to work with the ticketcollector.xml file produces by an Alcatel OmniPCX Enterprise PBX.

Name Type	Birmingham serial XML file
Location	{app}\ticketcollector.xml
X-Path query	CallAccountingList/CallA
Checksum node	Checksum
Outer element	CallAccountingList
Check interval	10000
Delay	2000
Delete Save	

Field	Description
Location	The full filename of the XML file to be monitored. The $\{app\}$ variable can be used to specify the program data location of the running service

X-Path query	The XPath query to use when testing for new nodes		
Checksum node	The unique node(element) to be used to track which nodes have been added since the last check		
Outer element	The name of the outer XML element to be used to contain any new nodes when the new XML document is created for output		
Check interval	The time interval the system is checking for a new node.		
Delay	A value, in milliseconds, that specifies the artificial delay that is waited when a change in the source XML file is discovered.		

File reader

This method opens a connection to an actual file.

Name	Birmingham serial
Туре	File reader
Location	
Delay	2000
Delete	Save

Field	Description
Location	The path of the folder where the file is located

BCM DCOM

Name	Birmingham serial	
Туре	BCM DCOM	
Host		
Delete	Save	

Field	Description
Host	The IP address or hostname of the BCM PBX

Deleting an input

To delete a data input, select it from the All inputs list, as shown below:



A new window will open on the right-hand side panel. Click on the Delete button to remove the input from the system, as shown below:



Outputs

An Output is the system object that delivers the collected call logging data to a specified location.



Adding an output

To add a data output, click on the Add new button from either the Summary or the Inputs screen, as shown below:

Firefox T		_		
NetPBX	+			
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NetPBX	<u> </u>			Apply changes
All controllers	🔶 Back			
Birmingham	Summary	All Outputs		
	Inputs	NAME	TYPE	
	Outputs		ITTE	
Manchester		Add new		
+ New controller				
🔅 Settings	🔅 Settings			

A new window will open, allowing you to name the data output. Click on the Add button to add the output to the system, as shown below:

Firefox •	
Re NetPBX	
NotDRY	Google 𝔑 ♦ 🖬 🖬
NetPBX All controllers NetPBX All controllers NetPBX Summ London Manchester Nanchester	All outputs NAME TYPE Add new New output Immigham client socket Immigham client socket Immigham client socket
New controller	
Settings 🔅 Settin	

The output-configuration screen will be displayed. For information on how to configure these settings, refer to the Configuring an output section below.

Firefox *				
NetPBX	ost-8090			
i i i i i i i i i i i i i i i i i i i				Bookmarks
NetPBX				Apply changes
 All controllers Birmingham 	🔄 Back	Back Birmingham client	Birmingham client socket	
London	InputsOutputs		Name Birmingham client socket Type File	
			Location Delete Save	
🔅 Settings	🔅 Settings	+ New output		

Configuring an output

To configure a data output, select it from the All outputs list, as shown below:

Firefox •				
NetPBX		+		
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				💽 Bookmarks
NetPBX	<u> </u>			Apply changes
All controllers	🔶 Back			
Birmingham	Summary	All outputs		
	Inputs			
London		NAME	TYPE	
Manchester	O contras	binningnam client socket	clientsocket	
		Add new		
+ New controller				
🔅 Settings	🔅 Settings			

A new window will open on the right-hand side panel, allowing you to configure the settings of your data output:

Firefox 🔻				
NetPBX	+			
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				🔀 Bookmarks
NetPBX	\sim			Apply changes
All controllers	🔶 Back	🔶 Back	Birmingham client socket	
Birmingham	Summary	A Birmingham client	birmingham cheft socket	
	Inputs			
	Outputs		Name Birmingham client socket Type Client socket	
Manchester				
			Port 0	
			Connection Close	
		L		
New controller				
Settings	Settings	+ New output		

The settings displayed in this window will be described below:

Name

The Name field allows you to view or edit the name of the selected output. To rename, overtype the current entry.

Туре

The Type field allows you to select the method you want to use when delivering the call logging data to an output location. The following methods are supported:

- File
- HTTP Post
- Serial port
- Client socket

Output types

File

This method opens a file and creates or appends buffered data.

Name	Birmingham client socket
Гуре	File
Location	C:\ProgramData\Tri-Line
Delete	Save

Field	Description
Location	The name of the file to output data to. If the location doesn't exist, an attempt is made to create it, including the path. The following variables are replaced:
	{app} - The path to the location of the application's data folder, e.g. C:\ProgramData\Tri-Line\NetPBX.

HTTP Post

This method allows you to deliver data to a running instance of TIM Plus or TIM Enterprise by way of an HTTP POST. The HTTP headers include the datasource information required for the receiving application to identify the source of the data.

Name	Birmingham client socket
Туре	HTTP Post
D	
Protocol	http
Host	192.168.0.1
Port	80
Username	
Password	
Data source	
Delete	Save

Field	Description
Protocol	The protocol to use when constructing the URL of the target server to send data to
Host	The IP address or hostname where the receiving HTTP server is listening

Port	The port number to which the target HTTP server is bound
Username	The username required to access the target server
Password	The password required to access the target server
Data source	The UIV of the PBX datasource object in the target application, which will be deemed to have created the source data

Serial port

This method opens a serial (RS-232) port and sends any received data to it.

Name Type	Birmingham client socket
Port name	No Serial port found
Baud rate	9600
Parity	None
Data bits	8
Handshake	None
Buffer size	8192
Stop bits	1
Write timeout	500
Delete	ave
belete	

Field	Description
Port name	The name of the serial port device, e.g. COM 1, COM 2
Baud rate	The serial port's speed
Parity	 The parity check regime none - no parity checking is performed odd - odd bits parity checking is performed even - even bits parity checking is performed
Data bits	The number of data bits, between 5 and 8
Handshake	<pre>The type of handshake the serial port requires: none - no handshake required rts - Request to Send xonxoff - X-On/X-Off rtsxonxoff - either RTS or X-On/X-Off is used</pre>
Buffer size	The size of the serial port's data buffer
Buffer threshold	The size that the buffer must first reach before being empty
Stop bits	The number of stop bits used

Client socket

Creates a momentary TCP client socket connection to a remote TCP server.

Туре	Client socket
Host	localhost
Port	0
Connection	Close
Delete	Save

Field	Description
Host	The IP address or hostname of the remote TCP server
Port	The TCP port number to which the remote TCP server is bound
Connection	Determines the behaviour of the connection:
	close - creates and closes the connection every time data is sent
	• keepalive - creates a connection at startup, then sends any data over the existing (up) connection, each time
	some is received

Deleting an output

To delete a data input, select it from the All outputs list, as shown below:

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				🔝 Bookmarks
NetPBX	<u> </u>			Apply changes
All controllers	🔶 Back			
Birmingham	Summary	All Outputs		
	Inputs		1	
London	Outputs	NAME Birmingham client socket	TYPE	
Manchester	U		cherto y exer	
		Add new		
+ New controller				
🔅 Settings	🔅 Settings			

A new window will open on the right-hand side panel. Click on the Delete button to remove the output from the system, as shown below:

Firefox T				
NetPBX		+		
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				🔀 Bookmarks
NetPBX				Apply changes
All controllers	🔶 Back	🔶 Back	Pirmingham client cocket	
Birmingham	Summary		birmingham client socket	
	Inputs	Birmingnam client		
London			Name Birmingham olient socket Type Client socket	
Manchester	O anten			
			Host localhost Port 0	
			Connection Close	
			Delete Save	
+ New controller				
🔅 Settings	🔅 Settings	+ New output		

Settings

To configure the general properties of a controller, select it from the list of controllers and click on the Settings tab at the bottom-left corner of the screen, as shown below:

WetPBX + ♦ localhost:8090 ☆ C S - Google P ↓ Back Birmingham	⋒ kmarks es
 ♦ Iccalhost8090 ♦ Coogle ♦ Ecc ♦ Birmingham 	marks es
NetPBX Apply chang	kmarks es
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All controllers Back Summary Birmingham	
Birmingham	
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All inputs	
	_
NAME TYPE STATUS LAST RECEIVED	
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All outputs	
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Birmingham client socket clientsocket	
Add new	
+ New controller	
Settings Settings	

A new window will open, allowing you to edit the properties of the controller, as shown below:

Firefox •	
RetPBX	+
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NetPBX	Apply changes
 All controllers Birmingham London Manchester Back Summary Inputs Outputs 	<section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header>
+ New controller	

Each field in this section is described in the table below:

Field	Description			
Name	The name of the controller			
Dequeue time	The frequency (in milliseco	The frequency (in milliseconds) that the controller's dequeue timer checks the data buffer		
Dequeue linger	Determines whether or not	the dequeue timer is reset wh	nenever any input receives data	
Timestamp format	Defines a string to place befollowing variables: {year} The current {month} The current {day} The current {hour} The current {minute} The current {second} The current \r Carriage re	fore every line of data when i year, formatted as "yyyy" month, formatted as "mm" day, formatted as "dd" hour, formatted as "hh" minute, formatted as "mm" second, formatted as "ss" turn	t is dequeued. The string can contain any or all of the	
	\n Line feed			
Timestamp in UTC	Indicates that the UTC time	should be used as the time s	stamp, rather than the local time (default)	

Timestamp encoding	Selects the type of encoding to use during conversion of byte array data to strings (and viceversa) when timestamping.		
	The following values are accepted:		
	default	Use the operating system default	
	ascii	Use plain (7-bit) ASCII	
	unicode	Use Unicode double-byte encoding	
	utf8	Use UTF8 versatible encoding	

Deleting a controller

To delete a controller, select it from the list of controllers and click on the Settings tab at the bottom-left corner of the screen, as shown below:

Firefox *							x
RetPBX	P0				nale	J.	
	50		М			Bool	kmarks
NetPBX						Apply change	es
All controllers	Back Summary	Birmingham					
London) Inputs						-
Manchester		All inputs					
		NAME	ТҮРЕ	STATUS	LAST RECEIVED		
		Birmingham serial	serialport	8	No data		
		Add new					
		All outputs					
		NAME		г	TYPE		
		Birmingham client socket		c	lientsocket		
		Add new					
+ New controller							
Settings	Settings						

A new window will open on the right-hand side panel. Click on the Delete button to remove the controller from the system, as shown below:

Firefox 🔻			
NetPBX	+		
🔶 🔶 🎯 localhos	st:8090	☆ マ C 🛛 🔂 マ Google	오 🖡 🏫
			🔀 Bookmarks
NetPBX			Apply changes
All controllers Image: Controller state Image: Controller state <th> Back Summary Inputs Outputs </th> <th>Settings</th> <th></th>	 Back Summary Inputs Outputs 	Settings	
➡ New controller			
Settings	Settings		

NetPBX settings

To configure the general properties of NetPBX, click on the Settings button from the main NetPBX screen, as shown below:

Firefox *			
NetPBX	+		
			Bookmarks
NetPBX			
All controllers			
	All controllers		
Manchester	NAME	STATUS BUFFER AGE	
	London	8 No data	
	Manchester	No data	
New controller			
Settings			
Containings			

The NetPBX settings window will open, where you can configure its properties, such as IP address, port number or login credentials, as shown below:

Firefox T				
NetPBX	+	A T C Conale	D L	<u>ه</u> الآب
NetPBX	31.0030			
All controllers	NetPBX Settings			
O London				
Manchester	Bind address			
+ New controller				
Settings	·			

Field	Description
Bind	If the PC running NetPBX has more than one IP address, you can bind the web service to the IP address you want NetPBX to use.
Port	By default, NetPBX is running on port 8090. To change the port number, overtype the current entry.
Realm name	
Username	Enter a username that will used to login to NetPBX
Password	Enter a password that will be used to login to NetPBX

Knowledgebase

Connecting BCM v3.7 or below with NetPBX

Follow the instructions below to connect a BCM v3.7 or below with NetPBX:

1. Make sure the CDRServer.EXE and Interop.CDRSERVERLib.dll files are placed in the same folder as NetPBX.EXE, usually located in {pf}\Tri-Line\NetPBX.

🗁 NetPBX					
File Edit View Favorites Tools	Help				
🕒 Back 👻 🕥 - 🏂 🔎 Se	arch 🝺 Folders 🛛 🎹 🗸				
Address 🛅 C:\Program Files\Tri-Line\N	etPBX				
	Name 🔺	Size	Туре	Date Modified	
File and Folder Tasks 🛛 🛠	🔊 CDRClient.dll	176 KB	Application Extension	17/05/2010 08:10	
Alaka a naw falder	CDRServer.exe	36 KB	Application	31/01/2005 14:57	
Make a new rolder	🖬 CDRServer.tlb	3 KB	TLB File	31/01/2005 14:57	
Publish this folder to the Web	🔊 Interop.CDRSERVERLib.dll	7 KB	Application Extension	23/10/2012 19:57	
Shara this folder	💐 NetPBX.exe	92 KB	Application	23/10/2012 19:57	
Share this tolder	🔊 osa40.dll	1,112 KB	Application Extension	27/05/2010 03:24	
	💏 Uninstall NetPBX	2 KB	Shortcut	24/10/2012 12:33	

- 2. Register CDRServer.EXE by running the command line with administrator privileges and typing the following command under the directory path of the NetPBX folder: CDRServer.EXE/regserver.
- 3. Open the computer's local security policies: Start -> Control Panel -> Administrative Tools -> Local Security

Policy.	
😼 Local Security Settings	
File Action View Help	
← → X 🖹 😫	
Security Settings Account Policies Ga Account Policies Ga Local Policies Dalic Key Policies Software Restriction Policies Software Restriction Policies Software Network Policies on Local Computer	Name Account Policies C Docal Policies Public Key Policies Software Restriction Policies Plot Security Policies on Local C

4. Within the Security Settings\Local Policies\Security Options tree, change the following items as highlighted in the screenshot below:

😼 Local Security Settings			
File Action View Help			
⇔ ⇒ 🗈 🗙 🗗 🗟 😫			
📴 Security Settings	Policy /	Security Setting	
🗄 🧾 Account Policies	👪 Audit: Shut down system immediate	Disabled	
E 📴 Local Policies	🔠 DCOM: Machine Access Restrictio	Not defined	
🕀 Audit Policy	BDCOM: Machine Launch Restrictio	Not defined	
User Rights Assignment	👪 Network access: Shares that can b	COMCFG,DFS\$	
E Cecurity Uptions	🔀 Network access: Sharing and secu	Guest only - local us	
Public Key Policies	👪 Network security: Do not store LAN	Disabled	
Software Restriction Policies	👪 Microsoft network client: Digitally si	Disabled	
H Security Folicies on Local Computer	👪 Network access: Do not allow stor	Disabled	
	🔠 Network access: Let Everyone per	Disabled	
	😼 Network access: Named Pipes that	COMNAP,COMNOD	

- a. Network Access: Let Everyone permissions apply to anonymous users. Set this to Enabled.
- b. Network Access: Sharing security model for local accounts. Set this to Classic.
- C. DCOM: Machine Access Restrictions: Click on <u>Edit Security</u> and add the following user accounts: Anonymous, Everyone, Interactive, Network, System. Set each one to have full access rights.

DCOM: Machine Access Restrictions in Security Descriptor Defi ? X	Access Permission	? ×
Template Security Policy Setting Explain This Setting	Security Limits	
DCDM: Machine Access Restrictions in Security Descriptor Definition Language (SDDL) syntax If the security descriptor is left blank after defining the policy setting in the template, the policy setting will not be enforced.	Group or user names:	
Security descriptor: [0:BAG:BAD:(A;;CCDCLC;;;AN)(A;;CCDCLC;;;WD)(] Edit Security	Add Permissions for ANONYMOUS LOGON LOcal Access Remote Access	Remove Deny
OK Cancel Apply	ОК С.	ancel Apply

5. Next step is to modify the way DCOM behaves on the computer by executing the DCOM configuration program: Start -> Run -> DCOMCNFG [enter]. Browse the tree to the following location: Console Root -> Component Services -> Computers -> My Computer. Righ-click on My Computer for Properties and amend or update the following options:



a. On the **Default Properties** tab: Enable Distributed COM on this computer: tick the box for his option Default Authentication Level: set this to Connect

Default Impersonation	Level: set this to Identify
-----------------------	-----------------------------

y Computer Properties			3	12
Default Protocols) General O	MSDTC Iptions) (Defau	COM Security It Properties	
 Enable Distributed COM or Enable COM Internet Serv 	n this computer ices on this corr	iouter		
Default Distributed COM Cor The Authentication Level sn	mmunication Pro	perties	tlevel	1
Default Authentication Lev	vel:			
who is calling them, and who using the client's identity.	ether the applica	ation can do	operations	
Identify	0.	•		
Security for reference trackin and that the default imperso Provide additional sec	ng can be provi nation level is n urity for referenc	ded if auther ot anonymou e tracking	ntication is used Is.	112
	ОК	Cancel	1 Applu	

b. On the COM Security tab:

Go to the Access Permissions section and select Edit default .

Add the following accounts and set both local and remote access permissions: Anonymous, Everyone, Interactive, Network, Local Service and System.

My Computer Properties	? X Access Permission	<u>? ×</u>
General Options Default Properties Default Protocols MSDTC CDM Security Access Permissions You may edit who is allowed default access to applications. You may also set limits on applications that determine their own permissions. Edit Limits Edit Default Launch and Activation Permissions You may edit who is allowed by default to launch applications or activate ohiects. You may also set limits on applications that	Default Security Group or user names: ANONYMOUS LOGON Everyone INTERACTIVE NETWORK SELF	Add Remove
determine their own permissions.	Permissions for SYSTEM Local Access Remote Access	
OK Cancel Apply	уОК	Cancel Apply

Go to the Launch and Activation Permissions Section and click on Edit default tab.

Add or update the following accounts to give them all local and remote access permissions: Anonymous, Everyone,

Interactive, Network, Local Service and System.

	ies	
General Default Protocol:	Options) s) MSDTC	Default Properties COM Security
Access Permission	s	
You may edit wh also set limits on	o is allowed default access applications that determine	to applications. You may their own permissions.
	Edit Limits	Edit Default
You may edit wh activate objects. determine their o	o is allowed by default to lau You may also set limits on a wn permissions.	unch applications or applications that
You may edit wh activate objects. determine their o	o is allowed by default to la You may also set limits on a wn permissions. Edit Limits	unch applications or applications that Edit Default
You may edit wh activate objects. determine their o	o is allowed by default to lau You may also set limits on a wn permissions. Edit Limits	unch applications or applications that Edit Default
You may edit wh activate objects. determine their o	o is allowed by default to la: You may also set limits on a wn permissions.	unch applications or applications that
You may edit wh activate objects. determine their o	o is allowed by default to la You may also set limits on a wn permissions.	unch applications or applications that

25 INTEDACTIVE		
& INTERACTIVE & LOCAL SERVICE & SYSTEM		
	Add	Remove
rmissions for SYSTEM	Allow	Deny
Local Launch Remote Launch	য হ	
Local Activation		
Remote Activation		