OFFICECONNECT ISDN LAN MODEM RELEASE NOTE V. 6.2.0 (ST) AND 5.3.0 (U)

Introduction

This release note describes the following enhancements made to the OfficeConnect ISDN LAN Modem as part of the latest firmware releases.

- Enhanced Dial-in Support
- Callback Feature
- Upgrade Check Feature
- Local DNS Table
- LAN Modem Desktop Manager (Windows 95/98/NT)
- Miscellaneous Enhancements

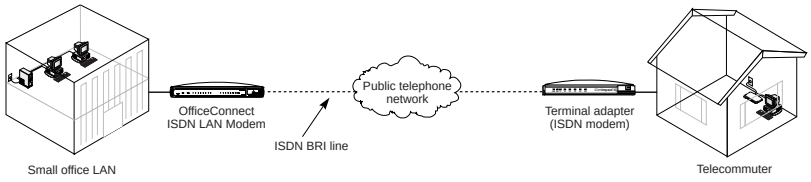
Enhanced Dial-in Support

Previously, the LAN Modem provided limited dial-in capability, such as accessing a remotely located LAN Modem for remote configuration or to check statistics. Now Dial-in support has been enhanced to extend access to workstations or servers located behind a remote LAN Modem.

Dial-in Applications

The following dial-in scenarios are supported by the LAN Modem. If you would like more detailed descriptions of these scenarios, refer to "Understanding the Three Dial-in Scenarios" later in this release note.

Dial-In Wizard Profile Name	Network Scenario
Single User	Terminal adapter calls into a LAN Modem.



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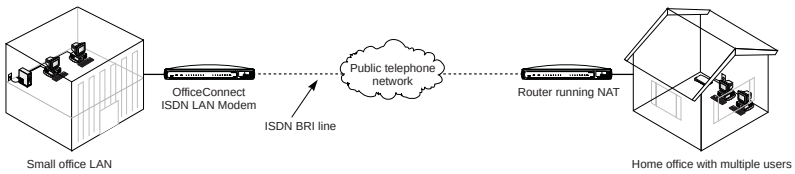
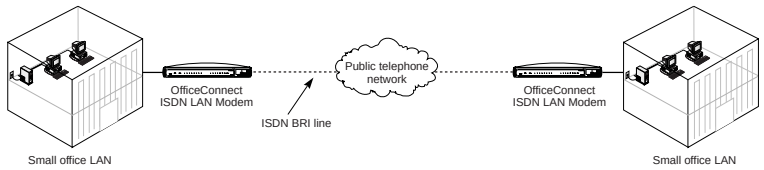
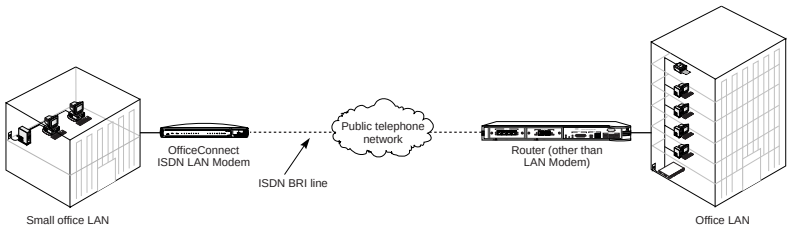
Dial-In Wizard Profile Name	Network Scenario
Single User	Router (such as a LAN Modem) running NAT calls into a LAN Modem.



LAN Modem Site to Site	LAN Modem to LAN Modem



Advanced	Router other than a LAN Modem calls into a LAN Modem



Configuring Dial-In

There are three main steps for configuring dial-in support.

1. Change remote administration password
2. Create dial-in user profile on server or central site
3. Create service provider profile on client or remote site

Before you Begin

Before you begin configuration, please note the following:

- Any remotely-located device you wish to access on the remote LAN Modem must be running appropriate software, such as a Web or FTP server.

  Examples of server software are Apple's Personal Web Sharing for the Macintosh or Microsoft's Peer Web Services for Windows 95/98. Check with your computer's accompanying documentation for more information.

- A LAN Modem can only accept dial-in calls from a device that matches its own call type.

  For instance, an ISDN LAN Modem will only accept dial-in calls from an ISDN terminal adapter or another ISDN LAN Modem or router. Calls from a 56K LAN Modem or other analog modems are not permitted for dial-in access.

Changing the Remote Administration Password

Previously, when dialing into a LAN Modem to configure it remotely or check statistics, you were prompted to enter the password associated with the LAN Modem's configuration parameters. Additional security has now been added which requires a unique user name and password for remote access. This is referred to as the Remote Admin account and is reserved for remote configuration only. This account does not provide dial-in access to LAN or WAN resources other than the LAN Modem configuration parameters themselves. By default the user name is **Admin** and the password is **1234**. Note that the username and password is case sensitive.

To change the default username and password (recommended), do the following.

1. Click the *Dial-in* button located on the LAN Modem's mainpage.

   The Dial-in Configuration submenu opens.

2. Click the *Dial-in Users* button.

   The Dial-in User Selection screen opens.

3. Select *Admin* and then click *Next*.
4. In the Username field, delete the default name and then enter the new name.
5. In the Password field, delete the default password and then enter the password.

Configuring the Server LAN Modem

Configuring the server LAN Modem for Dial-in support requires two main steps:

- Configure global dial-in parameters
- Create a dial-in user profile for each dial-in connection you require

Configuring global dial-in parameters

Dial-in Global parameters allow you to allocate B channel resources and set dial-in authentication preferences to be used for all dial-in users.

1 From the LAN Modem's main configuration page, click *Dial-In*.

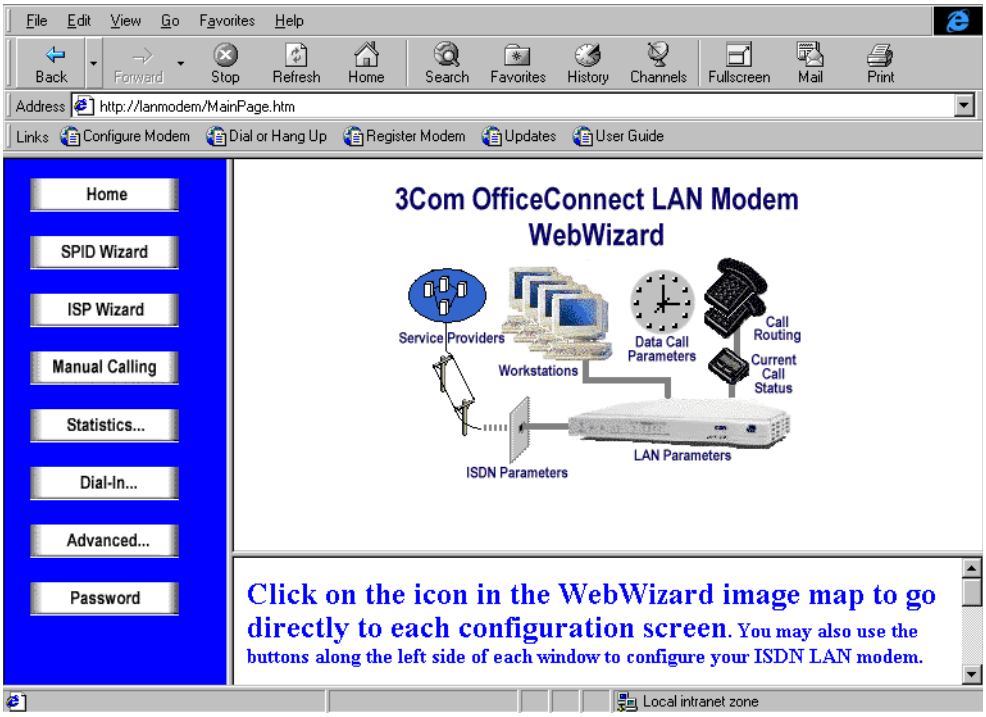


Figure 1 LAN Modem Main Configuration Page

2 Click *Dial-in Global*.

Figure 2 Dial-In Global Parameters Screen

3 In the Channels allocated for Dial-in field, select *1* to limit available dial-in channels to one (the default). Choose *2* to allow either a single-user Multilink PPP dial-in, or to allow two different dial-in users simultaneous access. Note that if two simultaneous dial-in users are connected, outgoing calls from the server LAN Modem are unavailable.

4 In the Allow Multilink field, select the checkbox to use both B channels for each dial-in call if requested by the dial-in user, or leave this box unchecked to use one B channel per dial-in call. Note that if you choose to allow Multilink, both B channels will be used for the dial-in call, however one B channel will be dropped when outgoing calls are placed from the server LAN Modem. Multilink is disabled by default.

5 In the Callback Prefix field, if a telephone number prefix is required to get an outside line, such as a 9, enter that number. Otherwise, leave this field blank.

6 In the LAN to LAN Site Number, designate the LAN Modem site for dial-in access from other LAN Modems which will employ the LAN Modem Site-to-Site scenario. Note that setting the site number may change the IP address of the LAN Modem, as described below.

- Choose *Site A* to designate this LAN Modem's IP address as 192.168.1.1 (the LAN Modem's default IP address, unless it has been changed).
- Choose *Site B* if this LAN Modem will place or receive calls to another LAN Modem which has been configured as Site A. Choosing *Site B* will change this LAN Modem's default IP address to 192.168.2.1

For example, if you have already designated a remote LAN Modem as Site A, and you are now setting up a second LAN Modem for LAN-to-LAN connectivity, you would designate this second LAN Modem as Site B. This will differentiate between the two IP addresses, which by default are the same.

- Choose *Site C* if this LAN Modem will place or receive calls to another LAN Modem previously configured as Site A or Site B. Choosing *Site C* will change this LAN Modem's default IP address to 192.168.3.1
- Choose *None* (the default) to leave the LAN Modem's IP address unchanged. You might choose *None* if you will never employ the LAN Modem Site-to-Site scenario with this LAN Modem (that is, all of your dial-in users will employ the Single-User Dial-in scenario), or an advanced user might choose this option if the IP address of the LAN Modem has been manually configured for static IP addressing.

7 In the PPP Authentication field, choose the type of PPP authentication you want the LAN Modem to use when negotiating dial-in access. By default, PAP, CHAP and MS-CHAP are enabled. This means that if the client side can do any of the three, authentication will be successful. Note that at least one must be enabled.

8 Click *Submit* to save changes. If you chose Site B or Site C as the LAN to LAN Site Number, the LAN Modem will re-initialize as its IP address is reset. The front panel LEDs flash, indicating a reset in progress.

Once the LAN Modem IP address has been changed, you can no longer access the LAN Modem until your workstation has been restarted and has acquired an IP address belonging to the new LAN Modem subnet.

Create a Dial-In User Profile Using the Dial-In Wizard

Before dialing into the LAN Modem, a dial-in user profile must be created for every user or site that requires access. To create a dial-in user profile on the central site using the Dial-In Wizard, refer to the appropriate application below for specific Dial-In Wizard instructions. For more detailed descriptions of these scenarios, refer to "Understanding the Three Dial-in Scenarios" later in this release note.

- Single User dial-in (Terminal adapter or a router, such as a LAN Modem, running NAT)
- LAN Modem Site-to-Site dial-in (LAN to LAN bidirectional connectivity)
- Advanced dial-in (unknown router dialing into a LAN Modem)

Single User Dial-In Wizard Instructions

1 From the LAN Modem main configuration page, click *Dial-in*.

2 Click *Dial-in Wizard*.

The Dial-in Wizard screen opens, as shown in Figure 3.

Figure 3 Dial-In Wizard Profile Type Selection Page

3 Select *Single User* and then click *Next*.

The Username and Password page appears, as shown in Figure 4.

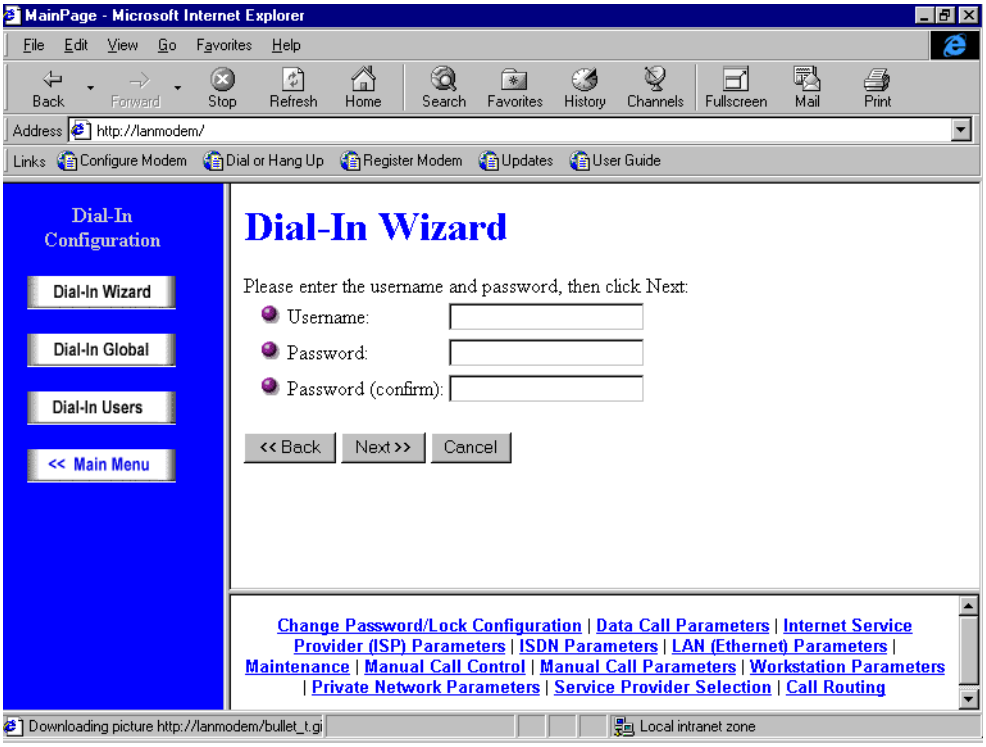


Figure 4 Dial-In WIzard Password Screen

4 Enter a unique name and password to identify and verify this dial-in user when dialing into this LAN Modem. This will match the username and password configured on the client dial-in device.

5 Click *Next.*

The Dial-in Wizard Service Provider selection screen opens.

6 Choose the Service Provider which this dial-in user may access when dialing into this LAN Modem. To disable remote service provider access for dial-in users, choose *None.*

7 Click *Finish*.

This completes the dial-in configuration for single user. To continue setting up your LAN Modem for dial-in access, go on to "Configuring the Client Site".

LAN Modem Site-to-Site Dial-In Wizard Instructions

1 From the LAN Modem main configuration page, click *Dial-in*.

2 Click *Dial-in Wizard*.

3 Select *LAN Modem Site-to-Site* and then click *Next*.

The password page appears.

4 Enter a unique name and password to identify and verify this dial-in user when dialing into this LAN Modem. This will match the username and password which will be entered in the client LAN Modem's service provider profile.

5 Click *Next*.

6 Specify the site name you would like to designate for this dial-in user's LAN Modem, A, B or C. Note that this site name must be different from the site name designated in this LAN Modem's Dial-In Global Parameters, in order to distinguish between the two networks. The site name specified here will match the site name configured in the client LAN Modem's Dial-in Global Parameters.

7 Click *Next*.

The Dial-in Wizard Service Provider Screen opens.

8 Choose the Service Provider which this dial-in user may access when dialing into this LAN Modem. To disable remote service provider access for dial-in users, choose *None.*

9 Click *Finish*.

This completes the dial-in configuration for LAN Modem Site-to-Site dial-in. Go on to "Configuring the Client Site".

Advanced Dial-In Wizard Instructions

1 From the LAN Modem main configuration page, click *Dial-in*.

2 Click *Dial-in Wizard*.

3 Select *Advanced* and then click *Next*.

The Username and Password page appears.

4 Enter a unique name and password to identify and verify this dial-in user when dialing into this LAN Modem.

5 Click *Next*.

The dial-in user parameters page appears. For configuration instructions refer to "Dial-in Users Parameters Screen" for more information.

Configuring the Client Site

To configure a dial-in user profile on the client site refer to the appropriate section:

- Configuring the client site for a terminal adapter (ISDN Modem)
- Configuring the client site for a LAN Modem

Configuring the Client Site for a Terminal Adapter (ISDN Modem)

If there is a terminal adapter at the client site (that is, an ISDN Modem), use the appropriate software such as Dial-Up Networking for Windows to create a connection to the LAN Modem. The basic steps for creating a Dial-Up Networking connection are as follows.

- Create a Dial-Up Network entry
- Enter the telephone number of the server LAN Modem
- Enter the username and password

Configuring the Client Site for a LAN Modem

If a LAN Modem is the device at the client site, you must create a service provider profile on the client LAN Modem in order to dial into the remote LAN Modem. You then use this service provider to place automatic or manual calls to the server LAN Modem as needed.

When using a client LAN Modem to dial into another LAN Modem via the Single-User scenario, you must manually change the IP address of the client LAN Modem in order to distinguish between the two networks. Refer to "Changing the IP address on the LAN Modem" for instructions.

Configure a Service Provider for this Dial-In Connection

Configure a service provider for this connection as follows.

Before You Begin

You will need the following information.

- Telephone number(s) of the server LAN Modem
- User ID and password of the Dial-in user
- IP address/subnet mask of the server LAN Modem

Additionally, to use the Callback feature, you will need the following information:

- Callback telephone number
- Callback username and password

Setting Up a Connection to a Server LAN Modem

To set up a connection on a client LAN Modem to dial into a server LAN Modem, do the following.

1. From the client LAN Modem's main page, click the *Service Providers* icon.

   The Service Provider Selection screen opens.

2. Choose *New (Private Network)* from the drop-down menu and click *Select*.

   The Private Network Parameters screen opens.

If you already have four Service Providers configured on your LAN Modem, one must be deleted before a new Private Network can be created.

3. In the Name field, enter a name for this service provider, such as the location of the server LAN Modem.
4. In the Telephone Number 1 field, enter the telephone number of the server LAN Modem.
5. In the Alternate Number field, you can enter an alternate number to be dialed in case the first number is unavailable, or enter the second ISDN telephone number if required for Multilink PPP. Select the appropriate option from the drop-down list box and then enter the telephone number in the Number field. Or, leave this field blank.
6. Under *Security*, enter the User ID and Password for this Dial-in User to access the server LAN Modem.
7. Leave the *DNS Addresses* fields blank, as these values are assigned by the server LAN Modem upon connection.

8 Specify Bandwidth Allocation.

9 Under Private Network Parameters, specify your private network parameters.

- Private Network IP Address: Enter the IP address of the server LAN Modem. For instance, if the server LAN Modem has been designated as Site A, or is set to its default IP address, enter 192.168.1.1.
- Private Network Subnet Mask: Enter the subnet mask of the LAN Modem you are dialing into. If you are not sure, leave the default (255.255.255.0).
- Domain Name: Enter the domain name of the server LAN Modem, if applicable. This field may be left blank if you have entered a Private Network IP Address. If you want to access client LAN resources via domain name (that is, "my_net.com") enter an appropriate domain name.

10 Specify Callback parameters if you want to use this feature. Otherwise, leave the defaults.

- Enable Callback: Choose to enable or disable Callback. By default Callback is disabled.
- Callback Delay: Leave the default setting, which is 5 seconds. Callback Delay is the amount of time the server will wait before calling back the client.
- Callback Timeout: Leave the default setting, which is 10 seconds. This is the amount of time that the client waits for the server to call back. Note that this value is in addition to the Call Back Delay value.
- Callback Number: Enter the number that the far end will call back when the LAN Modem connects to the remote server. This allows for the reversing of toll charges for the dial-in call. Note that if a different number is configured on the server, the server callback number takes precedence.
- Callback Username and Password: Enter the username and password of the callback user. These values are used to verify the server's authenticity to the client. These fields should match the login and password fields on the server LAN Modem's dial-in user parameters. Note that callback authentication is optional.

11 Under Miscellaneous, if you want to be able to access the Internet via the server LAN Modem, select the *Yes, I want to access the Internet* radio button. Otherwise, select the *No* radio button, which is the default.

12 Under Miscellaneous, specify the B channel rate. Note that the LAN Modem does not support TollMizer for dial-in calls.

13 Under Miscellaneous, indicate whether or not you would like to use data compression when transferring data by selecting the appropriate radio button.

14 Under Miscellaneous, leave the default, NAT enabled, if the dial-in user will be accessing the remote LAN Modem via the Single-User scenario. For LAN Modem Site-to-Site dial-in, set this field to *No,* as the Site-to-Site scenario does not use NAT.

15 Under WAN Link IP Address: Leave this field blank. The LAN Modem will automatically assign these values upon connection.

16 Under WAN Link Subnet Mask: Leave this field blank. The LAN Modem will automatically assign these values upon connection.

17 For Allow Automatic Call Initiation, leave the default setting which is *Yes*.

18 In the Default Workstation for Incoming Packets field, specify the workstation to which all unsolicited TCP/UDP packets should be delivered.

Note that if the Enable Intelligent NAT field is set to *Yes*, the ISDN LAN Modem first attempts to deliver the unsolicited TCP/UDP packets to the workstation that is currently communicating with the remote host that has generated these packets. Only if no such workstation is found are the packets delivered to the specified default workstation.

19 For Enable Intelligent NAT, leave the default setting, which is *Yes,* in order for the LAN Modem to better support Internet applications and games.

20 Click *Submit*.

If you would like to configure a connection to another server LAN Modem, repeat steps 1 through 20.

Changing the IP address on the LAN Modem

If you will be accessing a LAN Modem server from another LAN Modem via the Single-User dial-in scenario, you must manually change the IP address of the client LAN Modem in order to distinguish between the two networks. This is required because by default the subnet addresses for both LAN Modems are the same (192.168.1.x).

Note that this change occurs automatically when creating a LAN Modem Site-to-Site profile via the Dial-in Wizard.

To change the IP address of the LAN Modem which will dial into the server LAN Modem via the Single-User scenario, do the following.

1 Access the LAN Parameters page on the LAN Modem which will being placing the outgoing call by clicking the LAN Modem icon on the main page.

The LAN (Ethernet) Parameters page opens.

2 Change the IP address field to 192.168.2.1.

The LAN Modem re-initializes itself. The front panel LEDs flash, indicating a rest in progress.

Once the LAN Modem IP address has been changed, you can no longer access the LAN Modem until your workstation has been restarted and has acquired an IP address belonging to the new LAN Modem subnet.

3 Restart your workstation.

The default IP address for the local LAN Modem will have been changed to 192.168.2.1. Similarly, all attached workstations, once restarted, will utilize an IP address belonging to this new subnet (192.168.2.x).

Understanding the Three Dial-in Scenarios

Before you can use the Dial-in Wizard to set up the LAN Modem for dial-in access, you should understand the three dial-in scenarios available for each of your ten authorized dial-in users. The scenarios are as follows.

- Single User Dial-in (terminal adapter or LAN Modem running NAT)
- LAN Modem Site-to-Site Dial-in (LAN to LAN bidirectional connectivity)
- Advanced Dial-in (unknown router accessing a LAN Modem)

Single User Dial-in

Single User Dial-in describes a scenario where a client workstation dials into a LAN Modem via a single ISDN terminal adapter (or another LAN Modem, see below). With Single-User Dial-in the server-side LAN Modem assigns a single IP address to the incoming client, as shown in Figure 5.

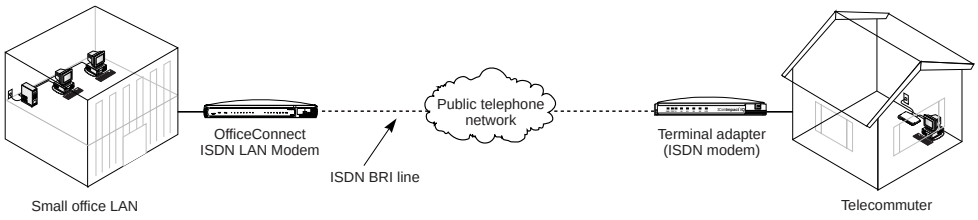


Figure 5 Single User Dial-in

Single-User Dial-in from Another LAN Modem: While Single-User Dial-in provides only one IP address to the dial-in client, the dial-in client may still be another LAN Modem with several attached workstations. In this case, the client-side LAN Modem uses NAT to share the single IP address provided by the server-side LAN Modem, similar to a typical ISP connection, as shown in Figure 6. Note that unlike the LAN Modem Site-to-Site scenario, the Single User scenario does not provide for bidirectional LAN-to-LAN connectivity. While authorized workstations attached to the client LAN Modem can share the connection to the server LAN Modem, workstations connected to the server LAN Modem cannot access client-side resources.

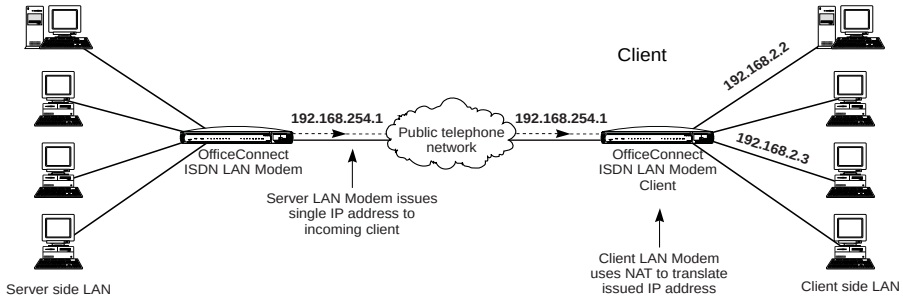


Figure 6 Single User Dial-in with NAT

Choose *Single-User Dial-in* when your dial-in user will access a server LAN Modem via a single ISDN terminal adapter, or via a LAN Modem that will share one IP address for all attached workstations. Note that in this scenario, workstations on the server-side cannot access client-side resources.

LAN Modem Site-to-Site Dial-in

LAN Modem Site-to-Site dial-in describes a scenario where a LAN Modem dials into another LAN Modem, with multiple IP addresses assigned to each LAN device on both sides of the connection, as shown in Figure 7. This scenario allows workstations on both sides of the connection to access servers and resources on each LAN, providing bidirectional LAN-to-LAN connectivity.

When the LAN Modem Site-to-Site scenario is first configured via the Dial-in Wizard, the client LAN Modem (or the LAN Modem which has not been designated Site A) will automatically change its default IP address and restart. This is to distinguish between each LAN Modem's subnet address, which by default are identical (192.168.1.x).

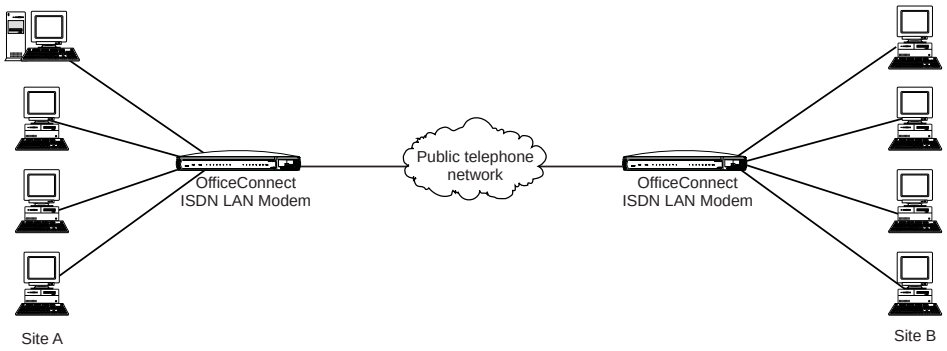


Figure 7 LAN Modem Site to Site Dial-in

In LAN Modem Site-to-Site Dial-in, the target LAN Modem provides its WAN IP address as the DNS server to the client LAN Modem. This scenario allows users across the connection direct access to all available workstations via domain name or IP address.

Choose *LAN Modem Site-to-Site* when your dial-in user will access a LAN Modem from another LAN Modem, where LAN resources are accessible on both ends of the connection.

Advanced Dial-in

Use Advanced Dial-in for scenarios where a router other than a LAN Modem dials into a LAN Modem. Advanced Dial-in assumes that both routers have been manually configured for static IP addressing, and each employs a unique range of addresses.

Choose *Advanced Dial-in* if your LAN is using static IP addressing, or your dial-in user will be accessing the LAN Modem from a router other than a LAN Modem. Note that Advanced Dial-in is the most complex dial-in scenario and may require the assistance of your MIS administrator. Refer to "Configuring Dial-in User Parameters" for more information.

Once you have chosen a dial-in scenario that best fits your dial-in criteria, you are ready to create a dial-in user profile. Refer to "Create a Dial-In User Profile Using the Dial-In Wizard" or "Configuring Dial-in User Parameters" to manually create or further define Dial-in users.

Configuring Dial-in User Parameters

Once the Dial-in Wizard has created a Dial-in User profile, you can further define the dial-in user parameters or manually create a new Dial-in user via the Dial-in User Parameters.

You can create a total of ten dial-in user profiles. If you have created ten profiles and would like to add a new user, you must delete one profile before adding the new one.

To access Dial-in User profiles, do the following.

1 Click the *Dial-in Users* button.

The Dial-in User Selection screen opens, as shown in Figure 8.

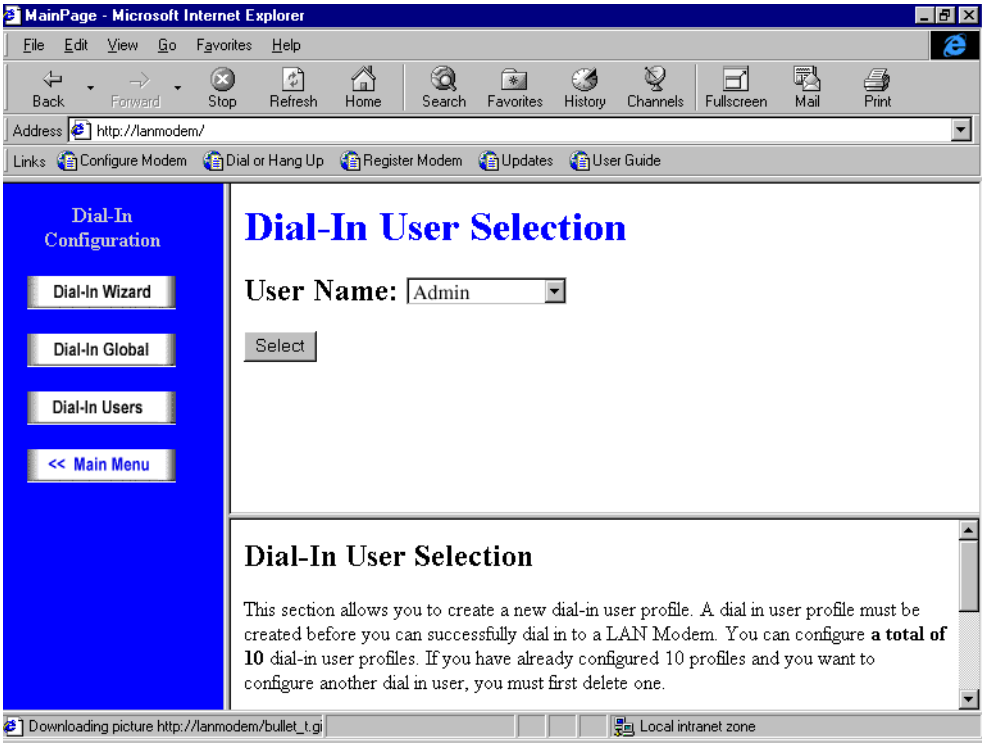


Figure 8 Dial-in User Selection Screen

2 Choose either *New Dial-in User* to manually create a new profile or choose an existing Dial-in User from the drop-down list and click *Select*.

The Dial-in User Parameters screen opens, as shown in Figure 9.

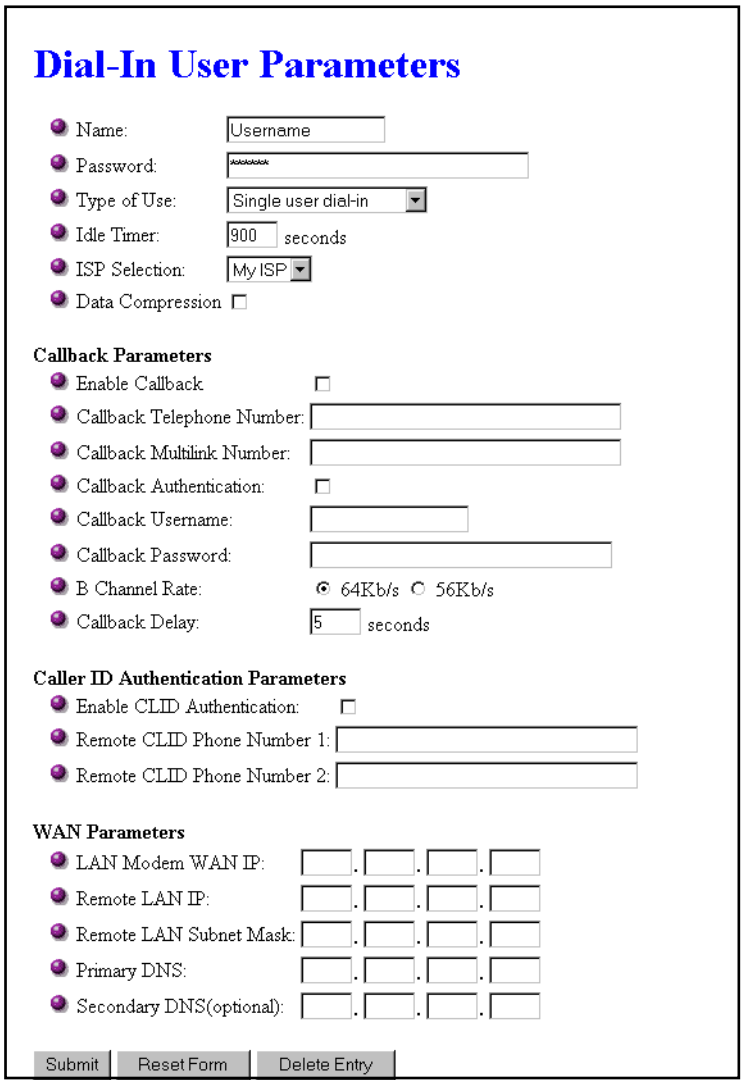


Figure 9 Dial-in Users Parameters Screen

3 In the Name field, enter a unique name to designate this dial-in user. This value should correspond with the username configured on the client.

4 In the Password field, enter a password to verify access when this user dials into the LAN Modem. This value should correspond with the password configured on the client.

5 In the Type of Use field, select the scenario for which your dial-in situation applies. Refer to "Understanding the Three Dial-in Scenarios" for more information.

- Choose *Single-User Dial-in* if this user will be accessing the LAN Modem from an ISDN terminal adapter or from another LAN Modem on which attached workstations will share a single IP address.
- Choose *LAN Modem Site-to-Site* if this user will be dialing in from another LAN Modem which utilizes bidirectional LAN-to-LAN connectivity.
- Choose *Advanced* if this user will be accessing the LAN Modem from a router other than a LAN Modem. This scenario requires that all IP addresses be statically configured, and should be configured by your MIS administrator.

6 In the Idle Timer field, enter the length of inactivity before the LAN Modem drops the incoming call. By default this value is 900 seconds (15 minutes).

7 In the ISP Selection field, select the service provider that this dial-in user can access when dialing into the LAN Modem.

8 In the Data Compression field, choose to have data compression active or inactive. By default compression is disabled. (In order for compression to occur, the other end of the connection must have the same compression active.)

Callback Parameters

This section allows you to enable and configure callback functionality. Callback occurs when, upon a successful connection of dial-in a user, the LAN Modem drops the incoming call and places a return call to the dial-in user.

To specify your Callback parameters, do the following. In order for callback to occur, the other end of the connection must support callback functionality and have it enabled. For more information refer to "Callback Feature".

1 In the Enable Callback field, check to activate Callback for this dial-in user. By default Callback is disabled.

2 In the Callback Telephone Number field, enter the number the LAN Modem will call back when this dial-in user accesses the LAN Modem, to verify the dial-in user's authenticity. Note that this value will override the telephone number provided by the client, should the client provides a different number.

3 In the Callback Multilink Number field, enter a second ISDN telephone to be used for either Multilink PPP or as a second number to try if the call cannot be established with the first telephone number.

4 In the Callback Authentication field, check the box to require callback authentication. Note that Callback Authentication is not required for callback functionality, but provides a further level of security by confirming the server's authenticity to the dial-in user.

5 In the Callback Username and Password fields, enter the username and password which the client will use to verify the server's authenticity. If the dial-in client is a LAN Modem, these values will match the username and password of the client LAN Modem's Callback Login and Password fields, located on the client LAN Modem's service provider parameters page.

6 In the B Channel Rate field, choose to use either 64 Kbps or 56 Kbps for the connection. By default this field is set to 64 Kbps.

7 In the Callback Delay field, enter the amount of time in seconds to wait until the dial-in user is called back. By default this is set to 5.

Caller ID Authentication Parameters

1 If you would like CLID Authentication (Calling Line ID) field, check the *Enable* box which indicates that CLID authentication must be present for the callback to continue. CLID authentication is used to verify the telephone number of the dial-in client. If enabled, the dial-in client cannot call from any other telephone number except the number specified in the Remote CLID field.

2 Remote CLID Phone Number 1: If you are requiring CLID authentication, enter the first expected telephone number for this dial-in user.

3 Remote CLID Phone Number 2: If you are requiring CLID authentication and have two phone numbers, enter the second expected telephone number for this dial-in user.

WAN Parameters

1 LAN Modem WAN IP: If the local LAN Modem WAN link has a static IP address, enter the WAN static IP address. Otherwise leave these fields as set by the Dial-in Wizard. If you are using the Advanced dial-in scenario, enter the IP address of the LAN Modem which is receiving the dial-in call.

2 Remote LAN IP: If the remote site of the WAN link has a static IP address, enter the WAN static IP address. Otherwise leave these fields as set by the Dial-in Wizard. For the Advanced dial-in scenario, enter the IP address of the router which is dialing into the LAN Modem.

3 Remote LAN Subnet Mask: If the remote site of the WAN link has a static IP address, enter the subnet mask of the remote LAN. Otherwise leave these fields as set by the Dial-in Wizard. If you are using the Advanced dial-in scenario, enter the subnet mask of the remote LAN.

4 Enter your Primary and Secondary (optional) DNS address as instructed by your MIS administrator, or as set by the Dial-in Wizard. For the Advanced dial-in scenario, enter the IP address of the LAN Modem which is receiving the dial-in call.

5 Click *Submit*.

Placing a Call to a Server LAN Modem

Once you have created a service provider profile on your client LAN Modem (refer to "Setting Up a Connection to a Server LAN Modem" for more information), you can place a call in one of two ways: You can use the client LAN Modem's Manual Call Control page to manually place a call, or you can simply enter an IP address or domain name of a server attached to the remote LAN Modem, and place the call automatically. Note that this option assumes that you have configured a Private Network as your service provider, and not an ISP.

Once connected, you can use all LAN resources available on the server end of the connection. For further information, visit the LAN Modem's Internet Homepage at **`http://www.remoteaccess.3com.com/support/docs/lanmodem`**.

Callback Feature

In addition to the callback capability for dial-in calls to the LAN Modem, the LAN Modem now supports callback functionality for outgoing calls to a service provider that supports callback.

When a LAN Modem places an outgoing call to a service provider which supports callback functionality, once the call connects, the remote server drops the call and places a return call to the LAN Modem, providing a further level of security.

Service Provider Callback options are set via the Service Provider Parameters page. Refer to "Setting Up a Connection to a Server LAN Modem" for more information.

Upgrade Check Feature

The LAN Modem now provides an Upgrade Check feature which will query the LAN Modem's Internet homepage for available firmware updates.

Note that you must have a service provider with Internet access configured in order to use the Upgrade Check feature.

To check for new firmware updates, do the following.

1. Access the LAN Modem main page by entering **`http://3com.oc.lanmodem`** in the location bar of your Web browser.
2. Click the *Advanced* button located in the left frame.

   The Advanced frame opens.
3. Click the *Upgrade Check* button.
4. Click *Check for Upgrades* to check for new firmware which may be available for your LAN Modem.

   A call is launched to your ISP. The LAN Modem compares the latest available firmware against the firmware currently installed.

   If your LAN Modem has the latest firmware installed, a message indicates that you do not need to upgrade at this time.

   If new firmware has been released, you will receive a message indicating that new firmware is available. Click the *Download* link to access the LAN Modem Upgrade page. Follow instructions to download the latest firmware.

Local DNS Table

The LAN Modem now includes a local DNS Table for configuring up to ten static DNS entries, allowing the LAN Modem to resolve designated IP addresses locally. The Local DNS Table can be used to suppress spurious calls caused by an application on the LAN generating packets, which is in turn launching unwanted calls to your service provider.

For example, if an application on the LAN is generating packets to "my_net.com", you would enter "my_net.com" in the Domain Name field, and then enter *192.168.1.29* in the IP address field. This is an IP address that resides on the LAN Modem's default subnet, but by default is not used by any attached workstations. Now, packets to "my_net.com" will be routed to this unused IP address, and will no longer launch automatic calls.

Another potential application of the Local DNS Table is to assign a domain name to a frequently visited IP address. In this case, you would enter the IP address in the IP address field, and enter a domain name of your choice, such as "my_site.com" in the Domain Name field. This will resolve the name "my_site.com" to the associated IP address.

Access the DNS Configuration Table by clicking the *Advanced* button from within the LAN Modem's main page. The DNS Configuration table opens, as shown in Figure 10.

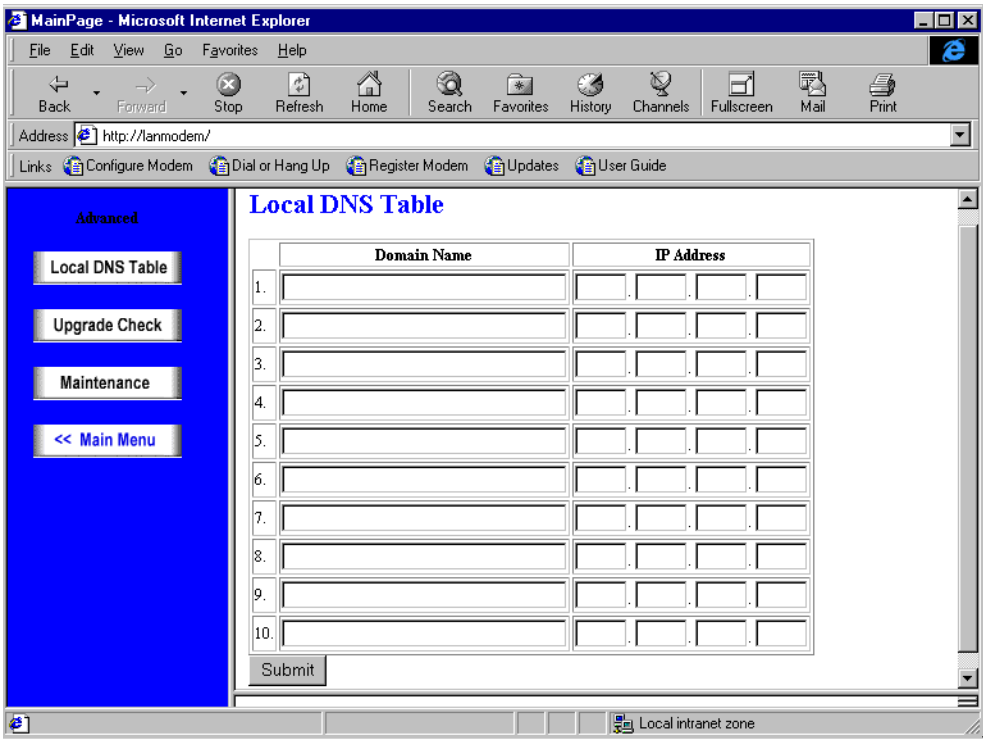


Figure 10 DNS Configuration Table

Enter the domain name and IP address as desired, and click *Submit* to save changes.

LAN Modem Desktop Manager (Windows 95/98/NT)

The LAN Modem Desktop Manager application for Windows 95/98/NT is available for downloading from the LAN Modem Internet homepage, and is also included on the latest *3Com Companion Programs* CD ROM. Once installed, the application resides in the Windows 95/98/NT Tool Tray. The LAN Modem Desktop Manager provides direct access to LAN Modem call functionality without requiring the use of a Web browser. No further configuration of the LAN Modem is required.

The following options are provided by the LAN Modem Desktop Manager.

- Place and hang up calls to service providers
- Monitor call status
- Display caller ID information for incoming voice calls (if available)

Download the LAN Modem Desktop Manager directly from the LAN Modem homepage:
`http://www.remoteaccess.3com.com/support/docs/lanmodem/util.html`

Miscellaneous Enhancements

The latest LAN Modem firmware incorporates the following enhancements, changes, and fixes.

- Abort Call Functionality

  ISDN data calls can now be aborted in progress via the Manual Call Control page. Access the Manual Call Control page by clicking *Manual Calling* from the LAN Modem main page. To terminate in-progress calls, simply click the *Abort Call in Progress* link.

- Last Ten Calls added to Call Statistics

  The LAN Modem Statistics page now includes information regarding the last ten calls made by the LAN Modem. Access LAN Modem statistics by clicking the *Statistics* button from within the LAN Modem main page.

- Workstation configuration enhancements

  Workstation parameters are now configurable from a single page. Access the Workstation Parameters page by clicking the *Workstation* icon from the LAN Modem main page.

- Lock Configuration enhancement

  The LAN Modem Lock Configuration feature now requires that a password be previously set before locking the LAN Modem parameters. If you have not set a password on the LAN Modem, you can no longer lock the LAN Modem configuration parameters.

- Real Time Clock synchronization

  You can now manually synchronize the LAN Modem's internal clock to match the date/time of an attached workstation. Access the Real Time Clock Synchronization via the *Maintenance* button located on the Advanced submenu.

- Maintenance Page relocation

  The LAN Modem Maintenance page has been moved to the Advanced Page submenu.

- Default Workstation for Incoming Packets enhancement

  The Default Workstation for incoming packets now offers an option of *None.* Setting this value to *None* will cause incoming packets to simply be dropped, and not routed to any attached workstation. Access the Default Workstation field via the LAN Modem's Workstation Parameters page.

- NetBIOS Filter enhancement

  The Enable NetBIOS Filtering option has been expanded to include three new options:

  - Always Block (default): Choosing this option will block all NetBIOS traffic which has been generated on the local LAN from being passed to the WAN. In this case, calls will not be brought up due to NetBIOS traffic, and NetBIOS traffic will not be sent to the WAN once calls have been initiated.
  - Never Block: Choosing this option will allow all locally-generated NetBIOS traffic to pass to the WAN. Note that enabling this option may cause the launching of spurious calls, and it may prevent these calls from automatically hanging up.

- Block Call Initiation: This option will prevent NetBIOS calls from initiating automatic data calls. Note that once a call has been established, choosing this option may prevent a call from coming down.

The Enable NetBIOS Filtering field is located on the LAN (Ethernet) Parameters page, which may be accessed by clicking on the LAN Modem icon from the LAN Modem's main configuration page.

Release Note written by Eric Heller