Introduction

Welcome to Telos Systems *Assistant Producer* **for Windows Talk Show Management Software**

Congratulations on choosing *Assistant Producer* for Windows, which completes Telos Systems' advanced multi-line talk show systems by addressing the need for Windows-based client/server call screener software. This system handles multi-studio environments, and enables producers to provide talent with information on each caller, send instant messages, and control the status of multiple telephone lines.

Now, any of the Telos talk show products can be easily integrated with maximum control and flexibility through the user-friendly Windows environment, and you can control *Assistant Producer* from remote locations.

Your new *Assistant Producer* for Windows:

- Supports Windows 95, 98, NT or higher
- Serves as either a talent or producer workstation on a PC
- Features line selection and control over the network by keyboard, mouse, and Telos Switch Console
- Contains robust color-coded line status indicators for ease of use
- Manages your time with clock and call timers and unique countdown timer for indication of time-to-break, etc.
- Houses a flexible database which allows configuration of desired listener demographic fields and talk show statistics
- Writes database records using Microsoft Access database protocols for easy manipulation of database information, and to convert to other formats to use with your favorite database applications.
- Allows multiple Telos Systems Direct Interface Modules (DIMs) to inter-communicate, permitting several studio location to share lines

Contained in this manual is information on how to install and use *Assistant Producer*. The flexibility of this system is great, so we encourage you to "play with" the system, and configure it thoroughly before putting it on the air.

As always, if you experience any problems during installation, or in using the product, please contact us immediately at screener@telos-systems.com, or phone us at +216/241-7225 in the United States, or at +49-81-61-42 467 in Europe.

Chapter 1: Software Overview and Installation

Software Overview

The *Assistant Producer* Windows based talk show management system is implemented using two basic programs. *TeloServe* (Server software), and *Assistant Producer* (Client Software).

What PC do I need for a Server? What is TeloServe?

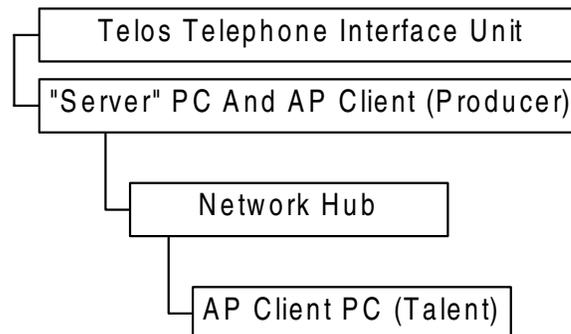Any PC running Windows 95, 98, NT 3.51 or higher can be used as a "server" PC.

We refer to "the server" as the PC which will connect directly to Telos phone interface units (1A2, 1X6, or Direct Interface Module) via RS-232 serial ports. This PC will then become the conduit between the Telos Telephone interface unit(s) and the *Assistant Producer* clients operating elsewhere on the office network.

The server PC can also simultaneously run (locally) the Client software.

The "TeloServe" server application is the software "brains" behind our talk show management system. It is the job of TeloServe to monitor, and "remember" all telephone line activity on our Telephone Interfaces. Whenever the status of any on-air line changes, TeloServe will send status updates to the *Assistant Producer* client PC's.

A very effective Talk Show caller management system can be constructed with a simple two- computer network (displayed below). More complicated arrangements involving multiple studio interfaces routed through the same PC can also be realized with the same software. The latter will be welcome news for facilities with multiple talk studios.

Simple two computer network screening system

```
        ┌──────────────────────────────────────────┐
    ┌───┤    Telos Telephone Interface Unit         │
    │   ├──────────────────────────────────────────┤
    └───┤  "Server" PC And AP Client (Producer)     │
        └──────────────────────────────────────────┘
            │   ┌──────────────────────────────┐
            └───┤        Network Hub            │
                └──────────────────────────────┘
                    │   ┌──────────────────────────┐
                    └───┤   AP Client PC (Talent)   │
                        └──────────────────────────┘
```

Another method of networking two computers together is to use the Windows 95 serial port networking option. In this instance, the two PC's communicate through their serial ports instead of an Ethernet LAN connection.

Users of PC's using the **Windows 98** Operating System have one more option available. With Windows 98, one PC can drive two monitors, and that means NO computer networks to install!

Assistant Producer is the software application used by your on-air staff. In the usual configuration, this program will connect to TeloServe via your corporate LAN connections.

Any caller data logged by your phone screeners is immediately routed through TeloServe. TeloServe then attaches the caller information to the appropriate telephone line, and this information is then sent to all of the Client applications to display on screen.

The *Assistant Producer* client software is designed to operate in one of two modes: "**Talent**", and "**Producer**". End users can switch to either mode at any time using on screen "pull down menus".

The "**Talent**" view can be thought of as an enhanced PC based Telos Control surface with caller information displayed next to each button. The Talent view allows remote control of the Telos Interface unit as well. This is accomplished by three different methods:
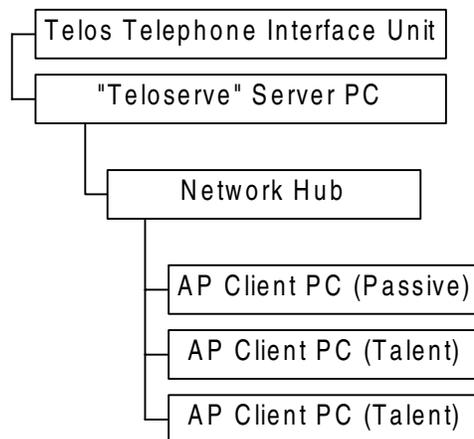
1)   Using your mouse to click onto virtual "on screen" buttons,
2)   Using keyboard short cuts,
3)   And by attaching a Telos control surface to an unused serial port on the client PC.

The "Producer" view has all the usual caller data entry features (Name, City, Topic, etc). In addition, the producer can modify the Telos Interfaces' automated "NEXT" caller operation.

Your phone screener can highlight a call as "next", flagging that call to be the next one on air. At this point, whenever the "NEXT" button is pushed on the Telos switch console, the "flagged" caller will be automatically selected to air.

The clients can communicate to the server application with the very flexible, and easy to use TCP/IP Winsock communications protocol.

A "fully loaded" computer network screening system

```
        ┌──────────────────────────────────────┐
        │  Telos Telephone Interface Unit      │
        │──────────────────────────────────────│
        │  "Teloserve" Server PC               │
        └──────────────────────────────────────┘
                 ┌──────────────────────────┐
                 │      Network Hub         │
                 └──────────────────────────┘
                     ┌────────────────────────┐
                     │  AP Client PC (Passive) │
                     ├────────────────────────┤
                     │  AP Client PC (Talent)  │
                     ├────────────────────────┤
                     │  AP Client PC (Talent)  │
                     └────────────────────────┘
```

What is Needed to Make This Software Work?

LAN Requirements:

Network: Ethernet LAN, TCP/IP, and
                    Microsoft Dial Up Networking.

Supported Protocols: TCP/IP.

Assistant Producer uses small packets of data, and this data is only sent over the network whenever there is a status change on any of the studio call in lines. Packets are also transmitted when sending messages.

PC Requirements:

CPU: Pentium (1) 75 MHz (Minimum)- Client.   Pentium (1) 75 MHz (Minimum) – "server".
                (Pentium 100 or higher is best.)

OS: Windows 95, 98, NT 3.51 or higher.

Memory: 16 MB or greater Recommended. (32 MB is best)

Ports: (Client): Ethernet card, or (TCP/IP) dial up networking
                    capability.

                (Server): Ethernet card, and at least 1 free RS-232 serial port for
                    connecting to Telos equipment.

Graphics requirements:

The exact type of monitor required for *Assistant Producer* depends on the total number of caller
data fields used in your application. If your requirements is for more than "ten callers on hold" to be
displayed, we recommend a larger display monitor. A larger Display monitor might also be necessary if
you want to retrofit your monitors for touch screen operation.

Graphics Card: SVGA capable of at least 256 colors. 3D cards are not necessary. In fact we recommend
you stay away from them, as some models absolutely screw up the graphics.

Telephone Interface requirements:
Assistant Producer 1.17 is designed to work with the following Telos Interfaces:
        1A2 Interface version 5.41 (or 5.41C)
        1A2 Interface version 8.51
        Direct Interface Module (DIM) version 1.48.x
        One-x-Six Version 1.20

The software version of your Telos Interface is marked on the EPROM inside. If the unit is new it will have
one of the above versions installed. Contact Telos customer support for information on upgrading to the
current version. Customer support may need to know your current version number and/or your motherboard
rev when arranging to upgrade your unit. Please note this information as well.

Cables and accessories:
You will need a serial cable from the Telos Interface to the Server computer. The server and each client
computer will need to be connected using a compatible LAN or WAN protocol such as TCP/IP.

Installation

This outline is intended to give you an idea of how the software installation process works. *There are step-by-step instructions later in this section.*

We've chosen to describe a simple two computer screening system because it is the simplest, most straight forward, and economical approach for a modern call screening system.

The installation instructions in this chapter will be based on the simple approach. More complicated installations (with multiple interface boxes connected to a single "server") are also possible. Multiple Telos Interface setups allow for more than one interface box to be used with the same server PC. This is useful for locations where there is more than one station in the same building requiring the use of call screening software. In this instance, the single server PC will handle all studios whose interface units are connected to the server PC serial ports.

Regardless of whichever installation route you choose to take, we suggest that you start with the two-computer, single Telos Interface approach to get the basic feel of the system and how it operates.

The simple solution outlined here must be used on machines running the Windows 95,98, or NT operating system.

Preparing for software installation

Select a free communications (serial) port on the server PC.

Connect the PC serial port to the RS-232 port on the rear panel of the interface unit. The connection must be made using a null - modem connection. This could be something as simple as a "three wire" RS-232 connection. (transmit, receive, and ground). See appendix for more information on "null modem" connections.

Using "Hyper Terminal", or some other terminal emulation software, you can verify proper serial port connections by looking at the Serial port activity. The protocol for Telos Systems Interfaces is 1200 baud, No parity, 8 bits, 1 Stop bit. After the terminal program is started and the proper connection protocol is entered, type the capitol letter "M". The unit should respond with "Line monitor on". You should see activity on the screen in the form of ASCII characters every time a function is performed (such as lines being answered, ringing in etc.). The exact command set is listed in the appropriate Telos Interface manual.

Please read this section before proceeding to the software installation procedures!

A preview of the installation process for *Assistant Producer*:

- Connect the Telos Interface Unit to a PC designated to act as the server. Telos telephone interfaces are usually installed within (or near by) their associated studios. If this is your situation, then the same PC, if located in the same studio, can also run the "*Assistant Producer*" client software. In this instance, this is generally the preferred setup.
- You will then be installing and configuring TeloServe. "TeloServe" is the *Assistant Producer* server program.
- If you need this PC simultaneously for call screener tasks, or to display caller data to the on-air talent, you will also have to install the *Assistant Producer* client software as well.
- The *Assistant Producer* software comes packaged to communicate through the TCP/IP protocol. It is possible and quite easy to use TCP/IP on your network even if the other PCs on the network are running a different protocol. See "network communications setup".
- Verify the operation of the other PCs on your network designated for the talk show work group. Verify that all the necessary network drivers are loaded and functioning. When this is complete, you will then install the *Assistant Producer* client software on these computers.
- Customize *Assistant Producer* for your method of programming.

The total amount of time needed to get the *Assistant Producer* software up and running on a two computer screener system is about 10 – 15 minutes for each computer. This is assuming the computers already have the proper network drivers & protocols installed and working.

If you do not have the proper network protocols installed, plan on possibly spending another 10-15 minutes per PC. If you have NEVER setup a computer network before, set aside an afternoon. Also, while you're learning about networks for the first time, we have a section in the appendix of this manual titles "Are you new to networking?" That section explains how a properly configured Microsoft "Peer to Peer" Network should work.

The simplest approach is to use two PC's and one Telos interface unit. These PC's can either co-exist with the PC's on your office LAN network, or can run on a simple "two computer" network.
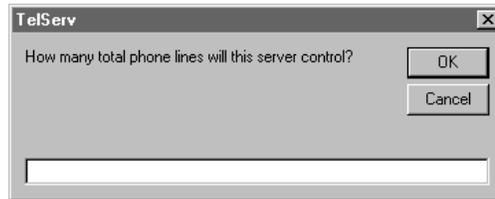
If your office LAN has a "pipeline" to the Internet, this could become useful for remote access to your talk show workgroup. Using TCP/IP, *Assistant Producer* can provide you with a fully functional remote client (out in the field) using the Internet as a connection. More on that later…

A Preview for the Installation of *TeloServe:*

Before the start of the installation process there is one thing that you need to know. When some of the options are selected you are prompted with a dialog box asking for the Administrator password. The default password is "Admin". To change the Administrator password refer to the Installation/Configuration section.
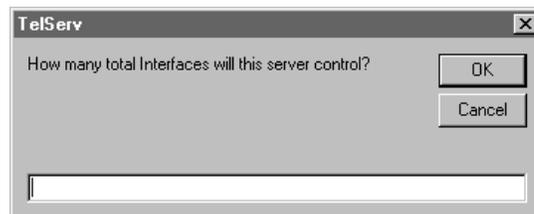
After starting the Server Program for the first time, you will be asked a series of questions.
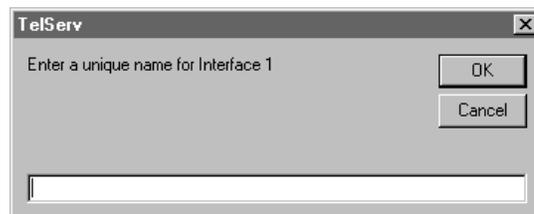
Here's the order in which TeloServe is set up:

```
┌─────────────────────────────────────────────┐
│ TelServ                                    ✕ │
├─────────────────────────────────────────────┤
│ How many total phone lines will this server │  ┌──────┐
│ control?                                    │  │  OK  │
│                                             │  └──────┘
│                                             │  ┌──────┐
│                                             │  │Cancel│
│                                             │  └──────┘
│ ┌─────────────────────────────────────────┐ │
│ │                                         │ │
│ └─────────────────────────────────────────┘ │
└─────────────────────────────────────────────┘
```

The first question you will be asked is "How many total phone lines will this server control?"

You will have to count the total number of lines connected to your Telos Telephone Interface unit (i.e. Direct Interface, 1X6, and 1A2 Interface). You will then enter that number in the dialog box illustrated above.

```
┌─────────────────────────────────────────────┐
│ TelServ                                    ✕ │
├─────────────────────────────────────────────┤
│ How many total Interfaces will this server  │  ┌──────┐
│ control?                                    │  │  OK  │
│                                             │  └──────┘
│                                             │  ┌──────┐
│                                             │  │Cancel│
│                                             │  └──────┘
│ ┌─────────────────────────────────────────┐ │
│ │                                         │ │
│ └─────────────────────────────────────────┘ │
└─────────────────────────────────────────────┘
```

It is possible to have more than one Telos Interface unit connected to the "Server PC" at one time. If you only have one interface connected to this PC, you will be entering the number "1"

```
┌─────────────────────────────────────────────┐
│ TelServ                                    ✕ │
├─────────────────────────────────────────────┤
│ Enter a unique name for Interface 1         │  ┌──────┐
│                                             │  │  OK  │
│                                             │  └──────┘
│                                             │  ┌──────┐
│                                             │  │Cancel│
│                                             │  └──────┘
│ ┌─────────────────────────────────────────┐ │
│ │                                         │ │
│ └─────────────────────────────────────────┘ │
└─────────────────────────────────────────────┘
```

You will then be asked to enter a unique name for each interface connected to your PC. This name will later be used for reference purposes. In a typical situation, only one Telos Interface unit will be connected to TeloServe. In this instance, a name such as "Studio" is acceptable.

Connecting multiple studio Telos Interface units to the PC will require unique names for each Telos Interface Unit. The setup program will ask you to assign each unit a name. This window will pop up once for each Telos Interface.

TeloServe will now initialize. After a few moments, the TeloServe window should be visible.
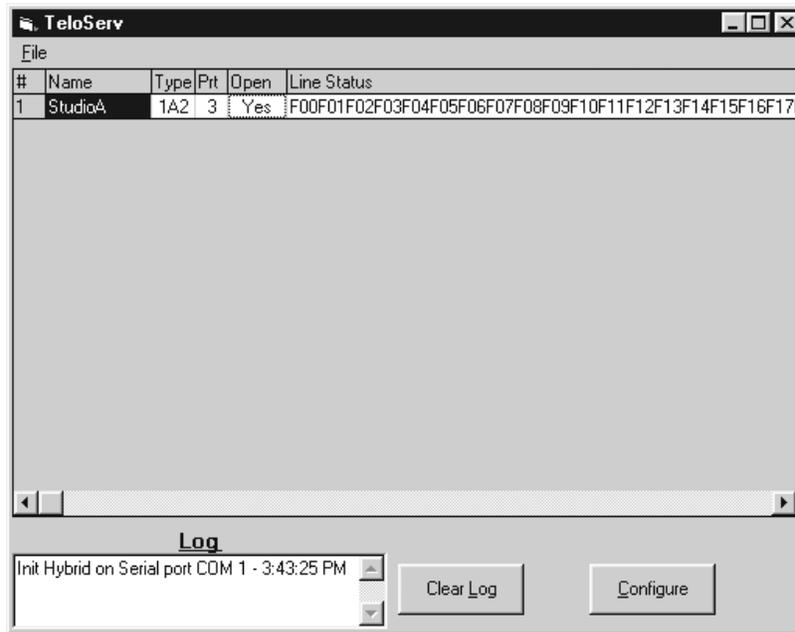
The initial setup of TeloServe is now nearly complete, but there is one last step. We must now setup how the studio telephone lines are used.

Using the illustration below, we will be previewing the purpose and setup of the various option boxes starting from the top going left to right, then the bottom left to right. The screen below is the TeloServe configure window. To access this page, you must click onto the "Configure" button on the main TeloServe page.
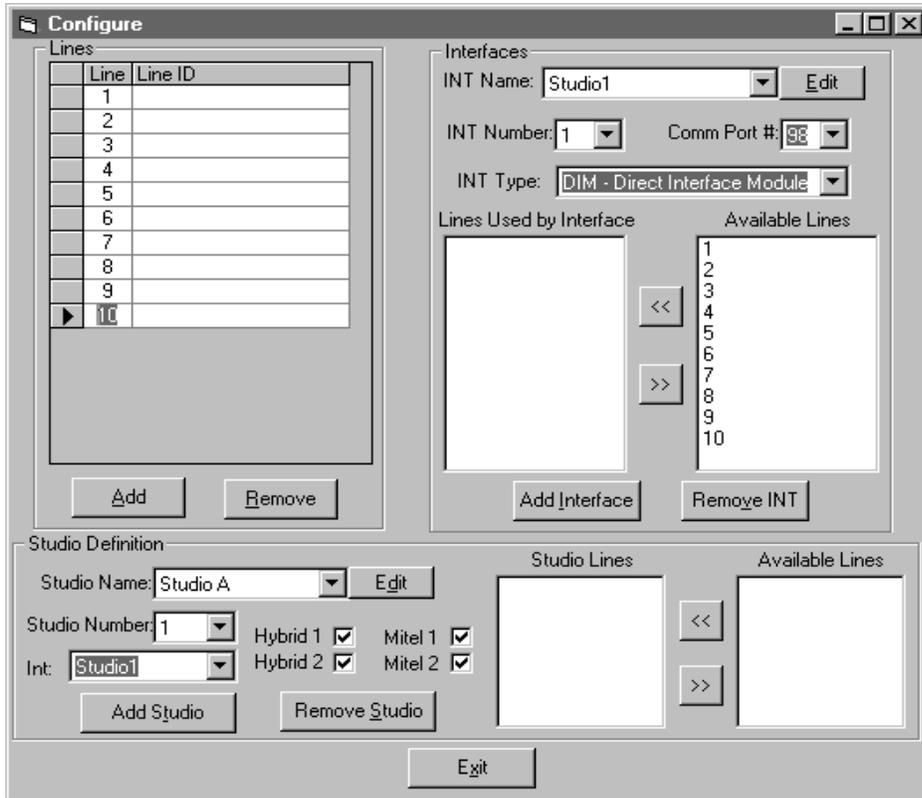
- **The Lines box:** This box will display setup boxes, the total number of which corresponds to the "How many total phone lines will this server control?" question asked during the installation phase of TeloServe. The purpose of this box is to assign names to these phone lines. These names will be used in subsequent configuration steps. This step is purely optional. The "names" can be the individual phone numbers on each line, or a word description such as "Request line 1".
- **The Interfaces:** The purpose of this box is to tell TeloServe how each line is used on your studio interface unit(s). The first box shows the *interface name*. This name will correspond to the unique name given to your Telos interface unit during installation setup. The second box shows the "*interface number*". The unique name given to each interface is tied to this number, which was automatically assigned by TeloServe during installation. The number corresponds to the order in which each interface was assigned during this process. The next option is the "comm port" number. Select the serial port that the Telos Interface Unit is connected to. The default start up number is 98. "*INT type*" tells TeloServe what Telos interface unit is being used on the selected serial port.
- **Associating phone lines with the appropriate interface:** Since there can be any number of Telos Interface units connected to this PC, TeloServe needs to know what lines are actually being used by the Telos interface unit currently under configuration. Select phone lines from the pool of "available lines" and move them to the "lines used by interface" box.
- **The Studio Definition box:** This box contains the information needed for the proper operation of the "*Assistant Producer*" client software. The "*studio name*" is used to identify a "talk show workgroup". This is the name that *Assistant Producer* client and your system administrator will need to know. This studio name will make it possible to find these interfaces in a pull down menu during the setup of the

Assistant Producer client software. If necessary, this will allow almost instant connections to other studios in your facility.

- **The Available Lines, and Studio lines section:** This works similar to the line setup box for TeloServe. The difference here is that you are to pick out all the lines used for talk show screening purposes from the total number of phone lines connected to this interface unit. The "*studio number*" is a number automatically assigned to each studio as it is entered. The "*INT*" box tells what interface is used for this talk show group. If you are using the Direct Interface, the Mitel check boxes will tell *Assistant Producer* which Mitel superset phone is being used by the phone screener. The "Exit" button saves these parameters to the hard drive, and returns to the standard TeloServe page.

One other feature that may or may not be configured is the use of the User Database. This database is set up and administrated on TeloServe. Each user gets an account and password. The Administrator then has the ability to control access to every menu item and feature in Assistant Producer for each account. Each feature can be enabled or disabled allowing or disallowing the user access. This allows the administrator to prevent DJs (talent) from inadvertently altering mission critical settings. This database also stores the users setting so when they log back in Assistant Producer comes up with the same options including studio groups, screen sized, and talent or producer mode they have selected previously. You may or may not elect to configure this option, but it is recommended to keep any unwanted disasters from occurring.

Time to install the software!

Step by Step configuration instructions.

Notice to Windows NT users!

Before running *Assistant Producer* setup:

Make sure you are logged in to the "Administrator" account, or that your account allows you to
edit the Windows NT registry! Failure to do so will cause the installation program to "hang"!

Installing TeloServe (Server software)

Run the "Server" setup program. It will install the server software.
After this installation is completed, you will have to configure the server.

To do this, go to your start menu and start the "TeloServe" program. The window that appears will
resemble the one below. To continue program setup, click on the "Configure" button.

Configuring TeloServe

> **How to tell TeloServe what is going on:**
>
> The "Lines" setup area, and the "Interfaces" setup area are used for <u>associating all phone lines with the appropriate Telos interface unit</u>. Since there can be any number of Telos Interface units connected to this PC, TeloServe needs to know what lines are actually being used by each Telos interface unit. Full details below:

Setting up "Lines":

The Lines box: This box will display setup boxes, the total number of boxes corresponds to the "How many total phone lines will this server control?" question asked during the installation phase of TeloServe. The purpose of this box is to assign names to these phone lines for your convenience in later configuration steps. This step is purely optional. The "names" can be the individual phone numbers on each line, or a word description such as "Request line 1".

Setting up "Interfaces":

The first box shows the *interface name*. This name will correspond to the unique name given to your Telos interface unit during installation setup. The second box shows the "*interface number*". The unique name given to each interface is tied to this number, which was automatically assigned by TeloServe during installation. The number corresponds to the order in which each interface was assigned during this process. The next option is the "comm port" number. Select the serial port that the Telos Interface Unit is connected to. The default start up number is 98. "*INT type*" tells TeloServe what Telos interface unit is being used on the selected serial port.

Available lines & Lines used by Interface:

TeloServe now needs to know what lines are under the control of this Telos interface unit.

To do this, select phone lines from the pool of "available lines" and move them to the "lines used by interface" box.

Since the "simple" single Telos interface setup requires that the "*Available lines*" be the total number of "*Lines used by the interface*", this procedure is really simple.

To associate phone lines to this interface, first select a line from the pool of available lines, and click onto the "left pointing arrow" button to move the line to the "lines used by interface" box. Repeat this procedure for the other phone lines in the available line pool.

Hint:

A block of numbers can easily and quickly be transferred by clicking once on the first line ID in the "Available Lines" box, then while holding down the "Shift" key, click once on the last line.
This will highlight the entire block of available lines. Clicking once on the left pointing arrow button will move all selected lines to the "lines used by interface" box.

Setting up "Studio Definition":

The "**Studio Definition**" box is used to define your (on-air) call in phone lines for use by the *Assistant Producer* clients. Any "*available lines*" assigned to "*studio lines*" will become phone lines for this talk show screening workgroup.

"*Studio Name:*" If you wish, you can enter a "*Studio name*", or just keep the default "Studio A" name tag. In the "simple" (one Telos telephone interface) setup, this name is not very critical, as it is now the only Interface unit on the network. If you have multiple interfaces connected to the server PC, each interface can be assigned its own name.
The purpose of the "studio name" is to allow for easy identification of each studio group when setting up the *Assistant Producer* clients elsewhere in the building (or the World, for that matter!).

"*INT Name*" is the name of the Telos interface unit. This is the "unique name" chosen by you for this interface during the initial setup of TeloServe. We used "sound room" for our hypothetical setup. In the instance where there are more than one Telos interface units attached to the server PC, there could be several names to choose from in the pull down menu.

In our example studio we have two Mitel Superset screener phones as well as two hybrids connected to the Direct Interface, so those boxes are checked. These boxes enable the software to provide virtual switch console control of both "Main" and "Conference" hybrids as well as automatically controlling both Mitel Phones for your call screeners (if you wish).

The "*Available lines*" are the phone lines "*used by the* (Telos) *interface*", which you have already set up earlier in the "interface" setup box. Selecting and moving "*Available lines*" to the "*Studio lines*" tells *Assistant Producer* what phone lines are part of the talk show screening group.

Click on the "OK" button. You're done here!

Setting Up User Passwords and Privileges:

Before Clients are able to connect to TeloServe user accounts and privileges must be setup. You have two options here. You can either choose to allow any Client to connect or you can restrict Client connections and privileges. To allow any Client to connect go to the "File" menu and make sure that the "Password Required" option is not selected (checked). Now any Client can connect without having to login in. They also will have unlimited access to all of Assistant Producer's features.

To restrict the Client connections go to "File" and then "Modify User Right".
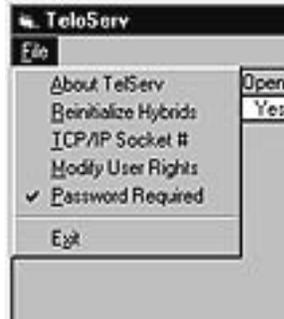
You will get a general setup screen when this option is selected. To add a new user, fill in the New User Name and New User Password boxes then click on "Add User".
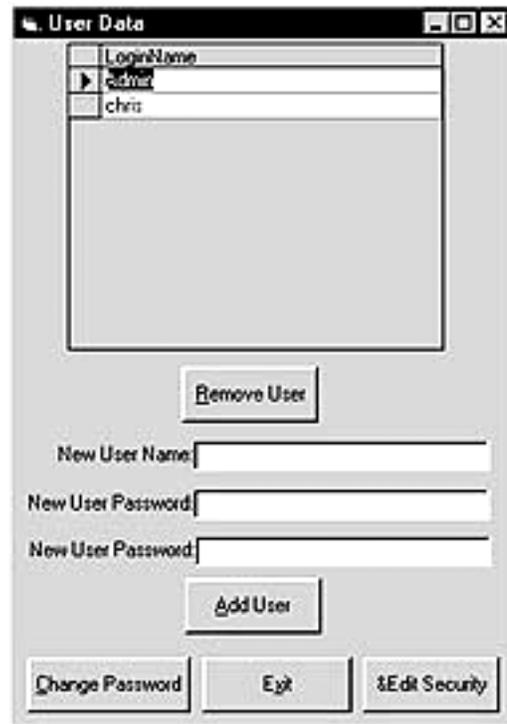
Clicking on the "Edit Security" button will reveal the rights or privileges that are assigned to the user highlighted above. Unchecking any box in the various fields will disable a corresponding "control" or "Function" on the Assistant Producer Client. After creating all the user accounts and privileges exit back to the main screen and go to the "File" menu and make sure that the "Password Required" option is selected

(checked). Now every time a Client attempts to login to TeloServe they will be prompted to enter their user name and password. If not, they will not be able to connect to TeloServe. This option will keep unwanted Clients from connecting to TeloServe and having control of Telos interfaces.

Changing Passwords

The "Change Password" button will allow you to change the Administrator and User passwords.
To do so highlight the name you want to change the password for then click on "Change Password". A message box will a then appear. Enter the new password and click on the "Exit/Save" button.

Setting up a TCP/IP Socket Number

Before a Client can connect to TeloServe you have to provide a TCP/IP Socket number to use. To configure the Socket number go to the "File" menu and select the "TCP/IP Socket #" option. You will then be presented with a message box asking for the Administrator password. After entering in the password you then are provided with message box asking for a Socket Number. Enter a number that will not interfere with other TCP/IP applications. Usually a number larger than 1024 will work just fine. For a better explanation of this please refer to the Appendices page 51.

Reinitialize Hybrids Option

It is possible at times that TeloServe and a Direct Interface Module (DIM) may stop communicating. A lot of times this occurs during a power fluctuation when TeloServe is connected to the DIM. This could be as simple as someone turning the Dim off and back on again. TeloServe may then stop communicating with the DIM. TeloServe should normally recognize these situations and reinitialize the DIM. Just in case TeloServe doesn't detect this you can manually to this by going to the "File" menu and then choosing the "Reinitialize Hybrids" option.

Installing & configuring *Assistant Producer*
(Client Software).

You will need to have the IP address and the socket number of the "server" PC handy.

Run the "Setup" software for the Client software and follow the onscreen instructions.

Windows 98/NT users:

Setup will install *Assistant Producer* in the default directory "C:\Program Files\Assispro". If you are planning on taking advantage of Win 98/NT's ability to run in dual monitor mode you should do this installation twice! You must change the directory name during the second installation! Use something like "C:\Program Files\Assispro2".

Starting up the Assistant Producer client software for the first time.

You will see the *Assistant Producer* user interface screen "pop up":

Click on the "Setup" button. The *Assistant Producer* menu bar will appear across the top of the *Assistant Producer* window.

On the top menu bar, select "port".

Select "TCP/IP Winsock".
You will see the following screen:

Remote Server IP Address

The "remote Server IP Address" box will default with "127.0.0.1". Change this to the server PC's IP address. *If this copy of Assistant Producer client is running simultaneously on the server PC, you can just leave this default IP address alone.*

Interesting note:
Every PC using the TCP/IP communications protocol has its own internal IP address of 127.0.0.1.

A Windows 98 or NT PC that is running TeloServe *and* both *Assistant Producer* clients in dual monitor mode could benefit from this feature. Both *Assistant Producer* clients could be set up to look at the IP address 127.0.0.1, and they will work! No need to do anything with a network. (See the TCP/IP guide in the appendix).

Socket Number

Enter the socket number of the server. This is the same socket number that was entered in the TeloServe application.

Click "Connect".

Assistant Producer will now attempt a connection to TeloServe. If TeloServe is configured to require a password you will be prompted with a login box. Enter your user name and password and continue. If no password is required then the status indicator light will turn green when a successful connection is made.

After you have successfully logged in, the last thing to do is to go to the "Options" pull down menu, and select the "Save Settings" option.

All of the parameters defined by you are now saved. There is still more to configure (Covered in the next Chapter). When you are done configuring those parameters, it would be a good idea to perform this (Save Settings) operation again.

Customizing Assistant Producer for your method of operation

The next thing to do is to configure the caller database and on-screen display options for *Assistant Producer*. You will need to go to "Database Options". These items chosen in the Database Options will be used for gathering information about each caller. At first glance this may appear to be designed exclusively for collecting information for database storage…But it is not! *Assistant Producer* will not only use this information to store information to a database but will derive on-screen data from these (checked) options. (See the graphic below).

In the *Assistant Producer* menu bar, choose "database options".

When the Database Options check box appears, select all the information you will need for your call screeners to enter. The "User" box is a user definable database field. If you wish to use an option not already defined by us, check the "User" box.

When you are done, click the "Exit" button.

Now click on "Display Data Options"
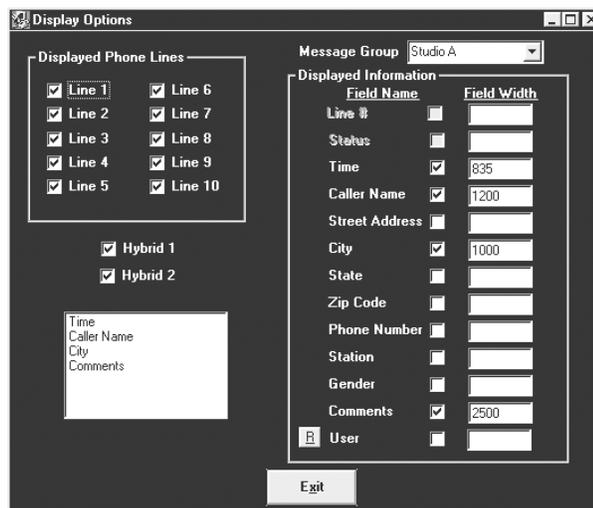
The "Display Options" box is used to set up the information that will actually be displayed on-screen for use by your air staff.

Any option with a check by it will be sent to the user display.

Customizing the Columns

The column widths for caller data can also be changed using this window as well.

> **Note:** The column width numbers are somewhat arbitrary in value. The numbers do not represent pixels, or number of character spaces. They represent a measurement known as "twips". The larger the number value, the wider the column widths.

The order of the columns is displayed in a window on the lower left-hand side of the "Display Options" box. This order can be re-arranged in any way by clicking onto a column name and dragging it to a different position.

The "User" Field

To assign a name to the "User" field, click on the "R" (for "Rename") button to the left of the word "User".

A dialog box will be displayed asking you to enter a new name for this field. Keep the name short, because *Assistant Producer* will automatically truncate the field name to fit the width of the column!

The Message Group Box

This is useful in a situation where there is more than one Telos telephone Interface unit connected to the "server" PC, these additional interfaces will be assigned their own message groups by TeloServe. Selecting one of these groups from the choices in the pull down menu will configure "this" copy of *Assistant Producer* (client) to operate using the chosen message group.

Chapter 2: Using Assistant Producer

The Assistant Producer User's Guide

Chapter 2 talks about how to use *Assistant Producer* from the point of view of the end-user. In this instance, we consider the end user to be the on-air talent and the on air support staff.
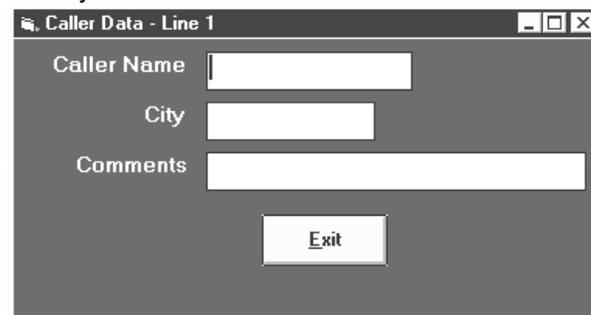
The "Producer" Display Mode

The "producer" display mode is used for your call screening staff. This mode contains the following call management tools:

1) The Caller data display board
2) A "chat" style message window for the on-air staff.
1) A "remote control" for your screener phone (Not available with the Telos 1A2 interface)
4) A real time clock, and event timer.

Caller Data

Holding the alt key and pressing a number key pulls up a line to be screened. For example, alt+1 will bring up a caller data entry box for line 1.

The producer, or call screener will then fill in the requested data, and press "Exit". That information will be posted.

"Virtual" On-Screen Controls

The ANSWER / NEXT Buttons (Producer's Display)

The "Next" Button
(General overview of our "Next" function)

Our software has its own "next" feature. This "next" button operates independently from the Telos phone Interface unit. By default, it will keep track of how long callers have been on hold.

The longest call waiting on hold will be flagged as "NEXT". This is accomplished by changing background colors in the caller data field to green. Fig. 3.1-2 shows this status condition from the "Talent Display".

This color change provides a visual indication as to which call is "up next". The Producer can override this feature by manually flagging another caller. This feature is handy when a long running topic suddenly changes directions.

If there is a caller "parked" on hold three calls away and has something to add to this impromptu topic change, the Producer can flag that caller's line instead of the next one waiting on hold.

If the "Remote Next" feature is enabled, *Assistant Producer* will take control of the Telos Interface unit "Next call" cue. In this instance, whenever the talent presses the "NEXT" button on the Telos Control Surface, *Assistant Producer* will switch the Telos phone system to the next call displayed on-screen. The indication of the next call in cue is always displayed by highlighting that caller data field green.

If *Assistant Producer* workstation is used to select the "next call", the highlighted caller is put on the air next (regardless of the "remote next" status).
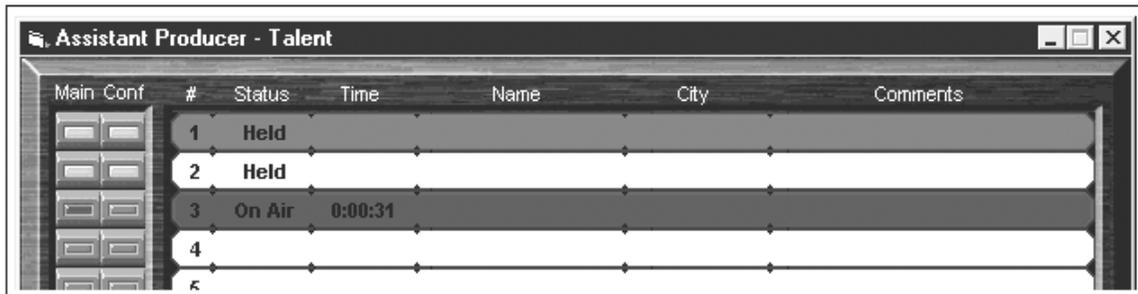
How to operate this function using AP (Producer Mode)

On the Producer's Display, there is one "Next" button per line.

Each "Next" button will flag its associated line as "Next caller up". One click on the button will mark that caller as "Next".

This feature overrides the normal "Longest call waiting" next function.

The "Answer" Buttons

These buttons have a primary function of opening the selected field for caller data entry. There is a secondary function for these buttons which is slightly different for each Telos interface unit.

Direct Interface Module

If you are using the Direct Interface Module, The "Answer" buttons will direct that line to one of two Mitel Superset phones.

In this setup, the software will automatically control the Mitel Superset allowing hands free operation for your Producers. Selecting the line to be screened with the computer using the mouse will automatically pull up that line to the Mitel Superset, and turn it on. This allows your Producers the ability to use headsets with the Mitel phone, and have the ability of selecting lines without ever touching the phone. Of course, the line can also be answered on the Mitel phone at any time as usual.

1X6

If used with the 1X6, AP (Producer) software can be used at only ONE screening station. The software can be configured to automatically have the line being screened routed to the aux phone jack whenever the screener clicks onto the "Answer" button for that line. This mode is useful for "hands free" telephone operation if you want to have headset phones for your operators.

1A2 Interface

1A2 interfaces can have any number of screening stations, but because of the nature of 1A2 key systems, the answer functions will not work. The software will just use the "Answer" button for opening the selected fields for caller data entry.
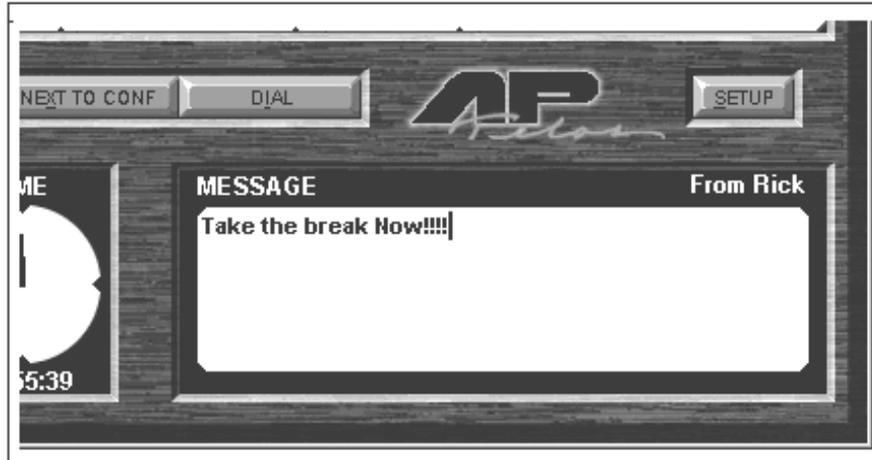
Hold Button

The hold button functions just as the name implies. When this button is pressed the current on air caller will be placed on hold.

Drop Button

The drop button also functions as the name implies. When this button is pressed the current active caller is dropped (disconnected).

Sending messages across the network

The "Message" Window

The Message board at the bottom of the screen is a "*network chat window*" that all parties logged into this particular "group" can use for communication.

Messages are created and sent by double clicking inside the area for the message window.

When messages are transmitted, your ID (which is defined by the "Sender Name" window) is also sent. The identification of the sender is then posted with their message. You will see this ID on the upper right hand side of the message window.

The message Entry Window. (Left).

How To Send A Message

1) Either double click inside of the message window, or press F4 and then a flash message window will pop up.
2) Fill in the "Sender Name". This is your ID on the network. (After you fill in the name for the first time, it will remain in memory).
3) Type in your message. Click on the "SEND" button to send the message over the network.
    To clear an old message from the window, click the "Clear" button once.

The Message "Hot List"

A compilation of messages can be kept as a "Hot List". These are created by you for your programming needs. These are a list of "canned" messages to quickly send out over the message board.

To add messages, you must click on the "Browse" button, and create a name for your file. You then enter the most often used messages one at a time. Enter the message in the top window then click "Add Current" after each message. The message you just entered should now appear in the bottom Hot List window.

To send a message from the hot list, click either the "clear message" button, or "Update Message". This clears the old message from the window.

Now double click on the hot message of interest, then click the "Send" button.

The "Talent" Display Mode

The Talent Display

Button Functions on Talent Display

Main & Conference Button Rows

These buttons function the same as the Switch Console. The Main button row will route calls through the "Main" hybrid. The Conference buttons will send callers through the "conference" hybrid.
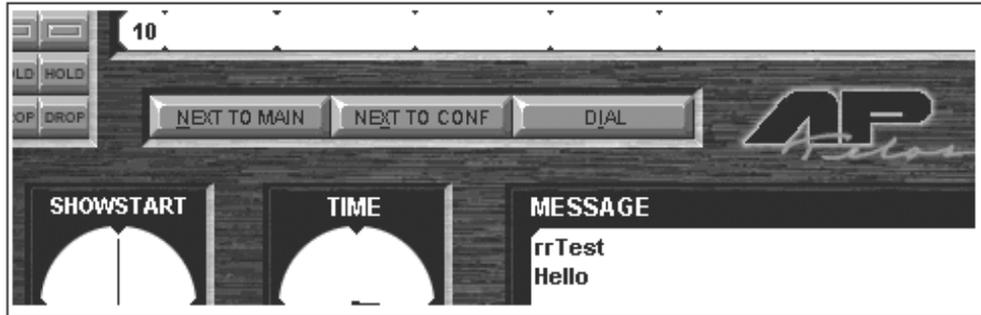

Next to Main & Next to Conference Buttons

To understand the significance of this feature, let's look at how the standard "next" function operates.

Standard function of the "Next" Button.

On Telos Switch Consoles (or Control Surfaces), there is a function called "NEXT". Whenever this button is depressed, the next call waiting on hold the longest is answered first.

This is one of those functions available only through software control of the interface unit. Next to Main will direct the next call waiting on hold to the main hybrid. Next to Conference will route the next call waiting on hold to the Conference hybrid.

The Switch Console itself only performs the "Next" function on the "Main" buss, and not "Conference".

Visual indication of "NEXT" caller.

Our software has its own "next" feature, which operates separately from the Interface unit. By default, it will keep track of how long callers have been on hold. The longest call waiting on hold will be flagged as "NEXT".

This is indicated by changing the background color of the caller data field to green. This provides a visual indication as to which call is "up next".

The Producer can override this feature by manually flagging another caller. This feature is handy when a long running topic suddenly changes directions. If there is a caller "parked" on hold three calls away and has something to add to this impromptu topic change, the Producer can flag that caller's line instead of the next one waiting on hold.

Now, when the talent selects "Next" via the computer, that caller is made "NEXT".

*********Hot Tip***********
Any of our switch consoles can be connected to the network via the RS-232 port on your local PC. When used in this manner, The switch console's normal "Next" function will emulate the functions defined for *Assistant Producer*. The Switch Console will only use the "NEXT TO MAIN" function.

(See appendix)
****

Hold Button

The hold button functions just as the name implies. When this button is pressed the current on air caller will be placed on hold.

Drop Button

The drop button also functions as the name implies. When this button is pressed the current active caller is dropped (disconnected).

The "MESSAGE" Window:

The Message board at the bottom of the screen is a "community chat" board that anyone logged into this particular "group" can use to communicate. When messages are sent, an ID is carried along as well. The identification of the sender is then posted with their message.

The Message board functions the same as it did in the Producer Mode (refer to the Producer Mode section if any questions).

Chapter 3: Special Features

Using the Event Log Timer

Event Timer
The show event timer is user programmable. You can program your hourly clock using the show data screen:

…And the event timer will count down the time before the next event (or break in programming) is to occur.

There is a user programmable warning timer, which will turn red whenever you get close to the next break. You can set the warning time for an amount you feel is appropriate for your operation. The default value is 30 seconds.

A specific clock can be made using hours, minutes, and seconds. Substituting "xx" for the hour (such as "xx:20:00") will cause the clock to "loop" the events on the schedule. This is handy for times where the program clock is relatively simple. For example, if you are into the mid-day clock, and its breaks are at :20 and :40 after the hour - You would enter the information as:

You enter: "<u>xx:00:00 News</u>"
You enter: "<u>xx:05:00 Program Start</u>"

The software will display this information as:

xx:00:00 to xx:05:00 as the news program block.

You enter: "xx:20:00 Break #1"

The program will set up the first segment of programming as:

xx:05:00 to xx:20:00 as the first programming segment.

xx:23:00 Local News insert
xx:25:00 Program Continues
xx:40:00 Break #2
xx:59:59 End of hour

This will now cause the scheduler to run through the events, it will then loop from xx:59:59 to xx:00:00, and repeat. This schedule will loop continuously until a new one is called.
If you were to place a specific hour (or hours) into the "xx" position, the event timer will only become active during the specified hour(s).

Storing Calls into a Database

Assistant Producer (Client) can store your caller data into a database using the Microsoft Access database format. To do this, you must specify a database file name.

Click onto the "setup" button on the *Assistant Producer* Client display. A standard Windows type menu bar will appear across the top of the *Assistant Producer*" screen. Click on "Database Path".
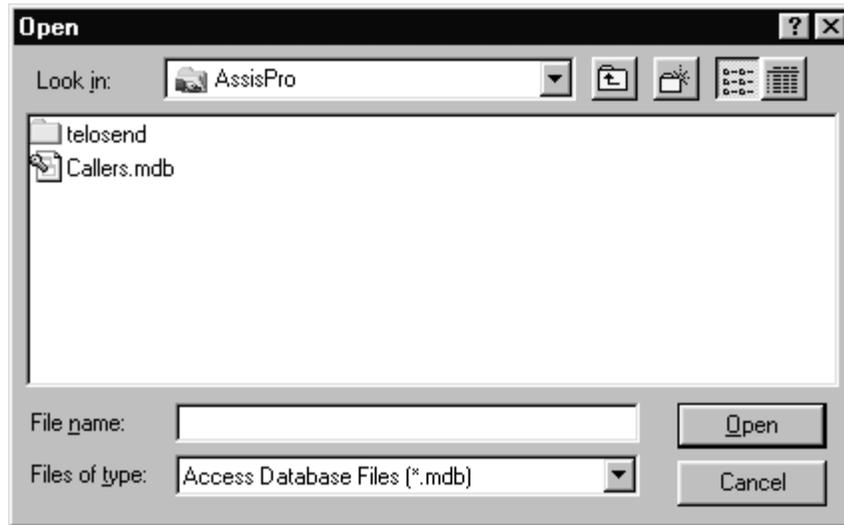
You will get the above window. In the "File Name" box, type the name you want to use for the caller database. After this is done, click the "open" button.   This will create the new database.

Under the "Configuration" category on the *Assistant Producer* menu bar, the "Log Data Options" Window will show what fields of data that will be written into your database record.

To view the caller data, select "Database Viewer" under the "Files" category. To manipulate the data, *Assistant Producer* writes the data to a Microsoft Access file, which can be viewed by any Microsoft Office product. Microsoft Access can also be used to convert the files to any other format you wish to use.

How the database stores records:

1) Your phone screener will enter information on each caller used on air.
2) The information is displayed on the appropriate phone line.
3) When each call is terminated (and their data clears from the display), the information for that caller is logged automatically to the database. In addition to information entered by your phone screener, *Assistant Producer* will include:

- Time spent on hold
- Time spent on air
- What time the call was received.
- The date the call was placed.

If you are using Microsoft Access to view the caller database, the information can be simultaneously viewed on a remote computer, provided the database is written to a shared directory on one of the *Assistant Producer* client PC's.

*Note:

Whenever any of the *Assistant Producer* client programs are running with the database logging option enabled, that client software will write the data in its specified directory. Having more than one client writing databases will create backup copies of your caller activity on the other client PC's.

Time Synchronization

Since Assistant Producer has remote capability it is important that the studio and the remote location have the ability to synchronize time. You would not want the remote location time to be 5 minutes behind the studio for this would cause a lot of problems during a broadcast. Assistant Producer has a built time synchronizer for this purpose. To synchronize the time between locations select the "Time Clocks" menu option. Then make sure the "Synchronize Time" option is selected (checked).
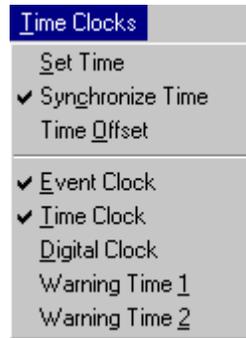
Connection Status Indicator

As shown below Assistant producer has status indicator light to display the status of the connection to TeloServe. TeloServe sends a command every 10 to 15 seconds to Assistant Producer and if this command is missed more than once the light will turn from green (connected) to yellow and then red (disconnected). At this point a message box will pop up giving you the option to reconnect. This provides you an obvious way to detect when your dialup or network connection has failed.

Status Indicator

Screen Resizing

The Assistant Producer screen can be resized to your requirements. Clicking and dragging the edges of the screen into position will resize it. All the graphics should grow and shrink accordingly. The screen size is then stored so next time Assistant Produce is started it will load at the same size. Also the text can be set so that it will grow or shrink along with the screen. This is done by going to the "Configuration" menu then making sure that the "Text Grow Toggle" option is selected. Also the Assistant Producer screen can be set back to the default size by either pressing F5 or going to the "Configuration" menu and selecting the "Reset AssiPro Size" option.

Line Names

Assistant Producer has an option that allows you to choice whether the line numbers or the line names are displayed. The line names correspond to the name of the lines assigned in the configuration page of TeloServe.   To use this option go to the "Configuration" menu then select the either the "Line Names" or "Line Numbers" option.
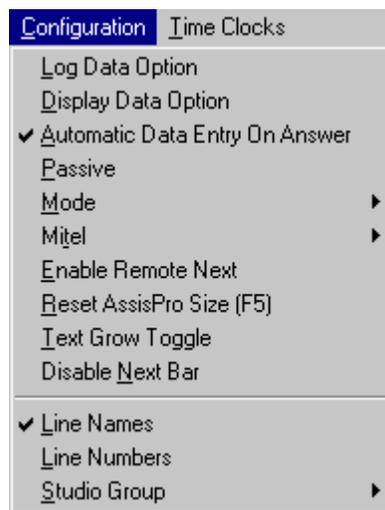
Passive Mode

To help safeguard against inadvertent mission critical errors Assistant Producer provides you with a "Passive" option.   This will disable the on screen user functions except some menu options. This works only in Talent mode. If your are in Producer mode and you select the "Passive" option Assistant Produce automatically switches to talent before disabling options. To select this option go to the "Configuration" menu and select the "Passive" option.

Mitel Phone Option

Assistant Producer provides a convenient option for switching between the Mitel phones you want to control. You can select what phone you want to control by going to the "Configuration" menu, then the "Mitel" option, and then choose what phone you want to control.

Disable Next Bar

As discussed earlier when a caller is flagged as being the "Next" caller the line they are on turns *green* and the word "Next" is displayed in the status column. Assistant Producer gives you the option off not turning the en uu tt but it will stay white. Although the word "Next" will still appear in the status column to indicate they are next. To select this option go to the "Configuration" menu and then select the "Disable Next Bar" option.

Note: The line will be white when there is a check mark next to this option.   Uncheck the option for the line to be green.

Grey Screen Option

Assistant Producer gives you the option of changing the background of its screen to all grey. This may aid slower computers draw the graphics faster or it can just give you a different look. To change the color of the screen go to the "Options menu and select the "Grey Screen".

Changing Fonts

Assistant Producer allows you to choose the size and type of the fonts that are displayed on its screen. To change the fonts go to the "Options" menu and select the "Font" option and select the font you prefer.

Automatic Data Entry on Answer

Assistant Producer can be configured so that when a line is answered the Caller Data Entry Box will automatically be displayed for data entry. To use this option go to the "Configuration" menu and select (check mark) the "Automatic Data Entry on Answer" option.

Appendices

Short cut keys on for Assistant producer (Talent and Producer) displays.

"**D**" = Drop Line
"**H**" = Hold
"**S**" = Setup option bar.
"**I**" = Dial Phone Number
"**N**" = Next to main
"**X**" = Next to Conference
"**L**" = Place Conference Line on Hold
"**R**" = Drop Conference Line

Combination Keys

"**Alt + Line #**" = Brings up caller information entry box for lines 1-10.
"**Shift + Alt + Line #**" = Brings up caller information box for lines 11-20

"**Shift + Line #**" = Pick up lines 11-20 (Main)
"**CTRL + Line #**" = Pick up lines 11-20 (Conference)

Function Keys

F2 = Flash Message Box
F-6 = Chat Style Messaging
F-12 = Log In As New User

Connecting a Telos Switch Console to your PC.

There are two ways. If you have one of our local power supplies, you can connect the output of that unit to our switch console. The "data in" connection will come from a second serial port on your remote computer. This serial port will communicate with the switch console, and allow this feature to work.

If you do not have a local power supply, you can custom build one by using a "wall wart" rated for 9v / 500 mA. More information on the pinout of the switch console's RJ-45 connector is in our manuals (DIM or 1A2). Look in the Appendix. You can, of course, call our customer support line for the info too!
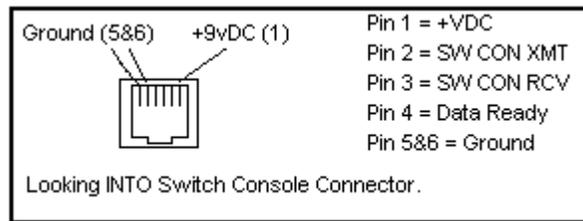
RJ-45 connector pinout of our switch console

In the above diagram, you can use the modular cable itself for pin references, but you must reverse the pin order! In other words, the modular jack itself will be wired opposite of the picture shown. (Pin 1 above would be pin 6 on the modular plug, pin 2 above would be pin 5 on the modular plug, etc.)
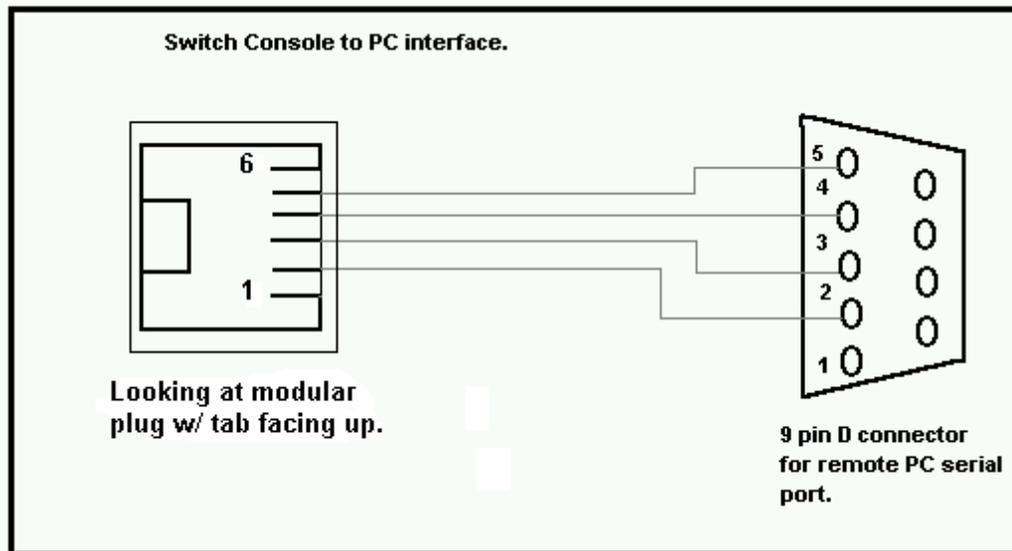
While you *might* get away without it, the "Data ready" line works more reliably if a "loose" pull up resistor is used between the switch console V+ and data ready. Try a 1k resistor here.
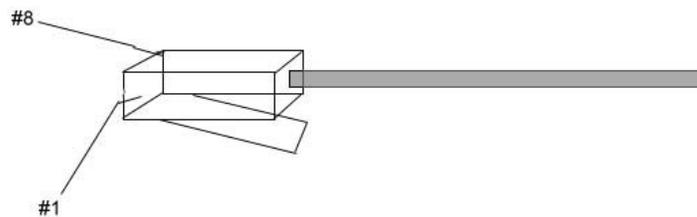
Three Wire Null Modem Connections

(For connecting the Telos Telephone Interface unit to your "Server" PC)

What pins go where?

9 pin to 9 pin null modem	
Interface Side	*Computer Side*
Pin 2	Pin 3
Pin 3	Pin 2
Pin 5 (Ground)	Pin 5 (Ground)

9 pin to 25 Pin null modem	
Interface Side	*Computer Side*
Pin 2	Pin 2
Pin 3	Pin 3
Pin 5 (Ground)	Pin 7 (Ground)

10 Base-T wiring diagram

Ethernet uses two pairs. One for transmit, the other for data receive. *Using the plug diagram above as a key,* here's the wiring scheme…

"Straight Through Cable"
One End Of The Cable   *The Other*

Pin 1 = White / Orange   Pin 1 = White Orange
Pin 2 = Orange   Pin 2 = Orange

Pin 3 = White / Green   Pin 3 = White / Green
Pin 6 = Green   Pin 6 = Green

To make the Ethernet equivalent of a "Null Modem" cable, called a "Crossover Cable", wire the cable this way:

"Crossover Cable"
Pin 1 = White / Orange   Pin 3 = White / Orange
Pin 2 = Orange   Pin 6 = Orange

Pin 3 = White / Green   Pin 1 = White / Green
Pin 6 = Green   Pin 2 = Green

Trouble Shooting – Common Error Codes and questions

Q: How do I use the Telos Template Files?

A: In order to aid in the setup proces Telos has now provided Template self-extracting .exe files which will install the configuration files for most standard setups. Just contact them and let them know what type of interface you are using. They will provide two tiny .exe files which will automatically install configuration files into your Teloserve and AssiPro folder as long as they are in the C:\Program Files directory. The default configuration includes 3 users Admin (Password:Admin), Talent(Password:Talent), and Producer(Password:Producer).   The producer and talent logins have settings saved to bring up the AP screen in either producer or talent mode.

Q: How do I modify the Setup after installing the template files?

A: The configurations can then be modified as you wish. If you need fewer than the default number of lines, simply remove some from the studio group. It is best to leave a full complement of lines assigned to the interface. Please be aware that the order of the lines does correspond to the I/O sockets on the interface box. If you delete the line in the studio group that corresponds to the 3rd line on the interface definition, Line three on the interface box will not be available, and the third line on the AP screen will actually be the 4th line on the interface box.

Q: Every time I go to start up *Assistant Producer*, I get an error message saying "Out Of Memory".   Why is this?

A: Check your "Display Settings" using "Control Panel". You may be running too few colors. Try increasing the color resolution. Try the "High Color" setting. We know this is an odd place to look to solve a "low memory error", and that the solution does not make logical sense, but the answer works!

Q: Every time I try to start *Assistant Producer*, I get an error saying "No route to host". How do I resolve this?

A: *Assistant Producer* is trying to communicate to TeloServe using TCP/IP Winsock protocols, and the network is disallowing TCP/IP traffic to pass through. This is a common problem on a Net BEUI peer to peer computer network. Write down all your properties for Microsoft Client, and the TCP/IP protocol. Delete both protocols, and re-install & re-configure them. (do this on both the Client, and Server PC's) Restart both computers. The computers should start talking TCP/IP now.

Q: How does the Firmware Revision Version in my interface box affect AP?

A: AP is designed to support as much of the functionality of your interface box as possible. It does not merely provide the basics. Since the control protocol of the different firmware revisions has changed, AP is only designed to function properly with the latest chip revisions. While some earlier chips versions may work fine, some of the problems you may encounter with earlier chip versions include but are not limited to: Teloserv and/or AP crashing or locking up, certain features not working, erratic behavior. Listed below are all of the current chip versions. If you are having problems this is one of the first things to check. You may contact Telos for updated chips.

Firmware Revision Versions
1A2   5.41 or 5.4.1c
DIM   1.48.4
1X6   1.20

Q: Why does TeloServ keep crashing with my 1A2 when I send caller data?

A: Check your Firmware Revision. The latest version is 5.41. Earlier chip versions will cause crashing.

Q: What do the various Configuration files do?
(Not all of these files will appear for older versions of Teloserve and AP)

In the Teloserve directory (probably C:\Program Files\Teloserve\):

StudioConfig.mdb	This file holds all of the configuration data defined in the Config page of Teloserve. It stores the lines, iterface type and definitions and Studio Group definitions.
Security.mdb	This file holds all of the user profile information. It holds all of the definitions defined in the user profile section of Teloserve. It also holds all of the screen settings of each user from the last time they used AP, so that AP looks the same for them wherever they log in.
Teloserve.inf	This file holds global Teloserve information such as the master winsock port information and whether the password required check is turned on or off.

In the AssisPro directory (probably C:\Program Files\AssisPro\):

Writ.Inf	This file stores master settings for AssisPro including the TCP/IP settings neccessary to contact TeloServe as well as other screen settings not included in the user profile.

Q: How can I make a backup of current AssisPro and Teloserve Settings in case someone accidentally changes them or they get corrupted?

A: Simply make a copy of the 4 files listed above somewhere on your computer. If the settings get screwed up just replace them with your copy of these four files and restart the program.

Q: Why does Teloserve sometimes switch to a different Winsock Port?

A: This problem has been fixed for the most part. However, in older versions of the manual it was suggested that you use Winsock Port 1. This is a bad idea. The bottom 1024 Winsock Ports are reserved for OS system use. When the system takes them over, Teloserve is forced to switch. We use socket number 1037 with no problems.

Q: I just set up Teloserve and AssisPro, but my settings did not get saved properly.
The settings for both of these programs get saved when the programs are shut down. The programs need to be shut down properly to save the settings. I usually set all of my settings and then shut down and restart the program once to be sure that they are stored and retrieved properly.

Q: I just set up AssisPro and when I logged in under another user name the settings were different.

A: All of the current settings of AP are stored in each user's (Log in name set up under Teloserve) profile. You must set up the appropriate AP options under each person's profile.

Q: Why do I get the red On-Air bar when I use the producer phone with the 1X6?

A: 1X6 systems may either be set up as having 1 hybrid and 1 producer phone or 2 hybrids. The scenario which you wish to use must be defined in the Teloserve Configuration page. When a 1X6 is defined as the interface type, you will notice that in any of the studio groups assigned to this interface, several of the checkmarks for hybrids or mitel phones are disabled. The Hybrid 1 is always available. If you unselect hybrid2, you will notice that both the hybrid 2 and the Mitel (Producer Phone) 1 become available. Click

on the one you will be using. If your scenario has a producer phone tied to the system click on Mitel 1. If you are using 2 hybrids, click on hybrid 2.

Q: I set up two instances of AP - One of them as Talent and one as Producer. Why do they keep switching roles?

A: If you are using the same log-in account (for example the Admin account) for both computers, whichever one was the last one to shut down AP stores its user settings in the Admin Profile. Thus when any machine logs in under the Admin Profile, the Talent/Producer mode which was used by that machine is returned. All screen settings including the Talent/Producer mode are saved to the Profile. The solution is to create two user names - one for the producer and one for the talent. At that point all settings will be returned correctly. This will also create different names for the comments in the Message box so that everyone knows where each comment comes from.

Q: I do not want my staff to have to log in to AP. How do I disable this and still have all of the right screen display and settings dhow up?

A: Create log in names for producer and talent. If you are using the template files they are already created. Be sure that the password required check is on in Teloserve. Then start up AP on each of the computers logging in with either Talent or Producer usernames if you are using the template files, or whatever usernames you have set up otherwise. Then shut AP down on all computers. Finally unselect the password required check in Teloserve. AP saves to its local writ file the last username used for a log-in when it suts down. When you start it up again it uses this username first. If Require Password option in Telserve is on it will bring up the screen asking for the users password. If Password required option is off it justs logs into Teloserve using whatever the last login name was. In this way you can get the correct screen settings and message user name to show up on each individual instance of AP without requiring a login.

Q: Why do my disabled buttons in my 1X6 AP setup sometimes appear to be enabled?

A: This is a benign problem which has been fixed. The fix will be released in the next version. This only occurs in 1X6 configurations and it is benign in that while the buttons appear to be enabled they will not actually function. It is just a graphics issue.

The TCP/IP Setup Guide

Users using the Windows 98/NT multiple monitor option: There are specific instructions for you at the end of this guide!

The "Ping test".

Here's an extremely useful test diagnostic tool: "PING"

If you can 'ping' the TeloServe PC with TCP/IP, *Assistant Producer* will be able to connect.

If you are using TCP/IP, you should perform this test before installing any of our software. If you pass this test, you should have no problem using Assistant Producer.

MAKE SURE YOU HAVE ALREADY SET UP YOUR TCP/IP NETWORK PROTOCOLS BEFORE PERFORMING THE PING TEST!

A "Ping Test" is accomplished in this way:

Go to the MS DOS prompt window, and type "PING *<the IP address of the computer of interest>*"

Example: "Ping 168.192.0.1". Your PC will then "Ping" the PC at the far end with 32 bytes of data, and will report the status of the ping test.

If you get messages such as "request timed out", or "host unreachable" then there is an error in your network configuration, and Assistant producer will **not** work.

Prepare the "Server PC" for TCP/IP communications…

TCP/IP Winsock is by far the easiest method to set up & operate *Assistant Producer* over your computer LAN.

When using TCP/IP, *Assistant Producer* will use strictly TCP/IP protocols. In order for this to work, *Assistant Producer* must look for the "server PC's" IP Address. After finding the computer, *Assistant Producer* will negotiate with the server, and start operating.

First, find out the IP address used for the "Server PC". If you do not have IP addresses assigned to your network PC's, you can use the address 192.168.0.1.


There is a block of IP addresses ranging from 192.168.0.1 to 192.168.0.255 that are considered safe to use for internal network purposes. They are not assigned to any server on the Internet.

Companies specializing in Modem Sharing software regularly use this block of addresses for the purposes of giving an entire network access to the Internet on a common modem. The modem sharing software basically becomes an IP router for all Internet activity.

The address "192.168.0.1" is typically used for the PC or IP Router acting as an Internet server.
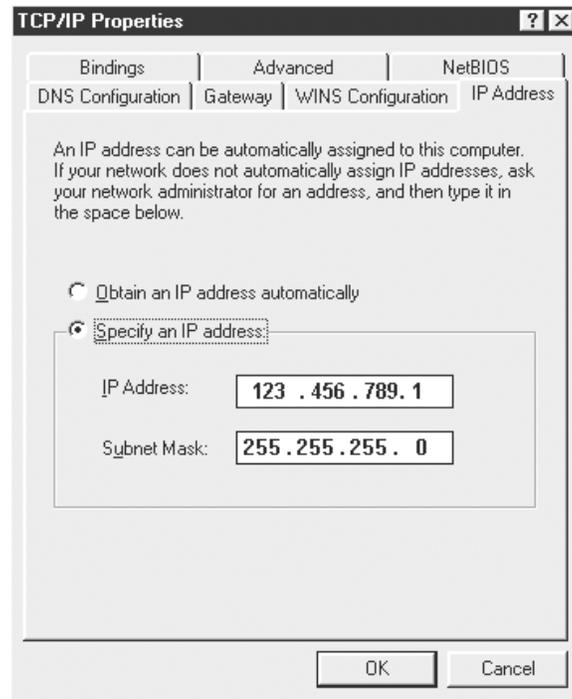
Assistant Producer's use of this block of addresses was intentionally chosen to ensure compatibility in this area. Should you decide to install Modem sharing software for the on-air staff using the Assistant Producer system, your addresses are already set up and running!

To assign one of these addresses (or enter your official IP address), you must go to your "network settings" and check to see if you are using TCP/IP for any of your communications protocols. You will find all of your network adapter protocols under the "adapter bindings" headings.
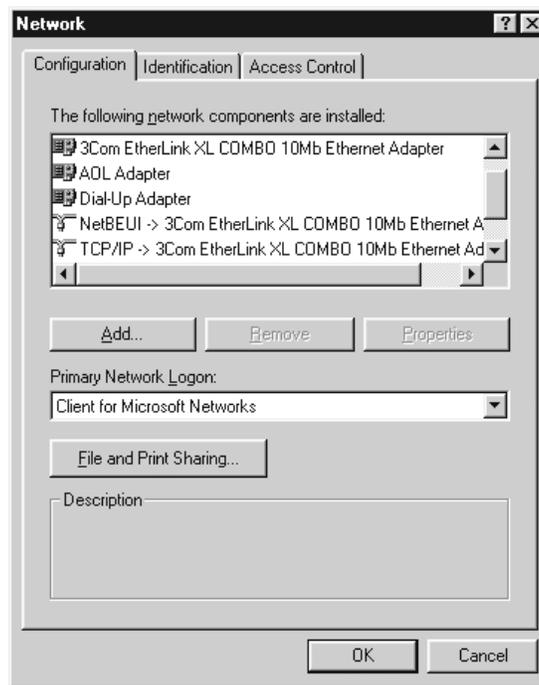
If you are not using TCP/IP as a protocol, add the option now. You will need your Windows OS CD ROM or floppy disks for here!

After you have verified that you are indeed using TCP/IP as a protocol, use the "Properties" option for this protocol. This will show you what IP address (if any) was assigned to your PC network Adapter.

TCP/IP Properties   ? ☒

| Bindings | Advanced | NetBIOS |

DNS Configuration | Gateway | WINS Configuration | IP Address

An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.

○ Obtain an IP address automatically

◉ Specify an IP address:

IP Address: 123 . 456 . 789 . 1

Subnet Mask: 255 . 255 . 255 . 0

OK   Cancel

The default option will be "Obtain an IP address automatically" If you already have an assigned IP address, the "Specify an IP address" option will be selected an address will be displayed in the "IP Address" box.

If you do not have an assigned IP address, select "Specify an IP address:" box, and enter an address ranging from 192.168.0.2 to 192.168.0.255. If this is the PC running TeloServe, enter the address 192.168.0.2. Addresses ranging from 192.168.0.1 to 192.168.0.255 are considered safe to use for internal network purposes. They are not assigned to any server on the Internet.

If your company switches to a permanent connection to the Internet through a service provider, you may have individual IP addresses assigned to each computer on your network. In this case, assign one of these addresses to the server PC by entering that address in the "Specify an IP address" box.

 There! The PC is ready. Now on to TeloServe!
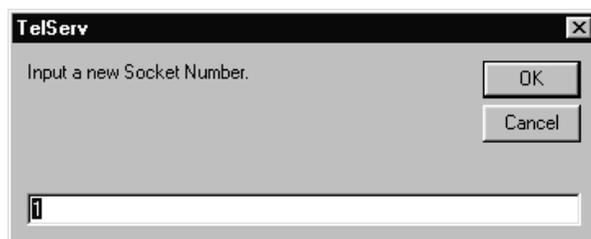
TCP/IP Setup for TeloServe.

TeloServe has a simple TCP/IP setup procedure. The TCP/IP configuration is in a pull down menu on the main window. Click on the word "File", and you will get the following menu:


Your TCP/IP options are:

- Change the TCP/IP socket #.
- Change the TeloServe password.

Selecting the TCP/IP socket # option, you will see the following dialog box:

For most applications, using a socket above 1025 should be fine, however, your PC may be running a TCP/IP application that is already using one of these sockets. Selecting a different number will resolve any possible socket conflicts.

If you choose to change your password, the following dialog box will appear:
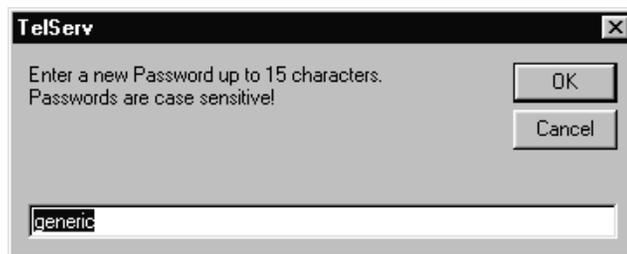
The default password is the word "generic". This dialog box will allow the system administrator to change the password to anything that contains up to 15 characters. The passwords are case sensitive, and are encrypted by the *Assistant Producer* software when transmitted to TeloServe. This adds another level of security when connecting to TeloServe over unsecured TCP/IP connections such as the Internet. The encryption method changes each time a new connection is made. The password is only sent during the initial connection phase.

Installing *Assistant Producer* **Client software for TCP/IP (recommended).**

When using this installation method, *Assistant Producer* will use strictly TCP/IP protocols.

You will need to have the IP address of the "server" PC handy.

Run the "Setup" software for the Client software.

After setup is complete:

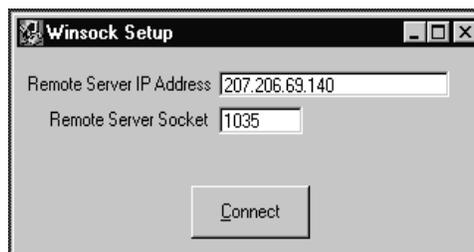Start up the *Assistant Producer* client software.

You will see the *Assistant Producer* screen:

Click on the "Setup" button.

On the top menu bar, select "port".

Select "TCP/IP Winsock". At this point, you will then see the following screen:

The "remote Server IP Address" box will show the default address of "127.0.0.1". Change this (if necessary) to the server PC's IP address. If Assistant Producer is running on the same PC as TeloServe, then you can keep the default address for "remote Server IP Address".

Assistant Producer will chose socket #1050 by default.

Enter your password to connect to TeloServe. If you did not change the password during installation, the Assistant Producer will default to these administrator defaults:

> Login: "Admin"
> Password: "Admin".

These default passwords must be added and/or changed on TeloServe to block access to the setup files by unauthorized users.

For now, we will stay with these defaults.

The Next step: Click "Connect".

You are now connected to the server. Whenever any of the configured clients start up, they will automatically connect to the Remote Server IP Address you just specified.

If you are unsuccessful making a connection to the server (After your first *ever* attempt making a connection), *Assistant Producer* will consider the IP address invalid, and revert to the default. If you were successful initially at making a connection, but later on some problem prevented you from making a connection, *Assistant Producer* will keep your (valid) IP address. Since the address worked once, *Assistant Producer* will assume that it is OK, and that the nature of the communications problem lies elsewhere.

Users of Windows 98's Dual Monitor Feature

With Windows 98's Dual Monitor option, there is no need to install other computers on a network if your needs require only two display (monitor) locations. You can just assign the display output for Assistant producer (talent) to one monitor, the copy of Assistant producer (producer) to the monitor for the producer.

To do this, you will need to install Assistant Producer (client) onto the same PC, but you will have to install copy #2 into a different directory, say "C:\Program Files\Assispro2". When starting up Assistant Producer #2, take your mouse and drag that display over to the studio monitor. When starting, Assistant producer #2, Windows 98 will remember to always display the output of assispro.exe (#2) on that particular monitor.

In total, you will be installing 1 copy of TeloServe (Explained earlier in this section), and 2 copies of Assistant Producer on the same (single) PC.

Install the TCP/IP protocol on your PC. There is no need to assign an IP address to this PC if it will not be sharing any Assistant producer functions with other PC's. When configuring the Assistant Producer Clients, enter the IP address "127.0.0.1" for the Server IP address.

The address "127.0.0.1" is the internal IP address for all computers using the TCP/IP communications protocol.

"Start up" sequence for running *Assistant Producer* over TCP/IP.

"Server" Machine

1) Start "TeloServe"
2) Start the Local Client version of *Assistant Producer*" if it is to run simultaneously on this PC.

All "Client" Machines

3) Start "*Assistant Producer*".

Error Messages:

```
AssisPro                              [X]
Error communicating remote socket
          [      OK      ]
```

```
AssisPro                                                  [X]
 /!\   Run-time error '40006':
       Wrong protocol or connection state for the requested transaction or request
                    [      OK      ]
```

The above errors are produced by either a failure in the Server PC, no network connection, or Incorrect IP address.

Using Assistant Producer Clients in remote (off-site) locations.

How it works:

Assistant Producer can establish a remote connection in one of two ways.

1) By using a modem connected to the TeloServe PC.
2) By making the TeloServe PC accessible via the Internet.

There is no special software to use. All you need is Windows 95 / 98, Assistant Producer Client, and Dial Up Networking v. 1.3.

The direct modem method for Windows 95 *requires* the use of Microsoft Dial Up Networking 1.3, and a modem.

Windows 98 already has a version of Dial Up Networking 1.3, so <u>do not</u> install it onto your Windows 98 computer!

Dial Up Networking 1.3 is on the Assistant Producer CD-ROM in a folder called "msdun".   The first step is to install Dial Up Networking 1.3 onto the TeloServe PC / and the Assistant Producer Client PC. ***Do this ONLY for Windows 95 PC's*** as Dial Up Networking 1.3 is designed as an upgrade for Windows 95. Windows 98 and Windows NT have their own dialer programs.

The Windows 98's dialer functions the same as Dial Up Networking 1.3, so these instructions will also be valid for the Windows 98's dialer too. The Windows NT's dialer is somewhat different, and you should consult your Windows NT manual for further information there. Another useful source on NT RAS can be found at this web site: http://www.wown.com.

After you have installed the Dial Up Networking 1.3 application to your computer, there are a couple of things you need to know about TCP/IP addresses and Dial Up Networking 1.3.

1) DUN 1.3 will assign 192.168.55.2 as the IP address of the dial up client, so make sure you do not assign an address to the remote computer.

2) The IP address the dial-in Assistant Producer client needs to use to contact TeloServe is now 192.168.55.1 (regardless of your in-house network IP address).

This means that the IP address for TeloServe when going through the dial up modem connection will be 192.168.55.1. This is automatically assigned by the Dial Up Server 1.3, so there is no need for you to set it up in the Networking control panel. It is highly advisable for you to NOT assign 192.168.55.1 or 192.168.55.2 to ANY adapters on your computers.

How to "activate" Dial Up Server

If when you download Dial Up Networking 1.3, and you do NOT get the option for Dial Up Server in your "connections" menu of the Dial Up Networking folder, perform the following steps to activate "dial up server":

1) Go to "Control Panel".
2) Go to "Add / Remove Programs".
3) Click on the "Windows Setup" tab.
4) Click on THE WORD "Communications" (not the check box). This should highlight the entire "Communications" region.
5) Click on "Details"
6) Put a check mark on the box next to "Dial Up Networking". Then click "OK"

Windows *may* prompt you to install your CD at this point. The system will then load "Dial Up Server", and it will become an option in the "Dial Up Networking" folder in "My Computer".

Using the Internet to connect to TeloServe

For the most trouble free use of Assistant Producer over the Internet, you'll need a *"Static IP Address"*. No doubt, you're already familiar with IP addresses by this point! TCP/IP is the standard communications protocol for the Internet. It is also the network communications protocol of choice for Assistant Producer.

Of course, TCP/IP requires each computer to have a TCP/IP address. Every computer on the internet at any given time has a unique address that only it is using. This makes it possible for other computers on the world-wide network to find your computer, and send data to it.

When your computer dials into the Internet, it is assigned with an IP address by the computers at the Internet Service Provider's offices when your connection is established.

All Internet Service Providers (ISP's) make use of a finite set of IP addresses for all their customers, so what they so is dynamically assign addresses to their customers computers. Basically, the same IP addresses get used over and over for everybody using their service. The next available address is assigned to users on a first-come first-serve basis.

What you need to know when trying to contact *any* computer on the Internet is its IP address. This gets kind of hard with dynamically assigned addresses, as the address will change every time you log onto the Internet through your provider. For some customers with a computer that needs to be made accessible to other computers on the Internet this is a big problem. To resolve this problem, your Internet Service Provider can provide a "Static IP Address" for a particular dial-up account.

What this means is that every time, say, your computer dials into the Internet, it is always assigned the same Internet IP address, and this IP address is ONLY used for your account, and nowhere else.

This static IP address is the basis of what you'll need to make Assistant Producer work across the Internet. Only the TeloServe computer needs the Static IP, and not necessarily the Client application(s).

Once the TeloServe PC is on the Internet, all Assistant Producer Clients need to use the Internet IP address of the TeloServe PC as it's "Remote Server IP Address".

In English:
If your Internet Service provider gives you the IP address of "207.25.221.194" for your Dial Up connection, the Assistant Producer Clients on the Internet need to use "207.25.221.194" as the Remote Server IP Address. (This is true even if the Assistant Producer Clients on your local network is using, say, "192.168.0.1" In this case, "192.168.0.1" represents the address of TeloServe from within your building, and "207.25.221.194" is the address of TeloServe to the rest of the planet.)

A Word on TCP/IP Socket Numbers

Assistant Producer's server application, named TeloServe, uses specific "ports" to send data to and from the client applications either locally, or over the internet. If you think of the TCP/IP address of a computer as the equivalent to an "area code" for telephones, then the "Port" number is equivalent to the seven digits of a phone number.

Computer programs that use TCP/IP as their means of communications uses specific port numbers to transfer data.

TeloServe allows you the ability to pick any number as your "socket number", but we recommend using numbers above 1024. Preferably somewhere above 2000. This is because there are many other applications that use specific port numbers, which could interfere with Assistant Producer's if you were to inadvertently assign TeloServe a port used by another application.

There is a list of "well-known ports", that is, ports known to be used, by (or reserved to) specific software, or applications.

For example:

All e-mail clients use port 24
All FTP activities use port 20
All Web Browsers use port 80
The popular game "Doom" uses port 666 (No kidding!)

A list of "well-known" ports can be found here:
http://www.isi.edu/in-notes/iana/assignments/port-numbers

Do not treat this list as the end-all be-all of lists, as it is impossible to keep track of EVERYBODY, but this is a start. If you find that the TeloServe socket number changes a lot, suspect a computer application either on the TeloServe PC, or on one of the Clients to be "interfering" with the normal operation of Assistant Producer. The easiest solution would be to change TeloServe's socket number. When you do this, don't forget to re-configure the Clients!

Basic Security Issues

"Direct dial up modems" provide you with the advantages of a closed system accessible only to individuals with your modem dial up number, network password, and your TeloServe password.

If you are doing broadcasts from locations from outside your local phone company LATA (Local Access Transport Area), you will be paying toll charges. How to get around this?

"Internet based TCP/IP Winsock" connections provide a very flexible (and cheap) means of controlling your phones from anywhere in the world…literally!   Security (by default) is provided by the requirement that *Assistant Producer* clients must be configured for the TeloServe computer's IP address and (TeloServe) password.

If network security from "shady characters" on the Internet is of concern:

There are two ways to provide security for your network from "busy bodies" on the Internet.

1)   Give the TeloServe "Server PC" Internet access through a standard computer modem. Secure a static IP address with your ISP or System Administrator. This IP address will be valid not only for the Internet, but also for the in-house *Assistant Producer* clients. When it is time for your remote broadcast, establish a call to the ISP on the TeloServe PC. The computer is now on the 'net. When the *Assistant Producer* client in the field logs onto the net, it will search for the IP address of the Studio PC, establish the connection, and you are then up and running.   Security to your PC comes in the form of the dial up connection.   The PC must be on-line for anyone to try connecting to it from the outside.

2)   Ultimate security would come in the form of an Internet firewall. This can be done using *Microsoft Windows NT Server's* IP router capabilities. In this setup, only the IP address you specify will gain access to your LAN / WAN by means of the Internet. This will require the use of fixed IP addresses on the PC's in the field.

The fixed IP address solution will work great for remotes that are within the reach of your LAN/ WAN, but if you can no longer access your network through some form of a local call, this could pose a problem.

One solution to the remote network access problem…

If you have a "DNS" (Domain Naming Service) server, you can take your IP address anywhere in the world, and gain access to your network with just a local ISP call.

The way it all works:

The user will use a local ISP account to establish a connection to the Internet. The PC will then search for your DNS server while on the "net". Your DNS server will then verify the IP Address, user name along with any necessary passwords. Once this is complete, you will be allowed access your network. At this point, you will be able to log into the "*Assistant Producer*" phone call management system.

Your method for security is only limited by your creativity. There are many options available to you, and a meeting with your System Administrator or a call to your local Internet Service Provider could possibly provide more ideas.

Are you new to PC Networking?

We at Telos recognize that there are many people like you out there, so we put together this guide to help you through the installation.

Here's some helpful instructions for the first time user of a computer network.

You just got *Assistant Producer* today, and you have to have it running yesterday. Only one problem…
You never set up a computer network in your life! Arrgh!

This section describes how to get your new call screening system up and running using entirely "off the shelf" parts.

What to do:

1) Establish where you want to install the PC's for *Assistant Producer*, and how you are going to run the network wiring.
2) Get the hardware. Before you hop into the truck to run to the computer store, read this whole section first! To make setting up a network go as smoothly as possible, we recommend buying an Ethernet network card for each PC, and a mini Ethernet network hub. Using 10 Base-T cards & hub will be more than satisfactory for *Assistant Producer*. 10/ 100 Base-T based networks are easy to set up & maintain when compared to the old "coax cable" based networks. You should figure out how much network cable would be needed to go between each PC and the network hub. What kind of cable to buy? The category 3 type Ethernet cable is just fine for 10 Base-T networks. When faced with really long cable runs, or facilities with a lot of RFI, it might be worth the cost to use category 5 cable. *If this is to be the start of a studio computer LAN system, just go with the category 5 cable.* Why? It won't be long before you will have to go 100 Base T, and that requires the use of category 5 cable!
3) While you are at the computer store, buy "Networking for dummies". ***Not** that you are a dummy*, but this book will answer a lot of networking questions that we do not have the space and time to cover in this manual!

Hints when buying network hardware: Stick to regular brands made by larger companies such as "Maxtech", or "Linksys". These larger companies will sometimes sell a complete "network in a box", which has all the necessary hardware & instructions to network two (maybe more) PC's *literally* in one box.

Buying cheaper brand cards will work just fine, but they sometimes come with less than clear documentation.   Experienced network administrators can easily "feel " their way through the installation of the cheaper cards. New people (like you) will find the lack of clear instructions very frustrating!

After you get the equipment to your facility, you will want to install the hardware, install the necessary drivers, connect each PC to the Ethernet hub, and see if they can talk to each other.

Have your Windows 95 disks handy. You will need them.
(You might also need your Windows 95 networking book we told you to buy earlier! A good reference book will answer all your network-specific questions!)

You can check for proper communication by clicking onto the "Network Neighborhood" icon on the desktop screen for each PC.   You should see both computer names displayed in the "Network Neighborhood" dialog box on each PC. Sometimes it will take a few minutes after the initial boot-up for anything to be displayed in these windows. This is normal.

> *If the following happens:*
>
> *Your Network Neighborhood window shows a flashlight, and eventually gives you an icon for "Entire Network". You click on the "Entire Network" icon, and you get an icon for "Workgroup".*
>
> *You click on the "Workgroup" icon, and get the "Entire Network" icon...*
>
> *The computer is not properly set up. Re-check your network setup. This is where the reference book we told you to buy comes in handy.*
>
> *There is probably just one thing not set up correctly. Carefully going through your setup procedures should shed some light here.*
>
> *If you click on "Network Neighborhood", and only see the computer you're working on displayed, then that computer is talking to the network card (at least), but the communications is not getting any farther than there. First check your local configuration, then re-check the network settings on the other computer (Maybe it is not talking).*

TCP/IP is the easiest to setup, and the most flexible to use. This protocol will have to be installed from your Windows 95 disks. After this is done, you can go to Chapter 2, and start the installation of *Assistant Producer*. For a review of how to use *Assistant Producer* on TCP/IP, see "The Complete Guide to TCP/IP".

Giving your computer an identity on the network

In order for any network of computers to work, you need to establish an identity to each computer. This ID can range from a word, or name, as used in a Microsoft (Net BEUII) peer to peer network - to a special number, such as an IP address, which is required for TCP/IP.

In the Microsoft peer to peer approach, the name of a particular computer can be anything you want, whether it be something as cold as "Station 3", or something with character, such as "Oscar". The choice is yours.

You can also run multiple protocols. For example, you can run Net BEUII, a Microsoft peer to peer network protocol, which requires (regular) computer names, and simultaneously run TCP/IP Protocols over the same network.

In the above situation, your computer will have two identities. 1) The (word) name used by Microsoft Net BEUII and 2) The IP address (number) for TCP/IP.

Any program application designed to look for a Microsoft computer (name) identity (such as Remote Automation Manager) will connect to that PC by first searching for the name of the required server PC over the network.

Any program application, which requires an IP socket connection (such as TCP/IP Winsock), will search the network for the IP address of the server PC, and then establish a connection to the server software.

To assign an ID to your PC on a Microsoft Network, go to the "Network" setup icon in your Windows 95 "Control Panel", click on the "*Identification*" tab, then define a "*computer name*", and define a "*workgroup*".

What is a workgroup? A workgroup can be thought of as an electronic "office" where multiple computers can be assigned to exist. By default, Windows assigns a generic workgroup called "**Workgroup**" to any unspecified workgroup entries. (See your Windows 95 or NT instruction books for more information).

Some Windows 98 advantages:

Dual Monitor Support:

Windows 98, like its cousin Windows NT, can extend its desktop by supporting multiple display monitors. With this feature, we have been able to run two copies of *Assistant Producer* client, along with one copy TeloServe on the same PC. With dual display monitors/ adapters, one PC. One client application is configured to be the "Producer", the other "Talent". The two client programs are then assigned to the appropriate monitor.

Assistant Producer Version History

Ver. 1.05

Introduced Lock mode for Next Generation and new chipset of DIM.
Fixed issues with null characters from K6 chip serial port.
Created a studio group change from the configuration menu.
Added capability for Line Names

Ver. 1.06

Update graphics so that only center colored icon changes in buttons to prevent flickering on slower machines in flashing hold or ring situations.
Fixed Bug for Next Generation system where in a 10 line setup some lines under 10 and some over 10 the buttons would not show up.

Ver 1.07 - AssisPro Only

Added a command line option "D." Add this option by changing the startup icon shortcut so that it says "….\AssisPro.exe D." This will initiate a debug mode that lengthens the allowable login timeout for debug purposes. If this option is selected pressing the F3 key will bring up a debug screen that shows the incoming raw Winsock data.

Ver 1.08 - AssisPro Only

Fixed graphics on button leds during resize.

Ver 1.09 - AssisPro Only

Fixed alignment of captions on resizing. Checked Sync Time Timer

Ver 1.10 - 1.11

Fixed various graphics and user profile issues. Fixed multiple resizing during logging into studio group.
Fixed user profile problems when changing studio groups. Fixed digital clock and clock cover issues.

Ver 1.12 – AssisPro Only

Fixed bug that didn't allow existing calls to show up when AssisPro first starts.

Ver 1.14

Recompiled in VB6.0. Added Password protection to configure pages.

Ver 1.15 - TeloServe Only

Make it so that only one version of TeloServe may be running on a machine at a time. Should fix problems with moving Winsock Ports.

Ver 1.16 – TeloServe and AssisPro

Fixed a host of graphics issues and screen redrawing issues that occurred when switching from various studio groups with various numbers of lines, and when booting into certain line configuration studio groups. Also fixed a graphic bug with 10 line 1A2 studio group setup that caused the screen not to draw or only half draw. Fixed a crash that occurred if the 5_{th} studio group tried to pass line data to the 5_{th} line. Forced hold and drop labels to center. Fixed bug that caused the time offset variable not to be saved. Fixed Save As option in the Show Data Form. Fixed Red Clock Hand in the studio groups with 11 or more lines.

<div align="center"><u>Ver 1.17 – TeloServe and AssisPro</u></div>

Fixed a bug that crashed AssisPro when dialing on the producer Mitel Phone.

Fixed a bug that occurred when the user profile data got beyond 255 bytes. This would usually manifest itself if the user tried to save a hotlist database with a long pathname.

Fixed a Login security issue that allowed login when the username and password were the same (i.e. Admin and Admin) if no password is entered.

Conformed Teloserve names to Teloserve with TeloServ as the 8 Character extension. Also Changed Teloserve's .inf filename to Teloserv.inf from Telserv.inf

Prohibited producer's ability to select next call on a line that is off.