How to Install the Virtual Control Panel

What is the Virtual Control Panel?

The **Virtual Control Panel** (hereafter referred to as VCP) is a means to get remote control panel (RCP) functions on the PC. This is accomplished by creating a LAN-based configuration, though no network is required. The VCP is <u>not</u> a replacement for the parallel-connected remote control panel (P/N 04N5592 a 25-pin cable) but rather an alternative. You will need to remove the parallel RCP cable, if it is installed. If you are using the serial-connected RCP cable (P/N 97H7591 a 9-pin cable) continue to use it. The VCP allows nearly all the same functions as the RCP but due to its connectivity, it cannot, for example, be used to power on a system. The Graphical User Interface (GUI) is the same as the RCP, only the connectivity is different. Currently, the VCP is only available for the V5R1 Client Access Express client communicating to a V5R1 server.

The VCP will use a TCP/IP (LAN) connection on the Operations Console cable. Because of this, the directly-cabled console must be connected to the iSeries in order for the VCP to function. The VCP can not be used to replace a configuration that is <u>only</u> for the parallel-connected RCP. You <u>will</u> have to have a directly-cabled console configured in order to use the VCP. The VCP will require an <u>additional</u> configuration.

Be certain to read the **Before you begin** section for a list of the requirements and limitations that the VCP may have for your environment.

Before you begin

The following V5R1 LIC PTFs need to be installed on the iSeries server prior to using the VCP:

- o **MF27569**
- o **MF27296**
- o **MF27349**
- o **MF27351**

In addition, the client needs to install V5R1 Client Access Express service pack SI02795 or later. The latest service pack can be found at:

http://www.ibm.com/servers/eserver/iseries/clientaccess/casp.htm

or

ftp://ftp.software.ibm.com/as400/products/clientaccess/win32/v5r1m0/servicepack

Limitations:

- The VCP is only available while the console is connected.
- You <u>must</u> remove the parallel remote control panel cable before configuring the VCP connection.
- A <u>unique</u> service tools device profile <u>must</u> exist for <u>each</u> VCP configuration.
  For example, you have connected a PC named **console** to **server1** using a direct cable and you now want to configure a VCP. If no Operations Console LAN configuration exists to this server then the service tools device profile **QCONSOLE** has not been used. Therefore, you can specify **QCONSOLE** when you configure the VCP.
  Another example would involve a cabled console called **console** that shares the duties as a console with other LAN-connected Operations Console PCs named **LAN1** and **LAN2**. In this example **LAN1** used the service tools device profile **QCONSOLE** during setup and **LAN2** used a user-created service tools device profile of **QCONSOLE2** during its setup. For the intended VCP configuration you must create another service tools device profile, such as **QCONSOLE3** to be specified when you configure the VCP.
- You cannot use an <u>existing</u> network name
  When you create the additional VCP configuration, you cannot reuse a configuration name. For example, if you have a configuration named **server1** you cannot name the VCP **server1**. Also, if the intended VCP-capable PC is on a network, you cannot use any name that already exists on that network.
- All VCP / RCPs are active at the same time
  If you have multiple PCs (LAN connected) that can become the console, one at a time, and those configurations also use the remote control panel functions, all active RCPs can control the server. Use care when working with control panel functions when multiple PCs have access to the functions.
- RCS connections to an LCS with remote access are <u>not</u> supported at this time.
- An alternative for powering on the system at a later time, instead of using a cabled remote control panel, can be provided using the IPL scheduling function in Operational Assistant, available in OS/400 by pressing the **Attention** key. You can also use the OS/400 command **go power** and select the option **Change power on and off schedule**.
- The **hosts** file on the PC may need manual cleanup
  Each time you create a network configuration on the PC, data is saved in a file called **hosts**. This file may be used each time the PC attempts to connect to the network and each entry is unique to any others by the connection name. Be aware that, currently, if you delete a VCP configuration the corresponding **hosts** entry is <u>not</u> deleted. You must manually delete the appropriate line from this text-based file using any text editor.
- If you have a server model that uses the keystick, the **mode** button will work with the same functions as the physical control panel, depending on whether the keystick is inserted or not.
- The service tools user profile used to authenticate the connection must have the **Partition remote panel key** privilege in order to use the mode function provided by the VCP. Service tools user profiles **QSECOFR**, **QSRV**, **22222222**, or **11111111** already have this permission by default. If you plan to use a user profile other than the defaults, see "Check user profile for permissions", below, for instructions on how to check for the privileges.
  Note: Systems with a keystick require the keystick inserted before the user is eligible to use the mode button. For example, the user has the remote panel key privilege but won't have the mode function available until the keystick is present. For systems without the keystick only the user profile remote panel key privilege is necessary.

What needs to be done

Follow the instructions below to prepare for and install the virtual control panel:

Using existing console, create a service tools device profile to use

The VCP requires an available, unused service tools device profile. If the server does **not** use Operations Console (LAN) for the console type, you can use the existing service tools device profile of **QCONSOLE**. To check for the console type follow these instructions:

1. Start Dedicated Service Tools (DST) to check the console type or create a service tools device profile. To enter DST, either IPL in manual mode or enter function 21 on the control panel. Use the most appropriate method for you by following <u>one</u> of the following steps:

    - To perform a manual IPL, follow these steps:

      a. Power down the system if it is powered on.

      b. Look at the Function/Data display on the iSeries control panel. Systems with a keystick should show the mode as **Manual** and **01 B** in the Function/Data display. Systems <u>without</u> a keystick should show **01 B M**.

         Note: If the Function/Data display is not lit the system does not have power.

      c. If the system is already set to **B M** or **Manual** go to step h. Otherwise, continue with step d to set the system to manual mode.

      d. Press the **Up** or **Down** button until **02** appears in the Function/Data display. If your system uses a keystick, select **Manual** by using the **Mode** button.

      e. Press the **Enter** button on the iSeries control panel.

      f. Press the **Up** or **Down** button until **B M** appears in the Function/Data display. If your system uses a keystick, select **B**. The Function/Data display should show **02 B** or **02 B M**.

      g. Press the **Enter** button on the iSeries control panel.

      h. Press the **Power** button on the iSeries control panel to power on the server, or start an IPL if the system was already in use.

         When the IPL has reached the appropriate step you will see the **IPL or Install the System** window. Select the option **Use Dedicated Service Tools (DST)** and sign on using a user ID that has security authority, like **QSECOFR**.

    - To perform a function 21 at the control panel, follow these steps:

      a. Sign off the console 5250 session first - leaving the screen at the AS/400 signon since your current session will end when you perform the function 21.

      b. Look at the Function/Data display on the iSeries control panel. Systems with a keystick should show the mode as **Manual** and **01 B** in the Function/Data display. Systems <u>without</u> a keystick should show **01 B M**.

         Note: If the Function/Data display is not lit the system does not have power.

      c. If the system is already set to **B M** or **Manual** go to step d. Otherwise, use the instructions above to set the system to manual mode.

      d. Press the **Up** or **Down** button until **21** appears in the Function/Data display.

e. Press the **Enter** button on the iSeries control panel.

The console should show the **Dedicated Service Tools (DST) Sign On** window momentarily. Sign on using a user ID that has security authority, like **QSECOFR**.

2. You should be here:

```
▫️ Session A - SYSTEM1.ws - [24 x 80]                              _ ☐ ✕
 File  Edit  View  Communication  Actions  Window  Help
                    Use Dedicated Service Tools (DST)
                                              System:    S102MPNM
  Select one of the following:

        1. Perform an IPL
        2. Install the operating system
        3. Work with Licensed Internal Code
        4. Work with disk units
        5. Work with DST environment
        6. Select DST console mode
        7. Start a service tool
        8. Perform automatic installation of the operating system
        9. Work with save storage and restore storage
       10. Work with remote service support




  Selection

        __

  F3=Exit    F12=Cancel

 MA        a                                                    21/007
 🖳 Connected to remote server/host 127.0.0.1 using port 2044
```

3. Select **Work with DST environment** (option 5).

```
Session A - SYSTEM1.ws - [24 x 80]                                    _ □ ×
File  Edit  View  Communication  Actions  Window  Help
                         Work with DST Environment
                                               System:    S102MPNM
   Select one of the following:

         1. Active service tools
         2. System devices
         3. Service tools user profiles
         4. System values
         5. Service tools device profiles
         6. Service tools security data




   Selection

       __

   F3=Exit    F12=Cancel

MA        a                                                       21/007
    Connected to remote server/host 127.0.0.1 using port 2044
```

4. Select **Service tools device profiles** (option 5).

```
Session A - SYSTEM1.ws - [24 x 80]                                    _ □ ×

File  Edit  View  Communication  Actions  Window  Help
                    Work with Service Tools Device Profiles
                                                    System:    S102MPNM
 Type option, press Enter.
   1=Create              2=Reset password        3=Delete
   4=Display             5=Enable                6=Disable
   7=Change attributes   8=Change description


      Device
 Opt  Profile     Description                               Status

  _   QCONSOLE    QCONSOLE                                  Enabled
  _










 F3=Exit    F5=Refresh    F12=Cancel

MA    a                                                            10/003
    Connected to remote server/host 127.0.0.1 using port 2044
```

5. Enter a **1** next to the empty **Device Profile** field, then, enter a name to call the VCP, similar to the next example window:

```
Session A - SYSTEM1.ws - [24 x 80]                                    _ □ X
File   Edit   View   Communication   Actions   Window   Help
                    Work with Service Tools Device Profiles
                                                   System:    S102MPNM
 Type option, press Enter.
   1=Create              2=Reset password        3=Delete
   4=Display             5=Enable                6=Disable
   7=Change attributes   8=Change description

       Device
 Opt   Profile     Description                                  Status
  1    VCP
  _    QCONSOLE    QCONSOLE                                     Enabled




 F3=Exit    F5=Refresh    F12=Cancel

MA     a                                                           10/010
    Connected to remote server/host 127.0.0.1 using port 2044
```
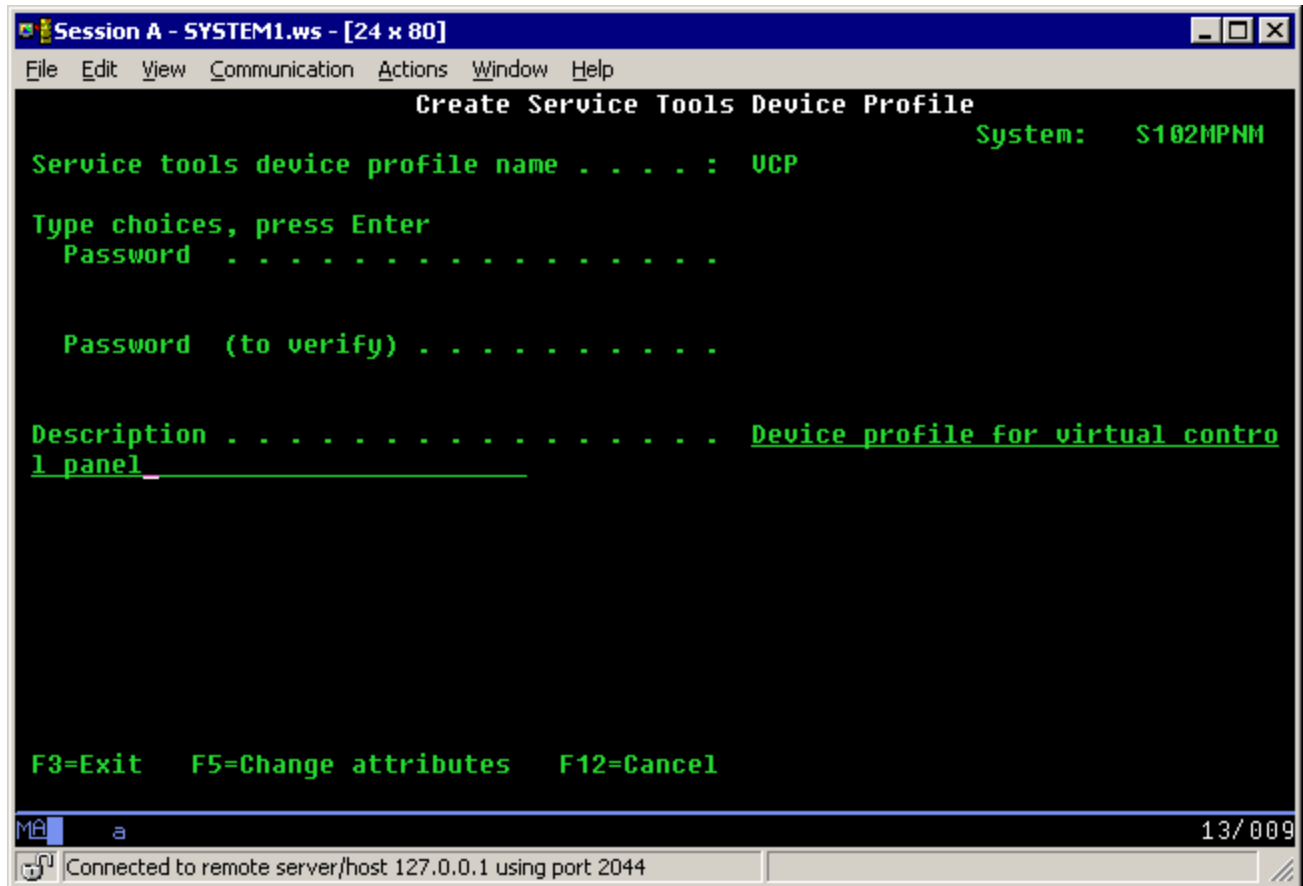
6. Press **Enter**. You will get:

```
Session A - SYSTEM1.ws - [24 x 80]                                    _ □ X
File  Edit  View  Communication  Actions  Window  Help
                     Create Service Tools Device Profile
                                                  System:    S102MPNM
 Service tools device profile name . . . . :  VCP

 Type choices, press Enter
   Password  . . . . . . . . . . . . . . . . .  _


   Password  (to verify) . . . . . . . . . .


 Description . . . . . . . . . . . . . . . .  _____
 _____





 F3=Exit   F5=Change attributes   F12=Cancel

MA█    a                                                            06/047
🖳 Connected to remote server/host 127.0.0.1 using port 2044
```
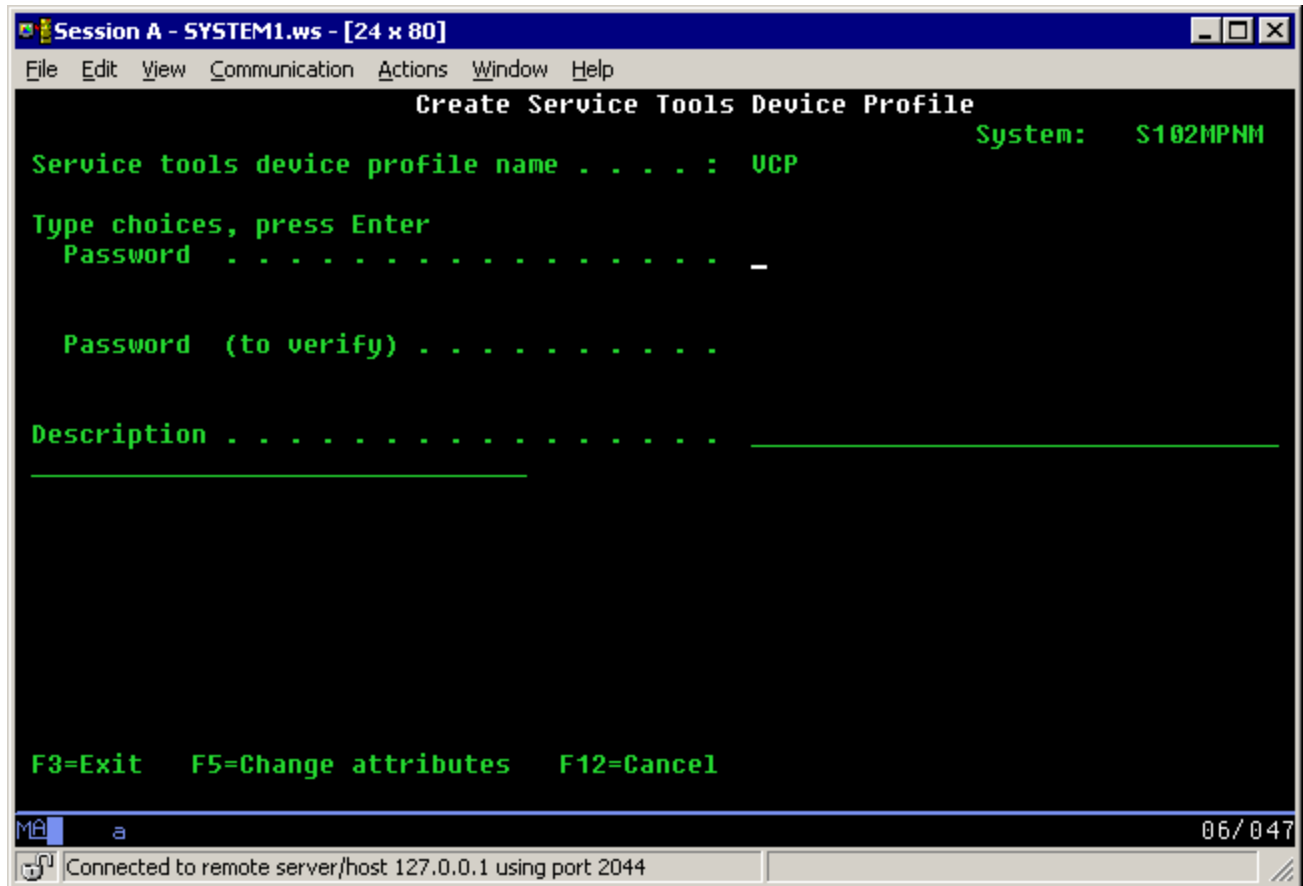
7. Enter a password into both password fields. Optionally, enter a description.

8. Press **Enter** and you will be taken back to:

9. You have now created a device profile for the VCP connection from one PC. You can use **PF3** to go
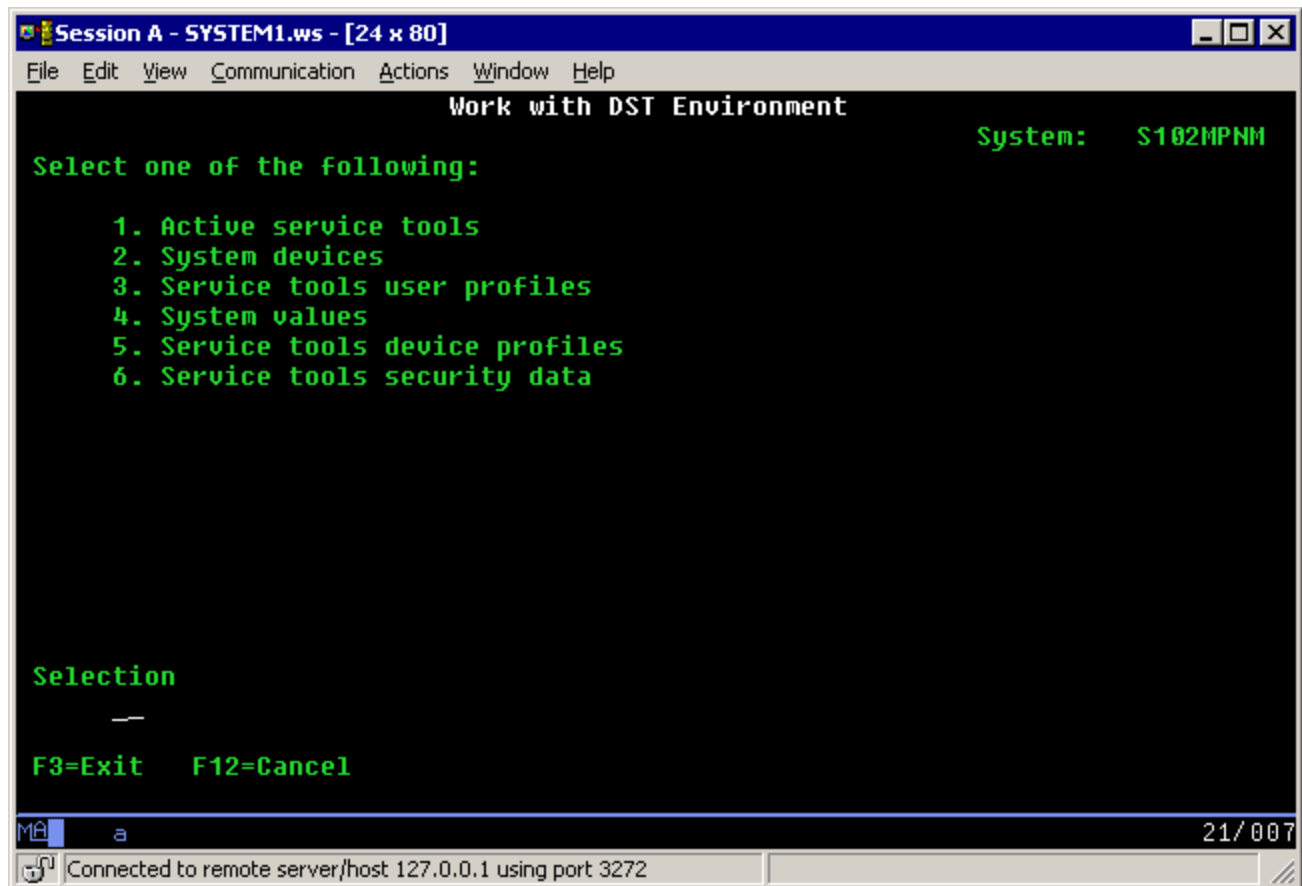   back to the DST main menu.

Check user profile for permissions

If you are using a service tools user profile other than **QSECOFR**, **QSRV**, **22222222**, or **11111111**for use with the VCP, you have to set the service tools user privileges for **Partition remote panel key** to allow access to the mode function. To verify or set this service tools user privilege, do the following:

1. Go to the DST main menu if you are not already there.

```
Session A - SYSTEM1.ws - [24 x 80]
File  Edit  View  Communication  Actions  Window  Help
                     Use Dedicated Service Tools (DST)
                                                  System:    S102MPNM
 Select one of the following:

        1. Perform an IPL
        2. Install the operating system
        3. Work with Licensed Internal Code
        4. Work with disk units
        5. Work with DST environment
        6. Select DST console mode
        7. Start a service tool
        8. Perform automatic installation of the operating system
        9. Work with save storage and restore storage
       10. Work with remote service support




 Selection
      __

 F3=Exit    F12=Cancel

MA     a                                                    21/007
   Connected to remote server/host 127.0.0.1 using port 3272
```

2. Select **Work with DST environment**.
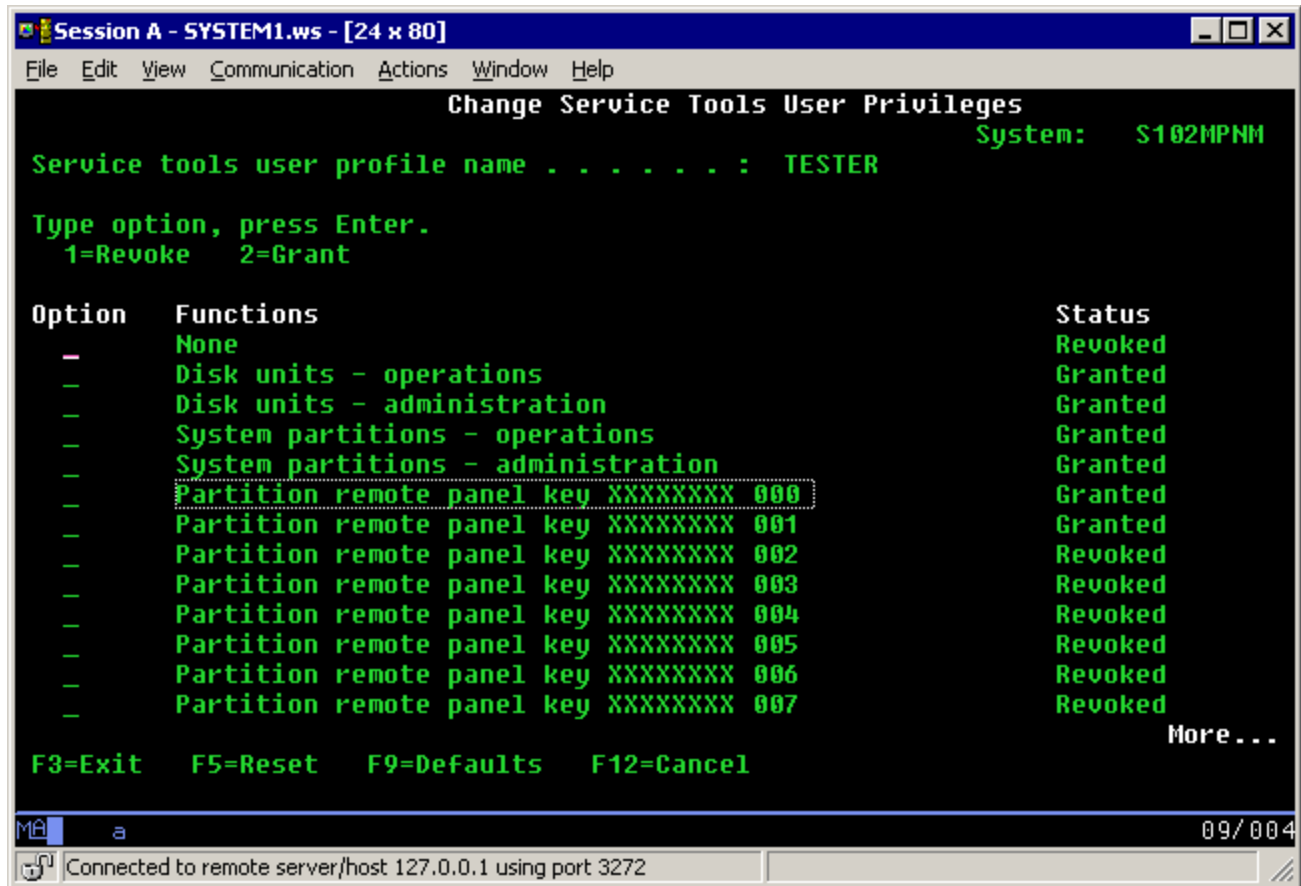
```
Session A - SYSTEM1.ws - [24 x 80]                                    _ □ ✕

File  Edit  View  Communication  Actions  Window  Help
                         Work with DST Environment
                                              System:     S102MPNM
   Select one of the following:

         1. Active service tools
         2. System devices
         3. Service tools user profiles
         4. System values
         5. Service tools device profiles
         6. Service tools security data




   Selection

         __

   F3=Exit    F12=Cancel

MA        a                                                    21/007
🖥️ Connected to remote server/host 127.0.0.1 using port 3272
```

3.   Select **Service tools user profiles**.

```
Session A - SYSTEM1.ws - [24 x 80]                                    _ □ ✕

File  Edit  View  Communication  Actions  Window  Help

                    Work with Service Tools User Profiles
                                                  System:    S102MPNM
     Type option, press Enter.
       1=Create              2=Change password      3=Delete
       4=Display             5=Enable               6=Disable
       7=Change privileges   8=Change description

           User
     Opt   Profile    Description                              Status
       _   _____
       _   QSECOFR    QSECOFR                                  Enabled
       _   QSRV       QSRV                                     Enabled
       7   TESTER                                              Enabled
       _   11111111   11111111                                 Enabled
       _   22222222   22222222                                 Enabled









     F3=Exit    F5=Refresh    F12=Cancel

  MA▊   a                                                        14/003
  🖳 Connected to remote server/host 127.0.0.1 using port 3272
```

4. Move the cursor to the user you want to verify or set the privileges for and place a **7** on the same line, followed by **Enter**.

```
Session A - SYSTEM1.ws - [24 x 80]                                    _ □ X
File  Edit  View  Communication  Actions  Window  Help
                      Change Service Tools User Privileges
                                                    System:   S102MPNM
 Service tools user profile name . . . . . . :  TESTER


 Type option, press Enter.
   1=Revoke    2=Grant

 Option    Functions                                   Status
    _      None                                         Revoked
    _      Disk units - operations                      Granted
    _      Disk units - administration                  Granted
    _      System partitions - operations               Granted
    _      System partitions - administration           Granted
    _      Partition remote panel key XXXXXXXX 000      Granted
    _      Partition remote panel key XXXXXXXX 001      Granted
    _      Partition remote panel key XXXXXXXX 002      Revoked
    _      Partition remote panel key XXXXXXXX 003      Revoked
    _      Partition remote panel key XXXXXXXX 004      Revoked
    _      Partition remote panel key XXXXXXXX 005      Revoked
    _      Partition remote panel key XXXXXXXX 006      Revoked
    _      Partition remote panel key XXXXXXXX 007      Revoked
                                                        More...
 F3=Exit   F5=Reset    F9=Defaults    F12=Cancel

MA      a                                                         09/004
  Connected to remote server/host 127.0.0.1 using port 3272
```

5. Since the VCP is only being used for independent systems (non-LPAR environment) or the primary partition, you only have to verify or set the privilege for the **Partition remote panel key XXXXXXXX 000** entry. The example above shows that entry as **Granted** for user **TESTER**. Place a 2 on the line for partition **000**, followed by **Enter** to grant permission to the mode functions.

    Note: Systems with a keystick require the keystick inserted before the user is eligible to use the mode button. For example, the user has the remote panel key privilege but won't have the mode function available until the keystick is present. For systems without the keystick only the user profile remote panel key privilege is necessary.

6.   You can now exit back to the DST main menu. Additionally, you can exit DST or IPL depending on how you entered DST.
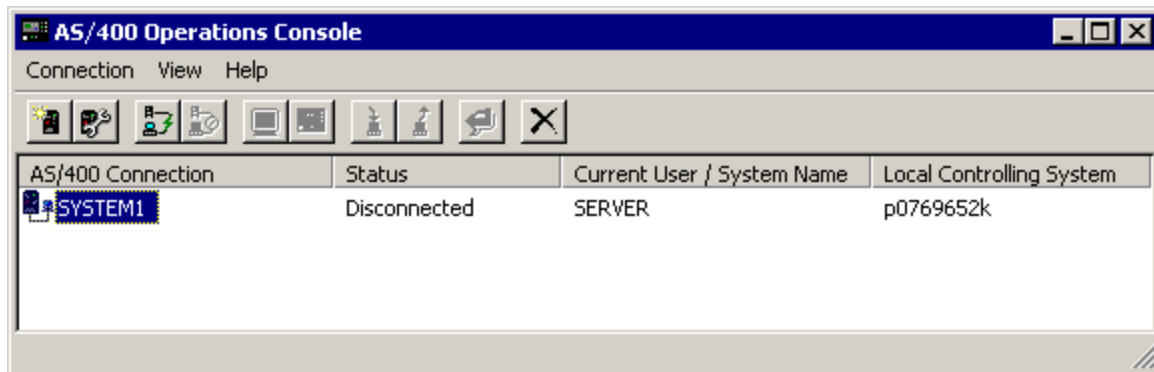
Change current configuration to console only

If you're current Operations Console connection configuration includes the remote control panel, use the following steps to configure the connection for just the console. If the console is currently the only function being provided, skip this section and continue with "Create new configuration for Virtual Control Panel."

1. To remove the remote control panel from the configuration the connection status must be **Disconnected**. To disconnect the configuration, follow these steps:

    a. If your local controlling system (LCS), or local console, is running in unattended mode and you have not requested control, do the following to get iSeries control:

        1) Select the configuration name (under **AS/400 Connection**). This is the name that Operations Console uses to refer to a specific iSeries server.

        2) From the **Connection** menu, click **Request Control**.

    b. If the **Service Device Sign-on** window appears, click **Cancel**.

    c. Select the configuration name (under **AS/400 Connection**). This is the name that Operations Console uses to refer to a specific iSeries server.

    d. From the **Connection** menu, click **Disconnect**. The connection status shows **Disconnecting** until it completes with a status of **Disconnected**.
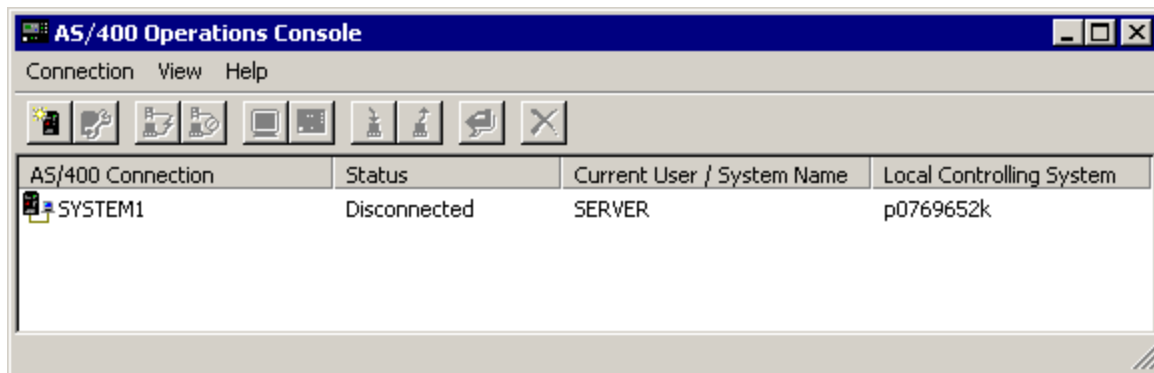
2. Select the configuration name that you want to change.

3. From the **Connection** menu, click **Configure Connection**. The values for the current configuration are going to be presented to you.

Configure AS/400 Operations Console Connection - SYSTEM1
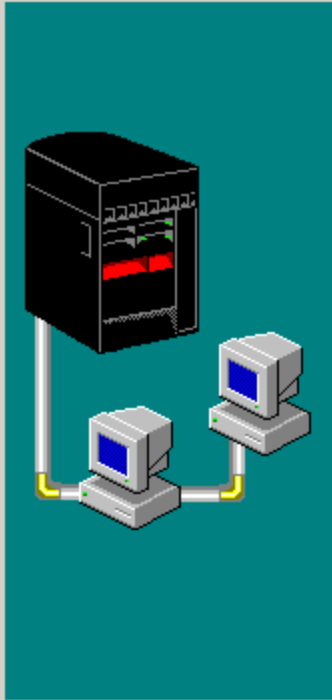
Welcome to Operations Console

To successfully setup and configure the hardware and software, following the instructions in Operations Console Setup, SC41-5508, is highly recommended.

For the latest Operations Console information see the Client Access Express home page at:
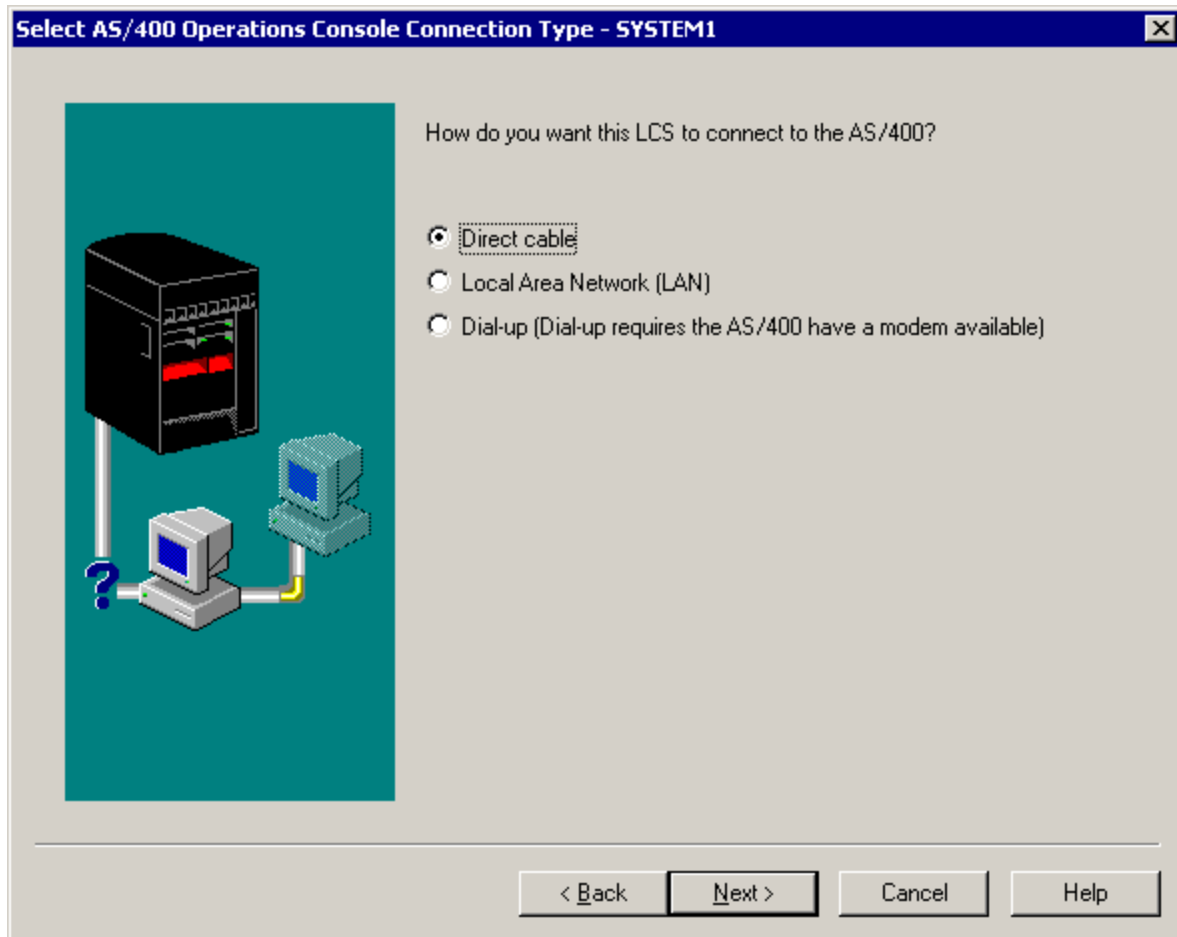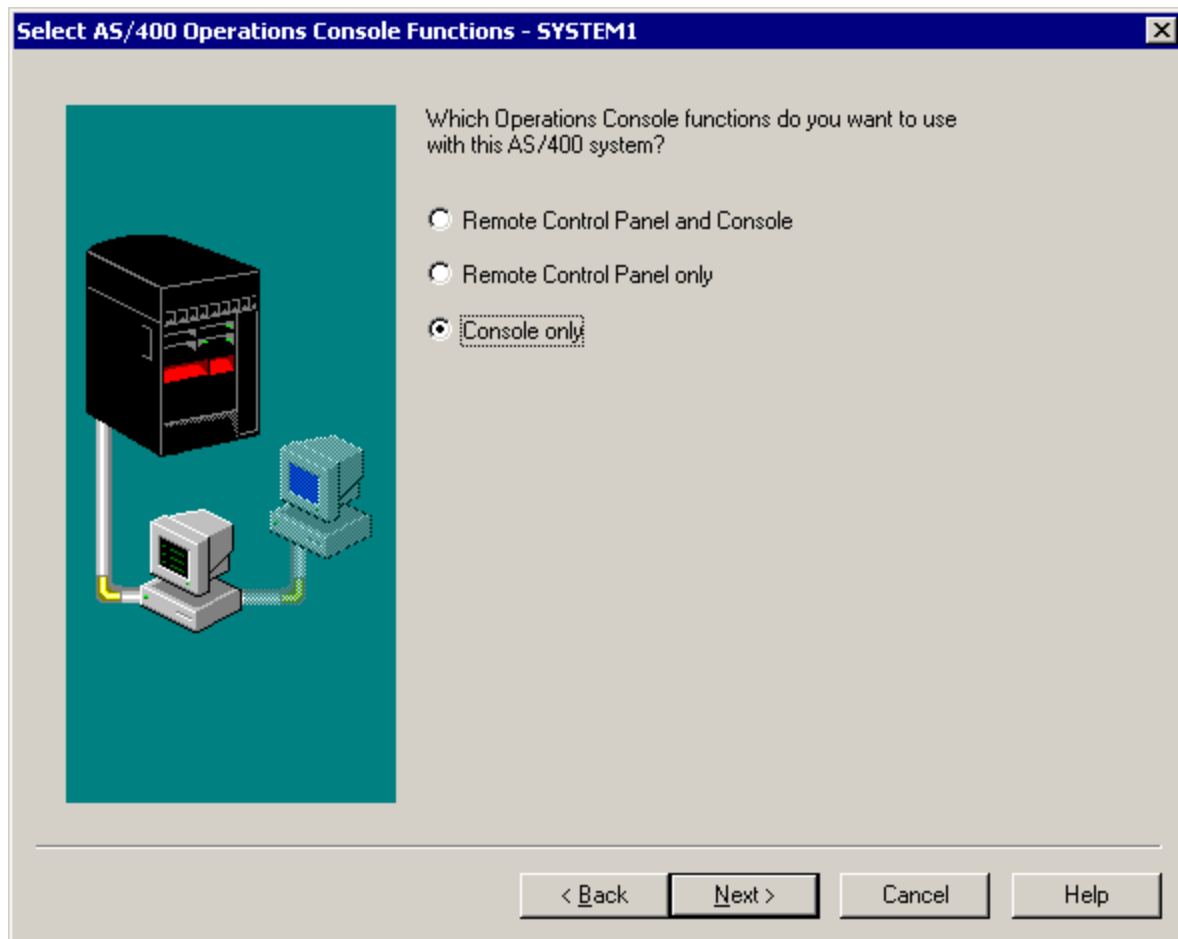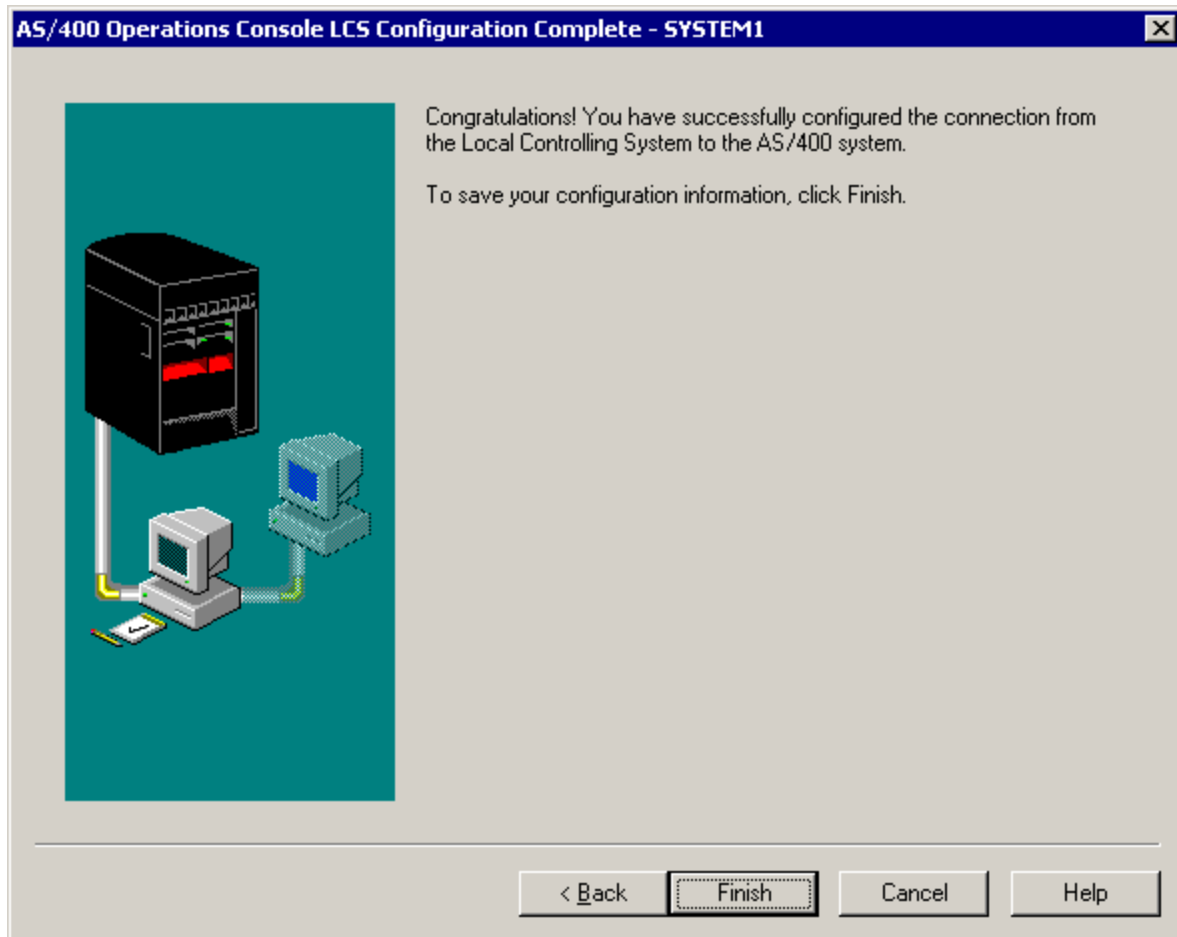www.as400.ibm.com/clientaccess
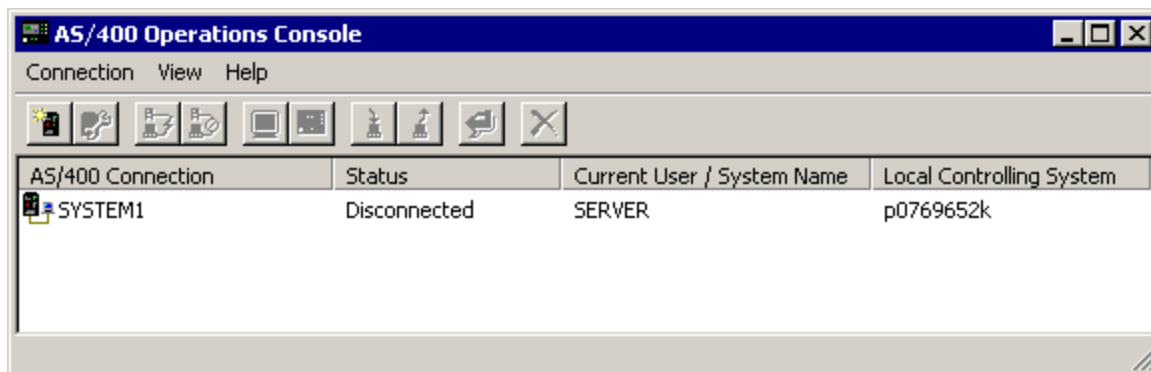
< Back | Next > | Cancel | Help

4. Click **Next**.

Select AS/400 Operations Console Connection Type - SYSTEM1

How do you want this LCS to connect to the AS/400?

○ Direct cable
○ Local Area Network (LAN)
○ Dial-up (Dial-up requires the AS/400 have a modem available)

< Back   Next >   Cancel   Help

5.   Click **Next**.

Select AS/400 Operations Console Functions - SYSTEM1

Which Operations Console functions do you want to use with this AS/400 system?

○ Remote Control Panel and Console

○ Remote Control Panel only

● Console only

< Back   Next >   Cancel   Help

6. Select **Console only**.

7. Continue clicking **Next** without changing any other values until you arrive at the **Configuration Complete** window.
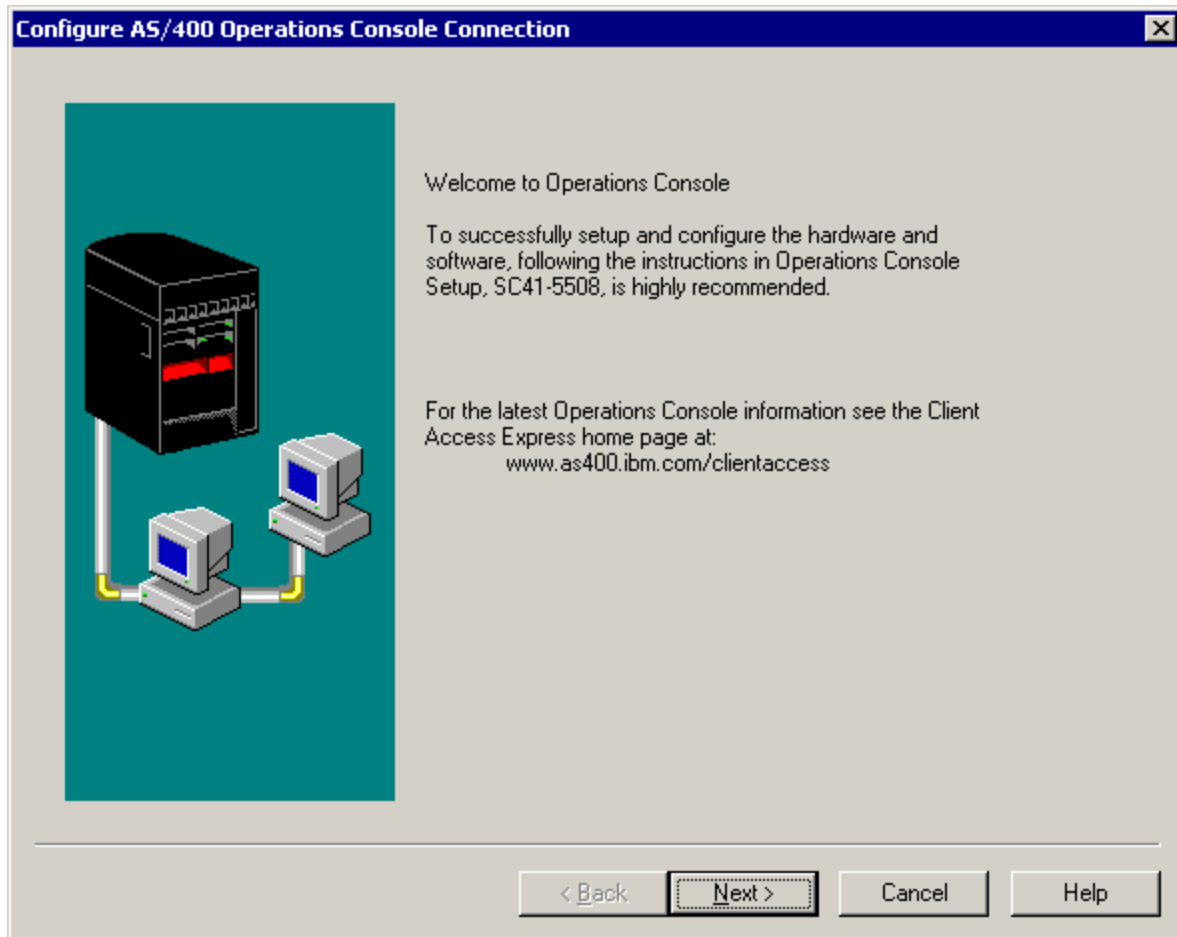
AS/400 Operations Console LCS Configuration Complete - SYSTEM1

Congratulations! You have successfully configured the connection from the Local Controlling System to the AS/400 system.

To save your configuration information, click Finish.

< Back   Finish   Cancel   Help

8. Click **Finish** to complete the configuration and save the change.

AS/400 Operations Console

Connection   View   Help

AS/400 Connection	Status	Current User / System Name	Local Controlling System
SYSTEM1	Disconnected	SERVER	p0769652k

Create new configuration for Virtual Control Panel

Use the following instructions to create a new connection configuration specifically for the virtual control panel.
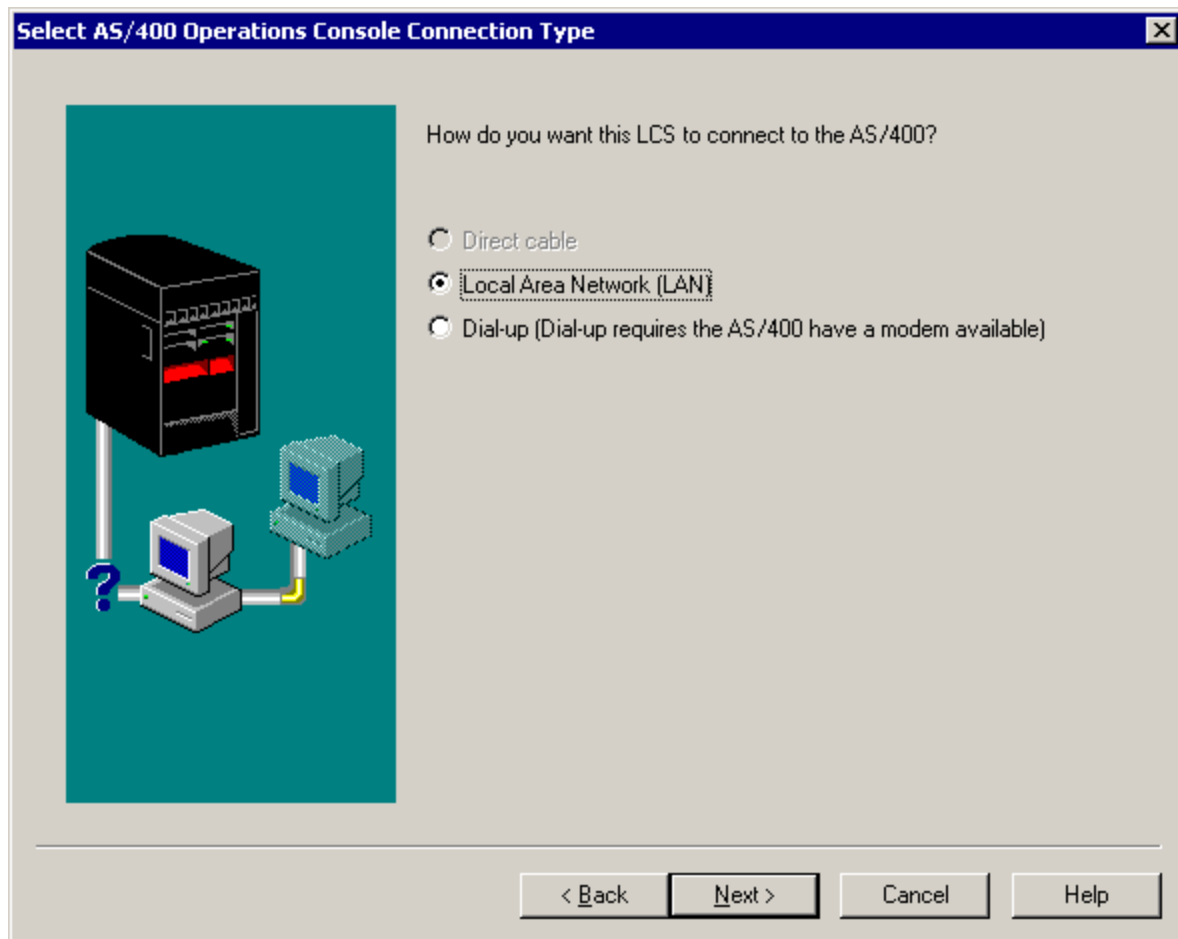
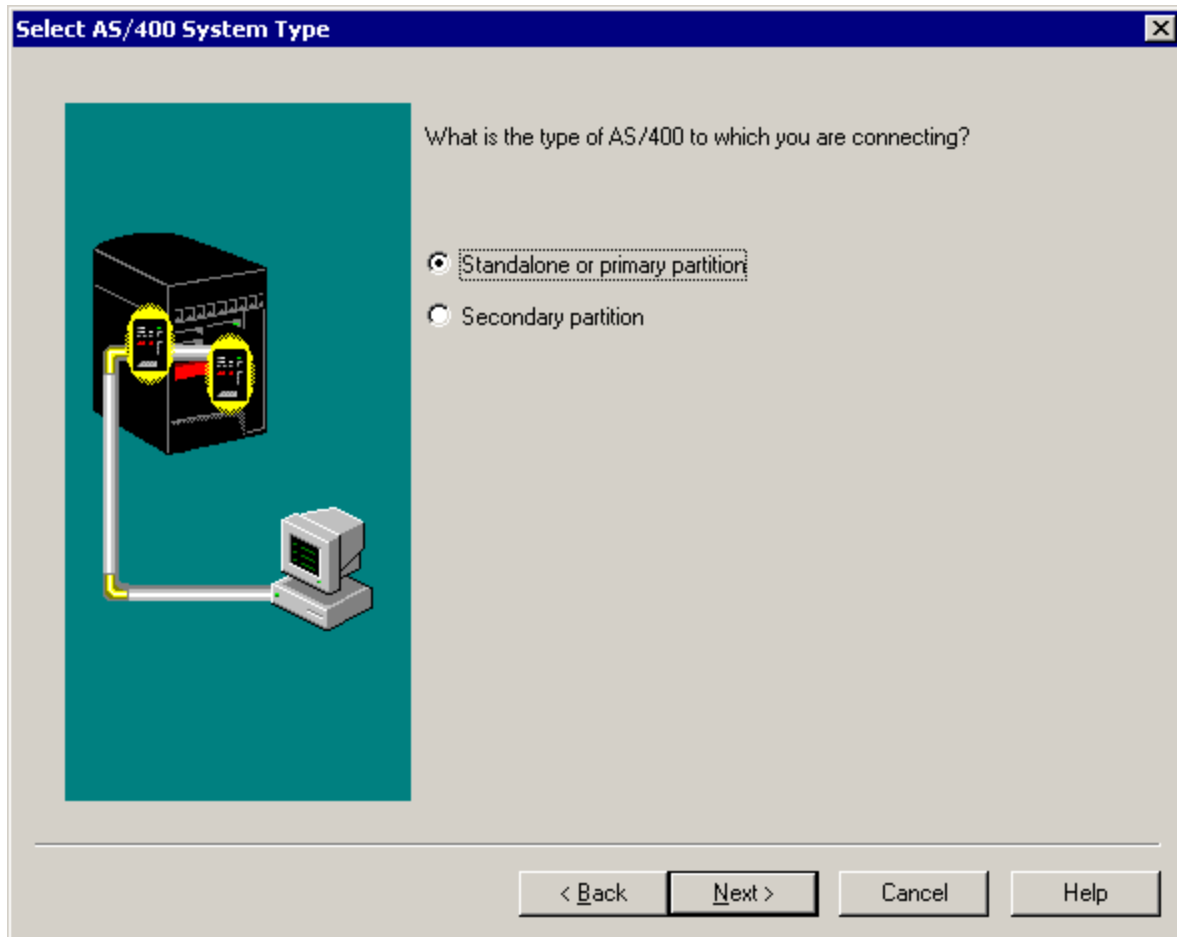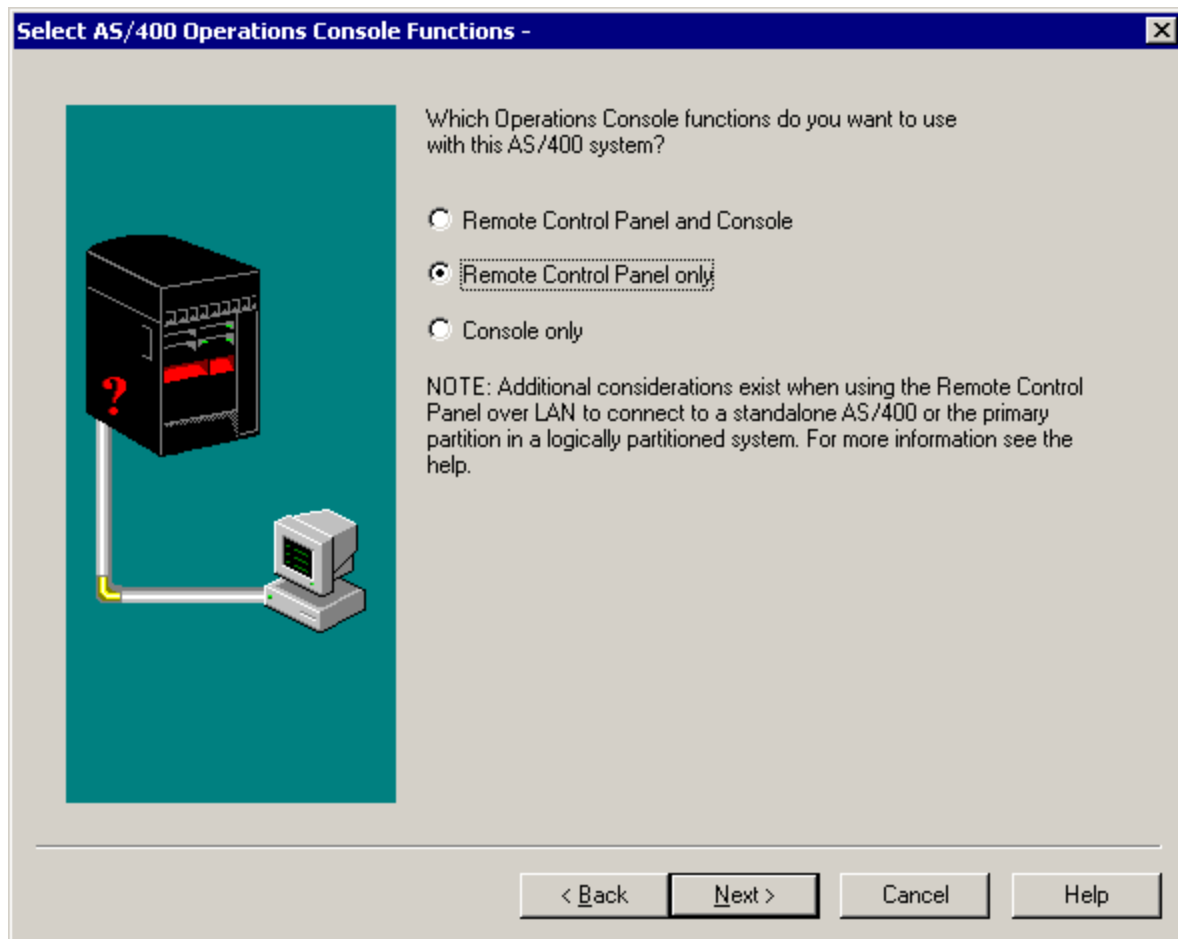1. From the **Connection** menu, click **New Connection**.

2. Click **Next**.

Configure AS/400 Operations Console Connection

This wizard steps you through configuring Operations Console connections.

What type of connection do you want to configure?

- ⦿ Local Controlling System (LCS) to AS/400 system
- ⦾ Remote Controlling System (RCS) PC to LCS

< Back   Next >   Cancel   Help

3. Click **Next**.

Select AS/400 Operations Console Connection Type

How do you want this LCS to connect to the AS/400?

○ Direct cable
⦿ Local Area Network (LAN)
○ Dial-up (Dial-up requires the AS/400 have a modem available)

< Back   Next >   Cancel   Help

4. Leave the option **Local Area Network (LAN)** selected and click **Next**.

Select AS/400 System Type

What is the type of AS/400 to which you are connecting?

⦿ Standalone or primary partition
○ Secondary partition

< Back   Next >   Cancel   Help

5. Click **Next**.

Select AS/400 Operations Console Functions -

Which Operations Console functions do you want to use with this AS/400 system?

○ Remote Control Panel and Console

⊙ Remote Control Panel only

○ Console only

NOTE: Additional considerations exist when using the Remote Control Panel over LAN to connect to a standalone AS/400 or the primary partition in a logically partitioned system. For more information see the help.

[< Back] [Next >] [Cancel] [Help]

6. Select **Remote Control Panel only**, then click **Next**.

Specify AS/400 System Name

What is the name of the AS/400 system to which you are connecting?

AS/400 system:

< Back	Next >	Cancel	Help
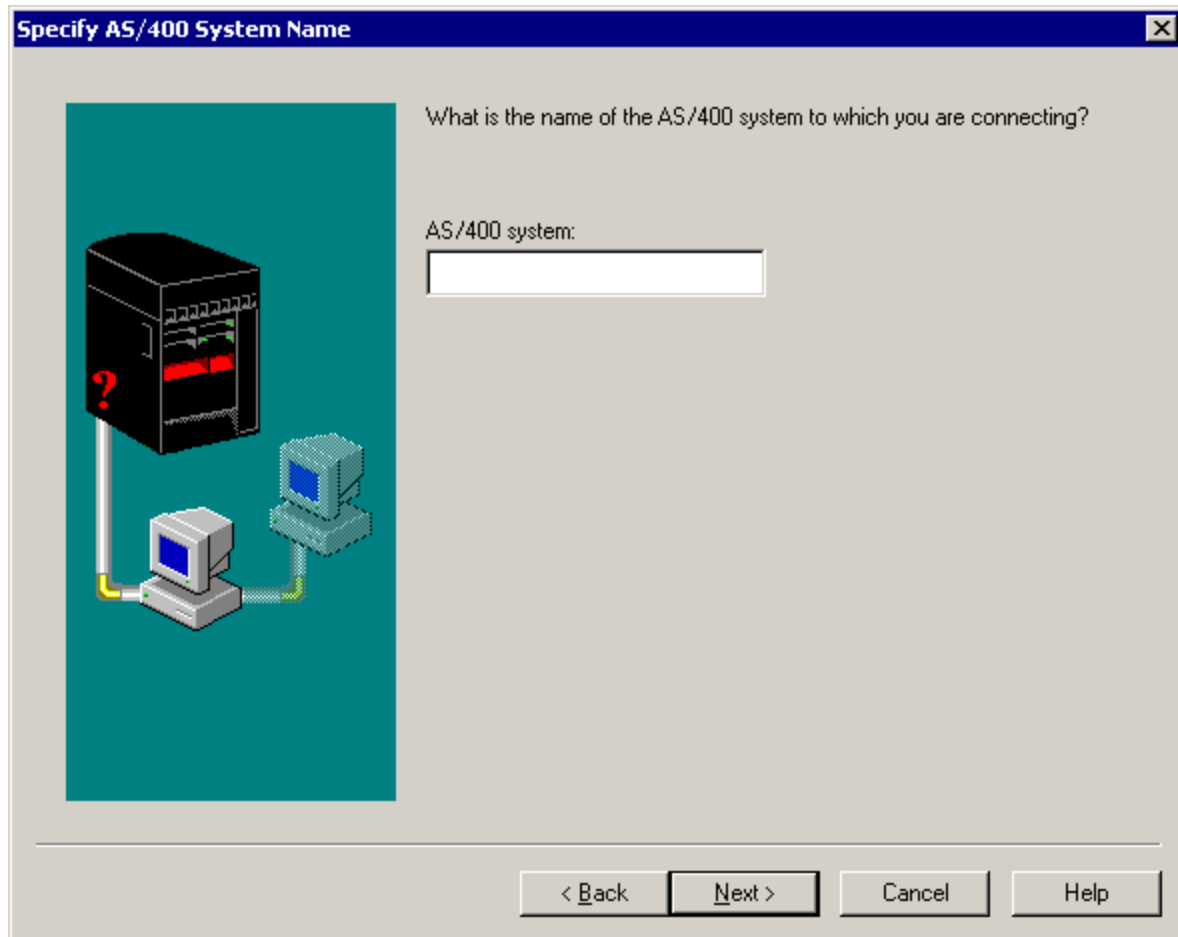
7. Enter a name to refer to your VCP connection.
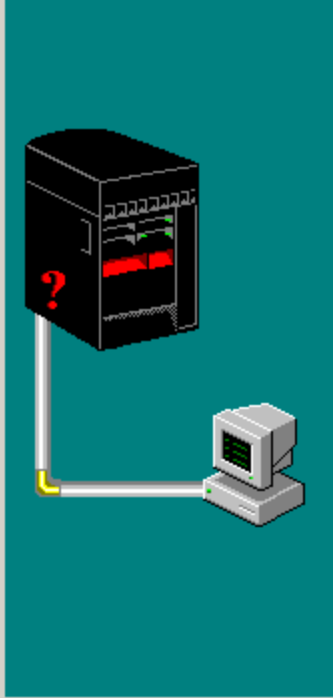
Note: If the PC you are working with is connected to a network, do <u>not</u> use a name that can be found on that network.
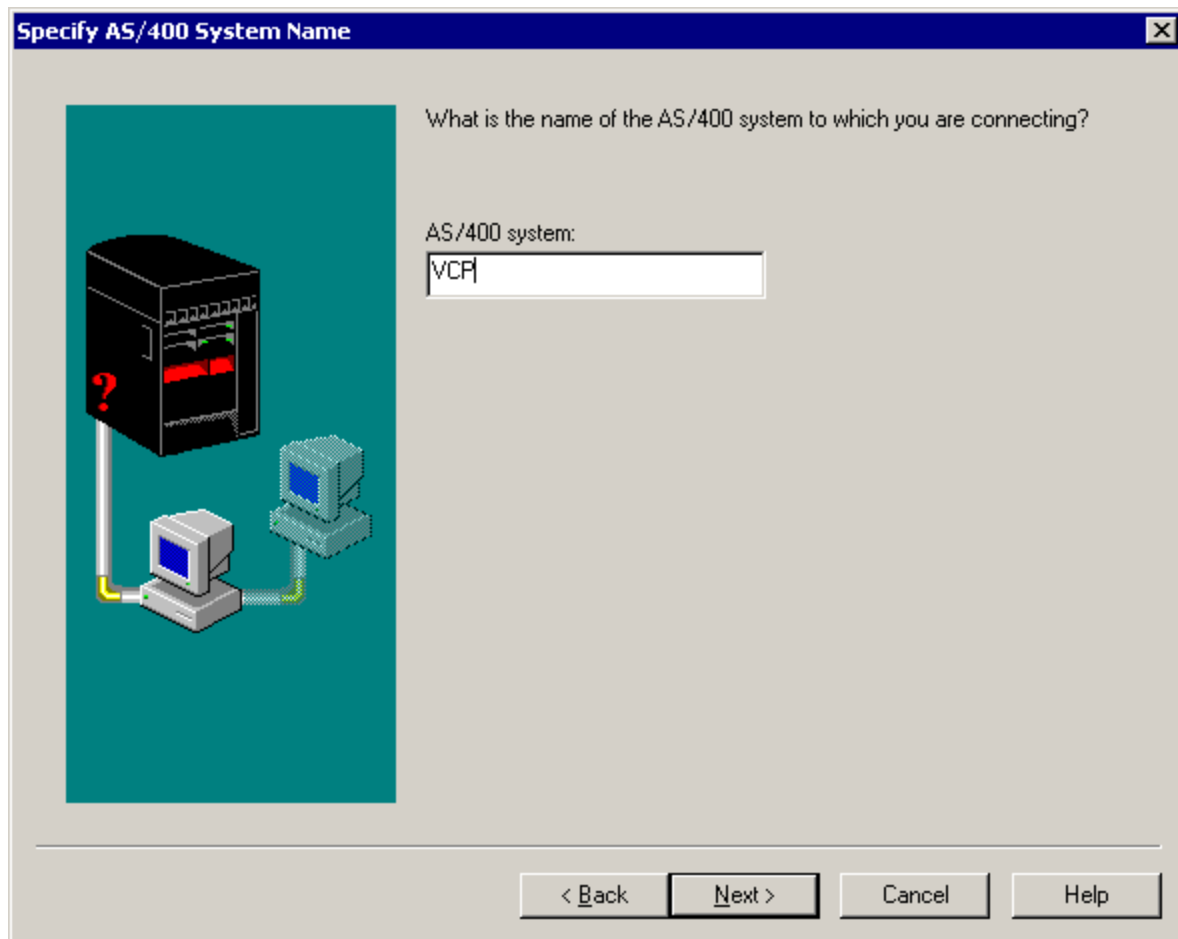
8.   Click **Next**.

AS/400 System Service Interface Information - VCP

What is the TCP/IP information and serial number of the system to which you are making a service connection?

AS/400 system service name:	VCP
Service TCP/IP Address:	
Service subnet mask:	
Service primary gateway address:	
Service secondary gateway address:	
AS/400 system serial number:	

< Back   Next >   Cancel   Help

9. If the **Service TCP/IP Address** field contains a value, you will have to use the **Back** button and enter another name. The name you used was found on your network. If no TCP/IP address is listed, enter **192.168.0.2**.
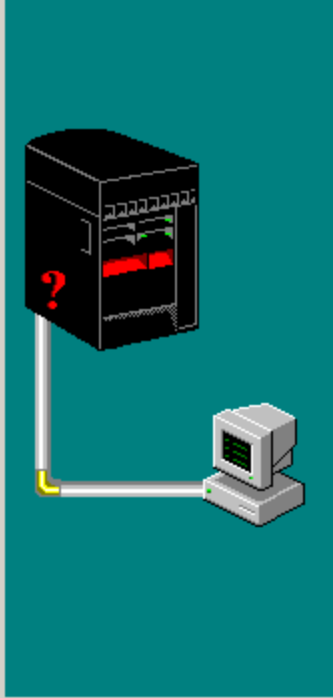
   Note: In some cases, the address **192.168.0.n** may have been previously used for something other than Operations Console. In those cases the user may have had to use a different base address for Operations Console such as **192.168.1.n** use the value of **192.168.1.2**. If so, use the base address currently assigned to Operations Console, but make the last value a **2**. To check the current base address, use **regedit** (or other registry editing program) and navigate to:

Registry Editor - [HKEY_LOCAL_MACHINE on Local Machine]

Registry Edit Tree View Security Options Window Help

```
HKEY_LOCAL_MACHINE
├─ HARDWARE
├─ SAM
├─ SECURITY
├─ SOFTWARE
│   ├─ ACD Systems
│   ├─ Adobe
│   ├─ Apple Computer, Inc.
│   ├─ Axtive
│   ├─ Classes
│   ├─ Clients
│   ├─ DCEProvider
│   ├─ DigitalEquipmentCorporation
│   ├─ IBM
│   │   ├─ ADSM
│   │   ├─ BluePagesV2
│   │   ├─ Client Access
│   │   │   └─ CurrentVersion
│   │   │       ├─ AS400 Operations Console
│   │   │       │   └─ LCS
│   │   │       │       └─ SYSTEM1
│   │   │       └─ AS400 Operations Navigato
```

```
Connection Type : REG_SZ : async
Console Connected : REG_SZ : yes
Console Port : REG_SZ : COM1
Console Port Speed : REG_SZ : 115200
Control Panel Port : REG_SZ :
CPanel Connected : REG_SZ : no
IP Address : REG_SZ : 192.168.0.2
Operation Mode : REG_SZ : attended
PC Remote Attached : REG_SZ : no
```

Use the IP address reported on your PC for the VCP address.

AS/400 System Service Interface Information - VCP

What is the TCP/IP information and serial number of the system to which you are making a service connection?

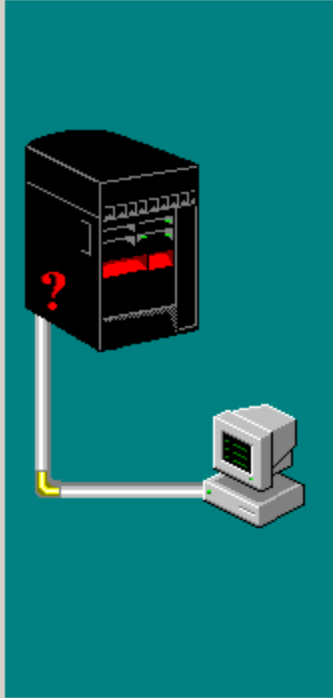|	
AS/400 system service name:	VCP
Service TCP/IP Address:	192.168.0.2
Service subnet mask:	
Service primary gateway address:	
Service secondary gateway address:	
AS/400 system serial number:	

< Back   Next >   Cancel   Help

10. Enter the **AS/400 system serial number**. This does **not** have to be the real system serial number, however.

AS/400 System Service Interface Information - VCP

What is the TCP/IP information and serial number of the system to which you are making a service connection?
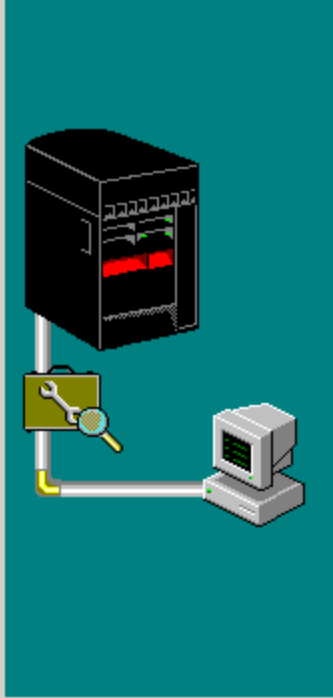
AS/400 system service name:	VCP
Service TCP/IP Address:	192.168.0.2
Service subnet mask:	
Service primary gateway address:	
Service secondary gateway address:	
AS/400 system serial number:	10-12345

< Back   Next >   Cancel   Help

11. Click **Next**.

AS/400 Operations Console Service Tools Device Information - VCP

To safely use AS/400 service functions with a LAN connection you must specify the following information. This protects access to AS/400 service functions such as the console and remote control panel. For more information see the help.

AS/400 system service name: VCP

Service tools device profile information

Service tools device profile for this PC:

Password:

Confirm password:

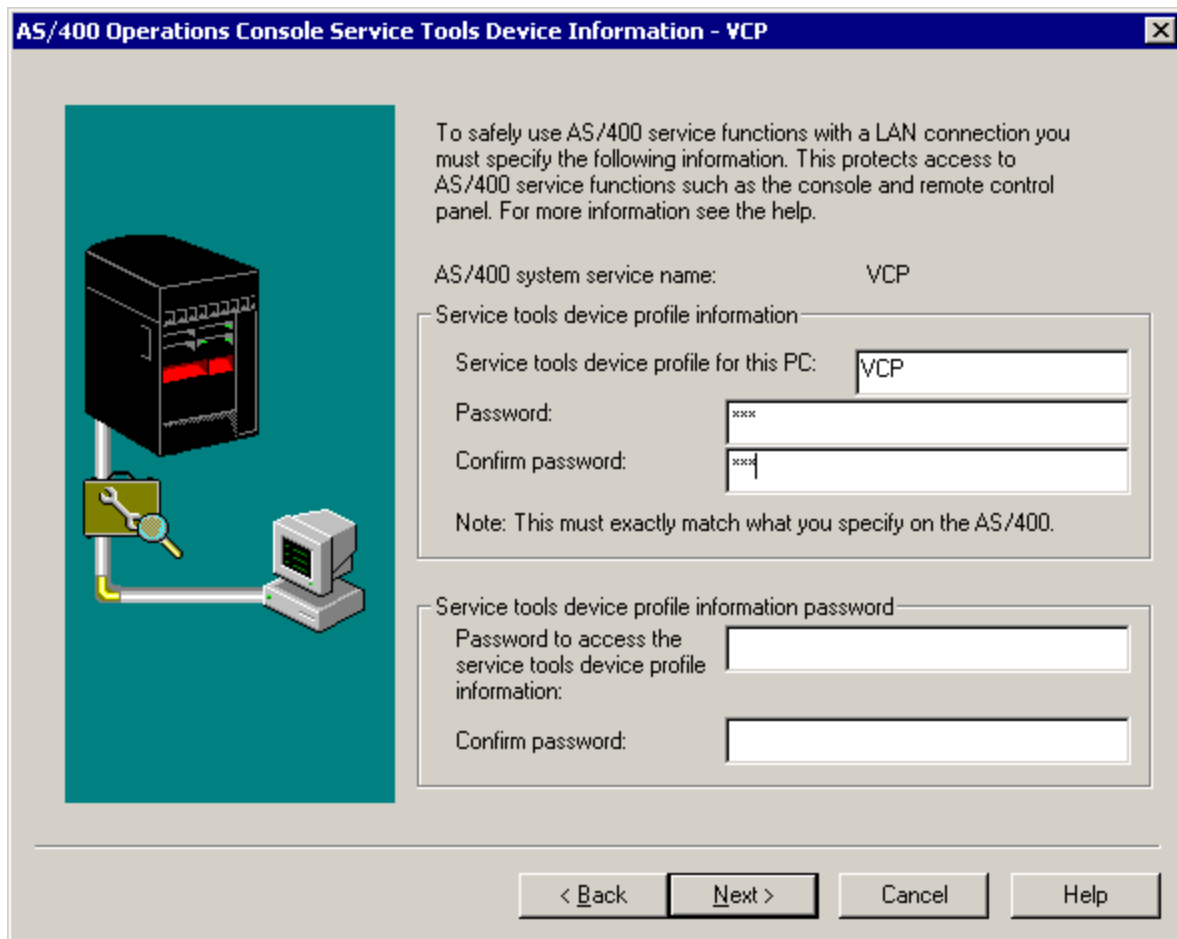Note: This must exactly match what you specify on the AS/400.

Service tools device profile information password

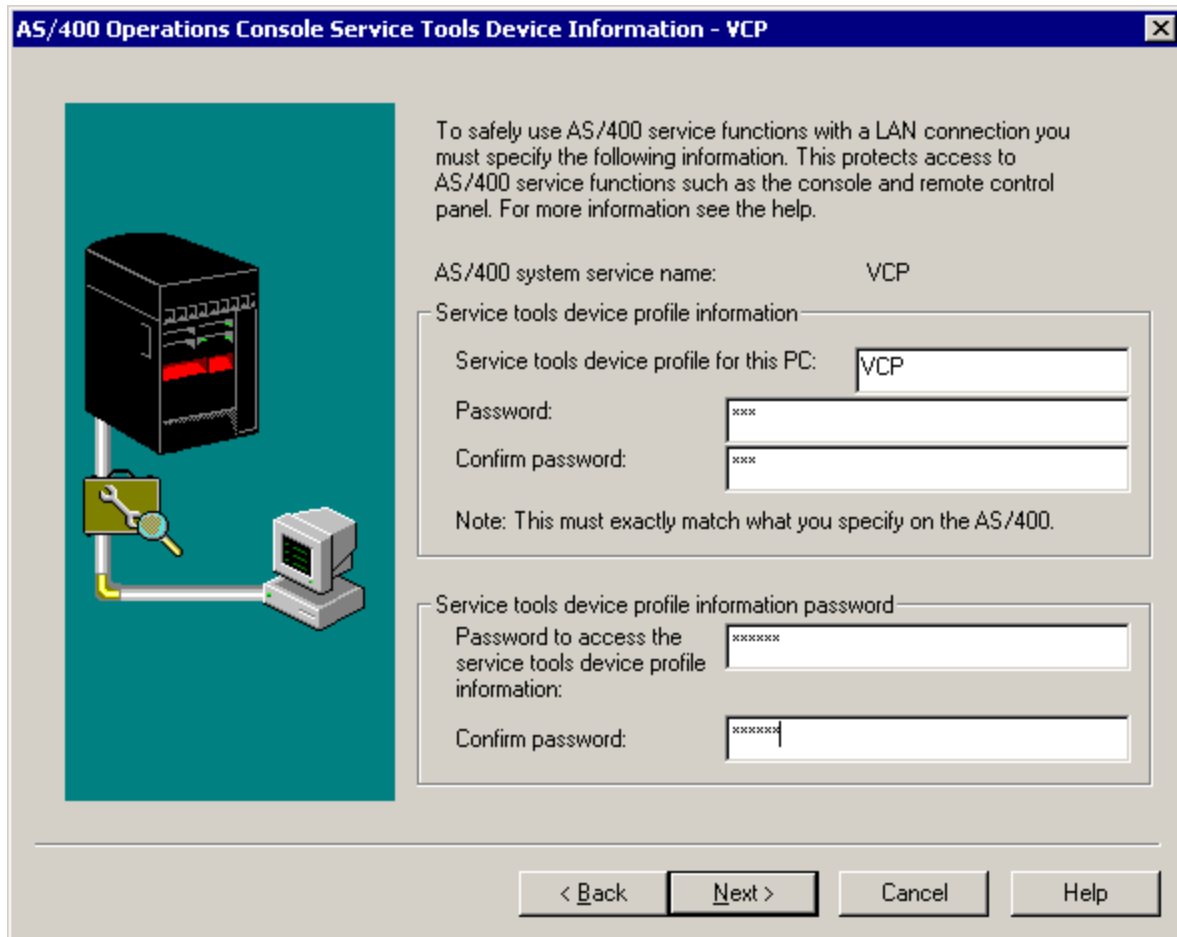Password to access the service tools device profile information:

Confirm password:

< Back   Next >   Cancel   Help

12. Enter the name of the device profile you will be using for the VCP connection authentication. By default, as explained above, you can use **QCONSOLE** if it hasn't been used. Otherwise, if you created a specific device profile, enter the name and password you assigned to it during the creation process.

AS/400 Operations Console Service Tools Device Information - VCP

To safely use AS/400 service functions with a LAN connection you must specify the following information. This protects access to AS/400 service functions such as the console and remote control panel. For more information see the help.

AS/400 system service name: VCP

Service tools device profile information
Service tools device profile for this PC: VCP
Password: ×××
Confirm password: ×××

Note: This must exactly match what you specify on the AS/400.

Service tools device profile information password
Password to access the service tools device profile information:
Confirm password:

< Back   Next >   Cancel   Help

13. In the remaining 2 fields is where you assign a password to be used during the connection process to authenticate the VCP connection. This password is only used by the PC being used for the VCP connection and is not known at the server. Enter a password and a second time to confirm it.

AS/400 Operations Console Service Tools Device Information - VCP

To safely use AS/400 service functions with a LAN connection you must specify the following information. This protects access to AS/400 service functions such as the console and remote control panel. For more information see the help.

AS/400 system service name: VCP

Service tools device profile information

Service tools device profile for this PC: VCP

Password: xxx

Confirm password: xxx

Note: This must exactly match what you specify on the AS/400.

Service tools device profile information password

Password to access the service tools device profile information: xxxxxx

Confirm password: xxxxxx

[< Back]   [Next >]   [Cancel]   [Help]

Example:

VCP was used as the name of the device profile and **VCP** as the password. The password of **access** will be used, for this example, as the password to be used for authentication. Therefore, I entered:

VCP

VCP

VCP

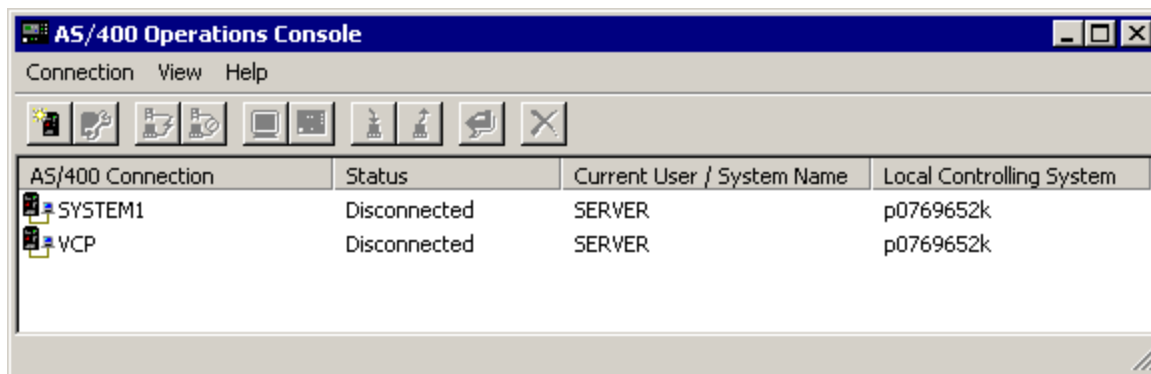**access**   <-----

access   <-----   **Remember this password!**

The password of **access** is what you need to remember. It will be used when we connect later.
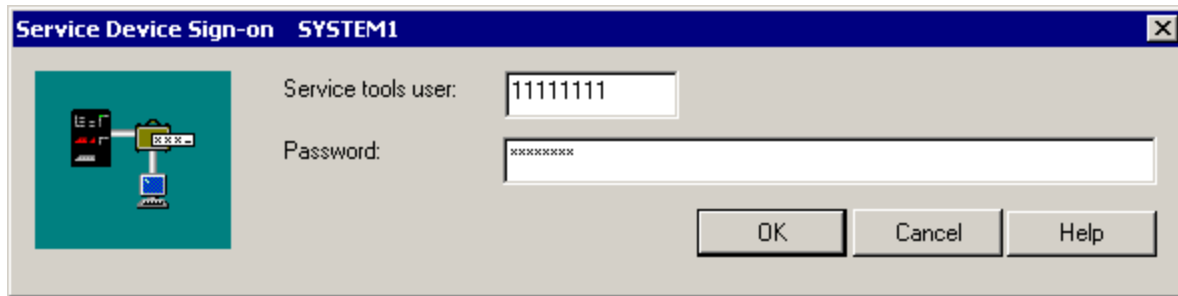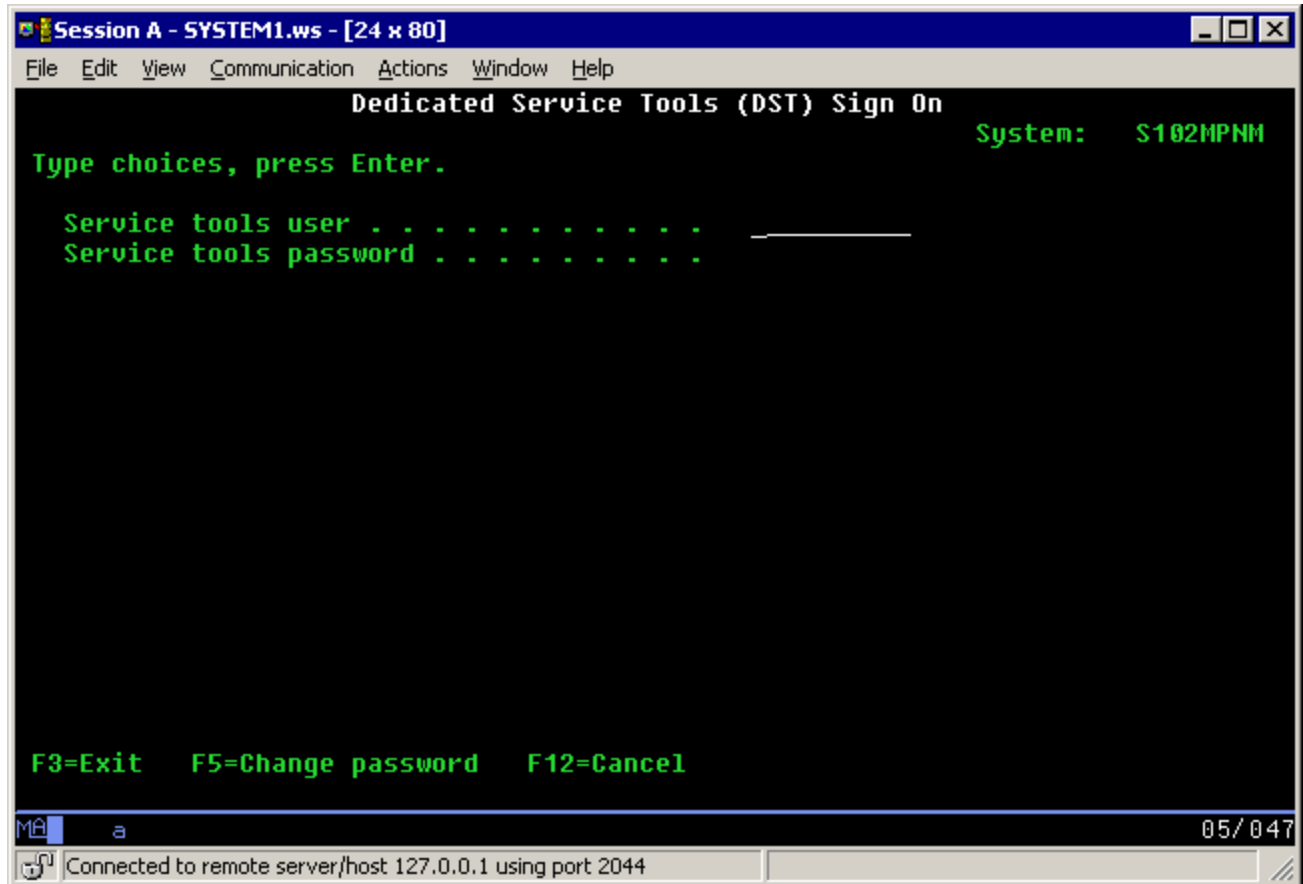
14. Now, click **Next**.

AS/400 Operations Console LCS Configuration Complete - VCP

Congratulations! You have successfully configured the connection from the Local Controlling System to the AS/400 system.

To save your configuration information, click Finish.

☐ Start connection when Operations Console starts

< Back   Finish   Cancel   Help
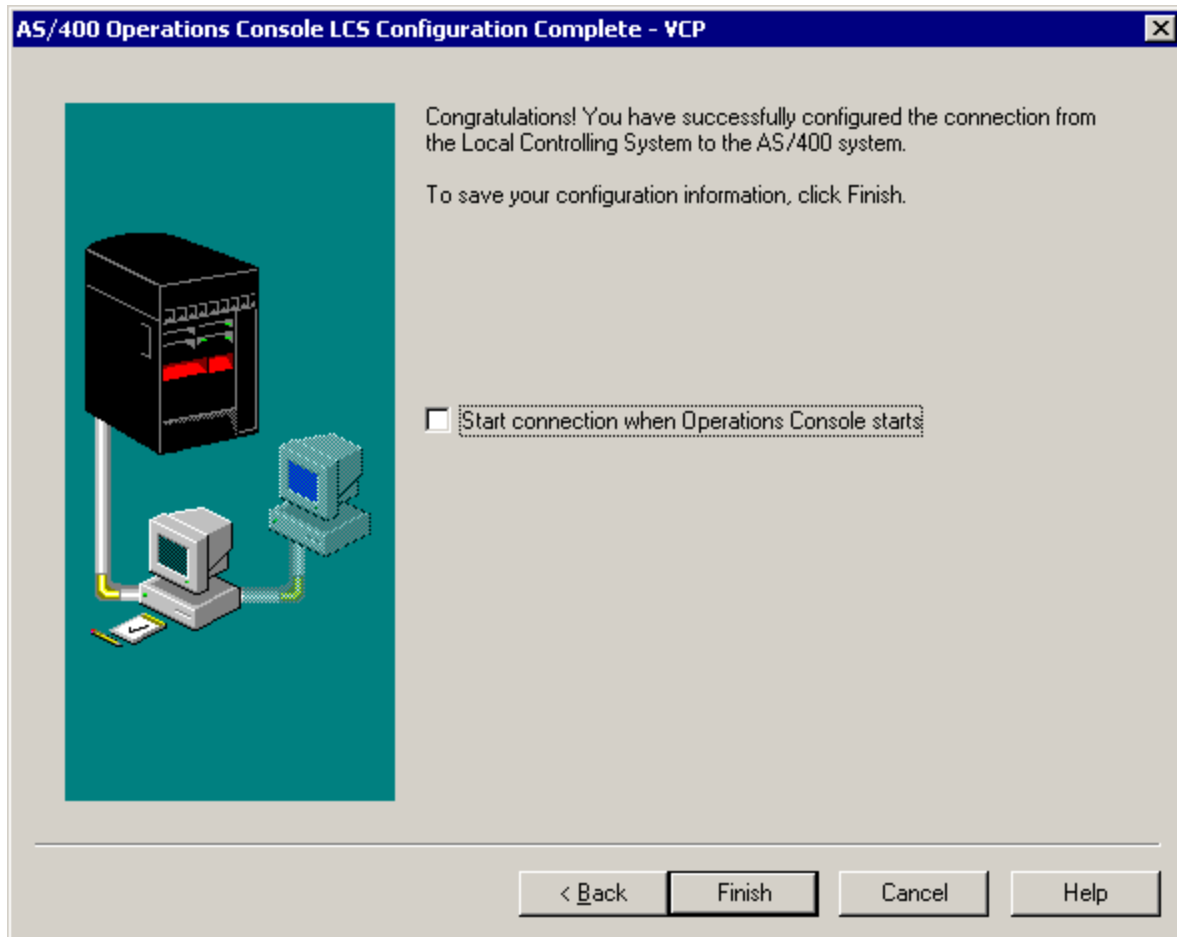
15. <u>Initially</u>, leave the option **Start connection when Operations Console starts** unchecked. This allows more control to debug a problem if one is encountered. When you feel comfortable that there are no issues you can go back through the configuration wizard and turn this option on. Click **Finish**.

AS/400 Operations Console

Connection   View   Help

AS/400 Connection	Status	Current User / System Name	Local Controlling System
SYSTEM1	Disconnected	SERVER	p0769652k
VCP	Disconnected	SERVER	p0769652k

You have now completed the configuration for the VCP connection. Start a connection for the console (your original connection).

Service Device Sign-on   SYSTEM1   ☒

Service tools user: `11111111`

Password: `********`

[OK]   [Cancel]   [Help]

Sign on normally, if necessary, then, wait for the console window to appear.

```
Session A - SYSTEM1.ws - [24 x 80]                              _ □ ×
File  Edit  View  Communication  Actions  Window  Help
                  Dedicated Service Tools (DST) Sign On
                                                 System:    S102MPNM
  Type choices, press Enter.

     Service tools user . . . . . . . . . . .   _____
     Service tools password . . . . . . . . .






















  F3=Exit    F5=Change password    F12=Cancel
MA    a                                                        05/047
    Connected to remote server/host 127.0.0.1 using port 2044
```

Now you can connect the VCP connection.
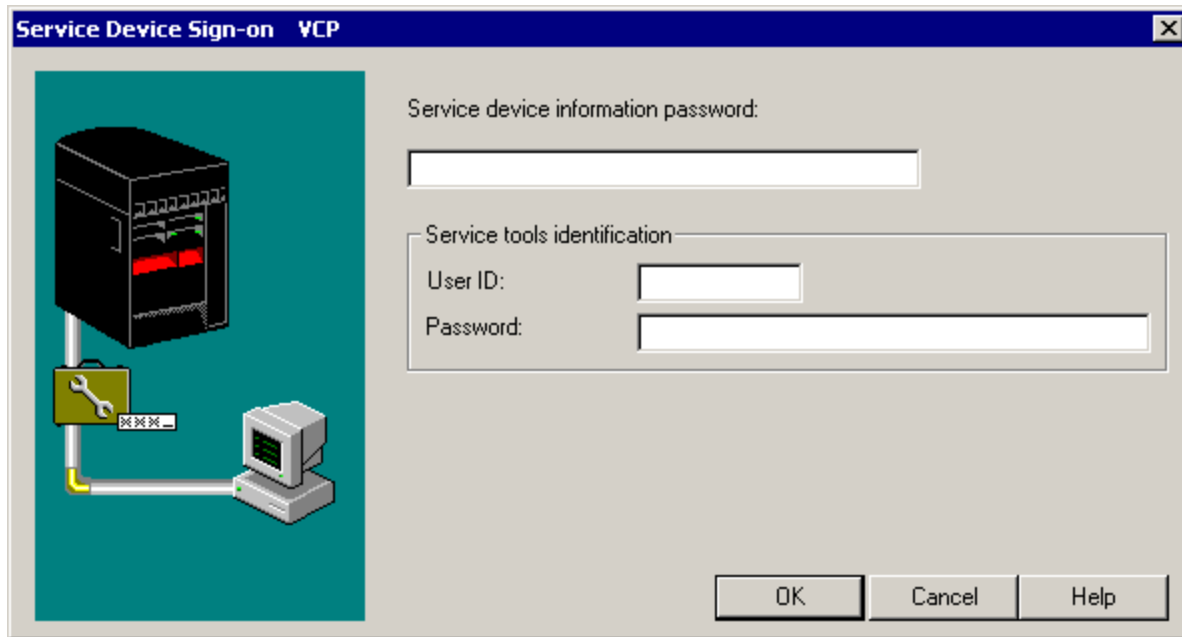
You will get the **Service Device Sign-on** window with an extra field. The **Service device information password** you chose for use when authenticating. If you remember the example used earlier, the password I chose was **access**. Enter the password you used in the 4th and 5th fields of the **Service Tools Device Information** window.

Now, enter any service tools user ID and password, commonly referred to as the DST user ID/password. Since this is authenticating the connection and not setting up any authorities to the work you'll be doing, there is no difference between using **11111111/11111111** or **QSECOFR/???????**. If you have previously created additional service tools user IDs you could use any of those as well.
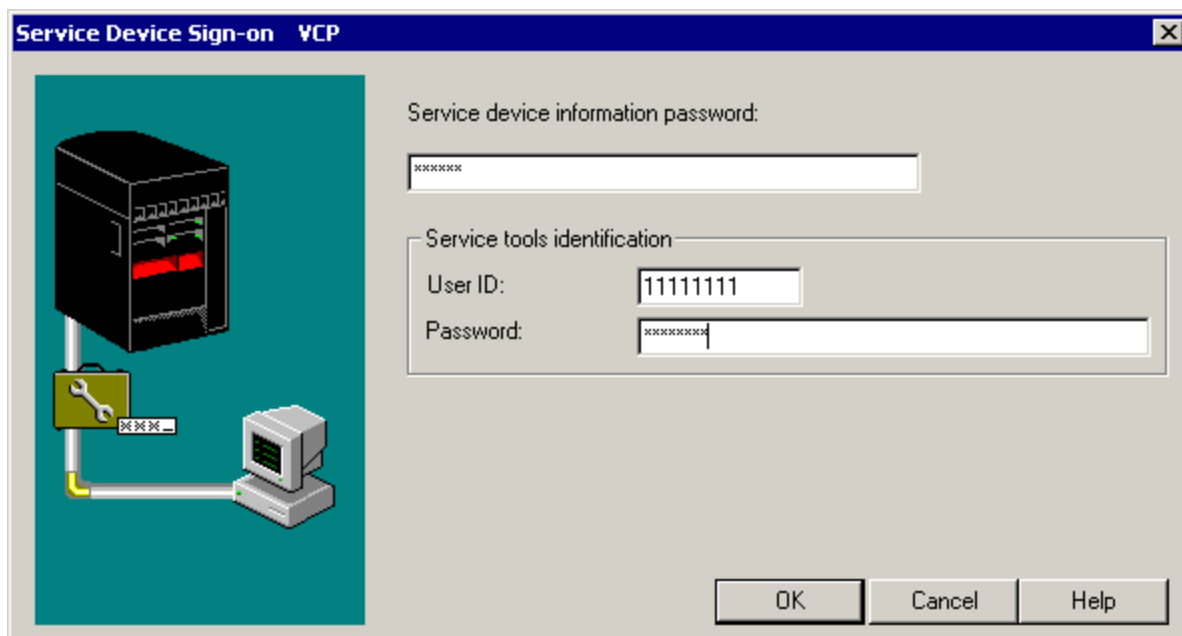
In this example, the following was entered:

access

**11111111**

11111111

Now, click **OK**.
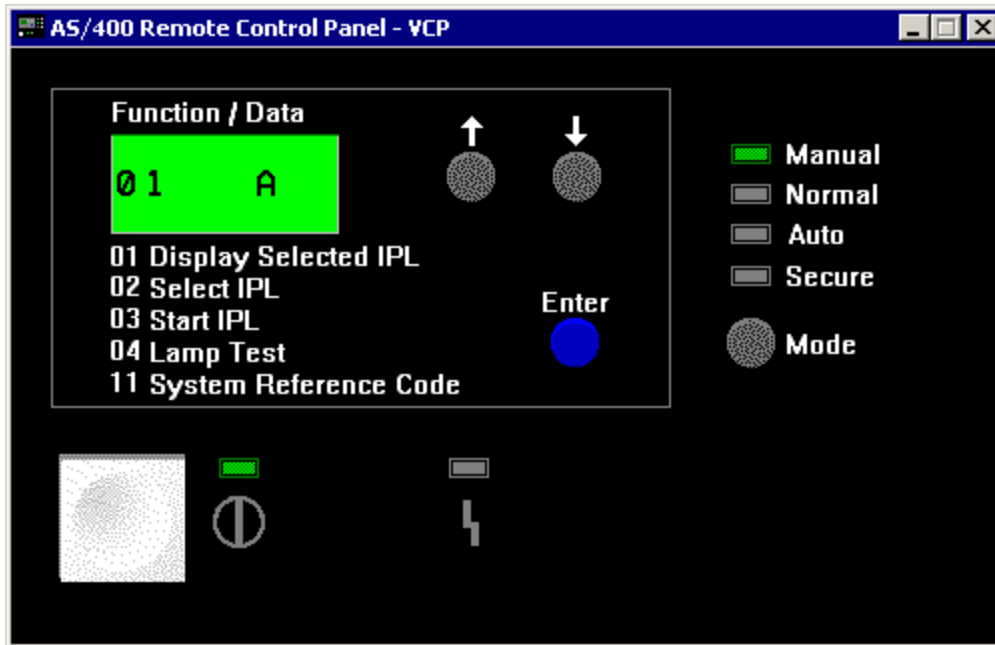
If everything went correctly, you will be rewarded with the virtual control panel, as shown above. This is the exact same graphics that you would have gotten if you were to have used a cable to connect to the remote control panel. The only difference would be function.

Potential Problems

The following items are possible problems and how to correct them.

Authentication errors

Something that could happen is a failure to authenticate.
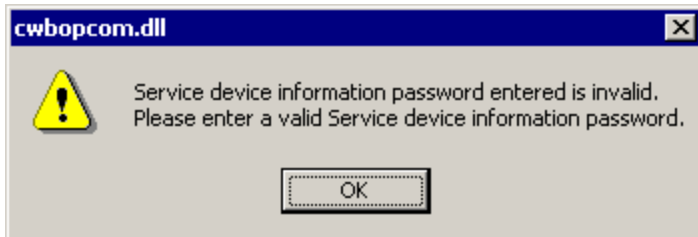
This message typically means that the access password you entered (the first of the 3 fields) is incorrect. In the example above it was **access**. Make sure that the Caps Lock is not active and re-enter the access password using the password you assigned, taking into account any case sensitivity you may used.

Another authentication problem is a failure to connect the VCP.
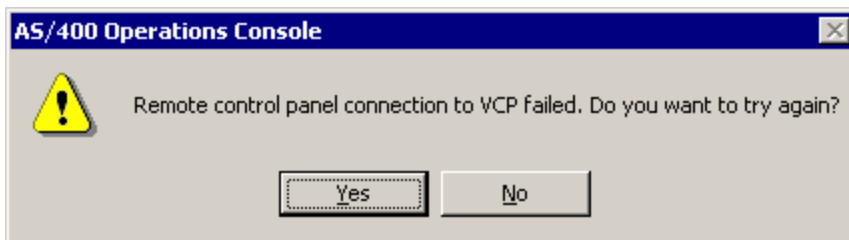
This is an indication that the Service Tools Device Profile Information password is not correct:

VCP

VCP   <---

VCP   <---

access

access

If this is the case, then the Service Tools Device Profile Information password stored on the PC no longer matches the value stored on the server. Each time you authenticate successfully this password is re-encrypted to a new value and stored on both sides of the connection. In rare cases this password gets out of synchronization and you will need to reset the value back to the original default values on both the PC and the server. For detailed instructions on how to do this refer to **Appendix C. Resynchronizing the PC and iSeries device profile password** in the "Operations Console Setup - SC41-5508-02" which you can get at:

http://publib.boulder.ibm.com/pubs/html/as400/v5r1/ic2924/books/c4155082.pdf