Calling a Desktop Computer's Modem from your Mobile Device

With a modem installed on your mobile device, you can call a modem attached to your desktop computer to connect to Microsoft® ActiveSync®. Connect by modem when you need to synchronize information while you are away from your desktop computer and your desktop computer is not connected to a network on which you have a remote access server. If your network has a remote access server, you can skip these instructions and follow the Microsoft ActiveSync Help topic "Connect to ActiveSync Using a Modem."

Warnings:
- These instructions are approximate steps intended for experienced users only. Depending on the system configuration, other steps may be required, or some of the steps outlined may not be necessary. If you are not familiar with network component installation and configuration,   you should consult your system administrator.
- Installing and configuring Remote Access Service (RAS) and Dial-up Networking (DUN) to work with ActiveSync may disable other types of ActiveSync connections, such as serial cable and cradle. Automatic baud rate detection will also be disabled.
- If you disable serial connection, RAS and DUN will not be disabled. You must separately disable network and RAS connections under Connections Settings on the File menu.
- These procedures may interact with your existing network configuration (for example, dial-out modems) or require removal of proxy software to work properly.

Before you begin:
- Set up a partnership between your device and desktop computer using a serial cable, cradle, or infrared connection. For more information about setting up a partnership, see Microsoft ActiveSync Help.
- If your computer is running Microsoft® Windows NT® 4.0, you need to install the Remote Access Service (RAS). RAS is installed as a part of all Microsoft® Windows® 2000 and Microsoft® Windows® XP installations.
- Install an internal or external modem for your desktop computer and configure it for general use as instructed in Windows Help or your modem instructions.
- Install an internal modem, PC Card modem, or external modem for your device.

Configure RAS, DUN, and modem equipment to work with ActiveSync

If your desktop computer is running Windows NT 4.0, Windows 2000 or Windows XP, you will need to configure RAS to work with ActiveSync. Steps for configuring RAS are different for each operating system. If your desktop computer is running Microsoft® Windows® 98/Millenium Edition, you will need to configure DUN to work with ActiveSync.

Configure RAS and modem equipment on Windows NT 4.0
To call a modem attached to a desktop computer running Windows NT 4.0:
1. Install network components for a PC without a network card.
2. Configure RAS.
3. Configure the user account.

Install network components for a PC without a network card

1. Click **Start**, **Settings**, and then **Control Panel**.
2. Double-click the Network icon. If you see a Network Configuration Wizard, then continue below. Otherwise, skip to the next section because networking is already installed.
3. In the **Network Configuration** dialog box, click **Yes**.
4. In the Network Setup Wizard, select **Wired to the network**, clear **Remote access to the network**, and then click **Next**.
5. Click **Select from list**.
6. In the **Network Adapters** box, select **MS Loopback Adapter** and click **Next**.
7. In the **Network Protocols** box, select **TCP/IP Protocol** and clear all other options.
8. Click **Next** three times to start installing the selected components.
9. In the **Windows NT Setup** dialog box, enter the directory where your Windows NT source files are located, and then click **Continue**.
10. In the **MS Loopback Adapter Card Setup** dialog box, click **Continue**. The default frame type will be selected.
11. In the **TCP/IP Setup** dialog box, click **No** when asked to use DHCP.
12. In the **Microsoft TCP/IP Properties** dialog box, click the **IP Address** tab.
13. Ensure **MS Loopback Adapter** is selected.
14. Click **Specify an IP Address**.
15. In the **IP Address** box, enter **1.1.1.1**.
16. In the **Subnet Mask** box, enter **0.255.255.255**.
17. Ensure the **Default Gateway** box is cleared.
18. Click **Next** on the next three dialog boxes, and then click **Finish** to complete the Network Configuration Wizard.
19. Restart your desktop computer.

Configure RAS
1. Click **Start**, **Settings**, and then **Control Panel**.
2. Double-click the Network icon, and then click the **Services** tab.
3. From the **Network Services** list, select **Remote Access Service**, and then click **Properties**.   If **Remote Access Service** is not listed, perform the following steps; otherwise, proceed to step 9.
4. Click the **Services** tab, and then click **Add**.
5. Select **Remote Access Service** from the list, and then click **OK**.
6. If necessary, provide your Windows NT Setup disks as instructed.
7. In the **Add RAS Device** dialog box, select your modem.
8. Click **OK**, then leave the **Remote Access Setup** dialog box open.
9. In the **Remote Access Setup** dialog box, select your modem.
10. Click **Configure**, select **Receive calls only,** and then click **OK**.
11. In the **Remote Access Setup** dialog box, click **Network**.
12. In the **Network Configuration** dialog box, clear **Require data encryption**.
13. Under **Server Settings**, select **TCP/IP**, and then click **Configure**.
14. Select **This computer only**.
15. Select **Use static address pool**.
16. In the **Begin** box, enter **192.168.55.100**.
17. In the **End** box, enter **192.168.55.112**.
18. Clear **Allow remote clients to request a predetermined IP address**.
19. Accept the default (recommended) responses for any messages that appear.
20. Click **Continue**, and then click **Close**.
21. Restart your desktop computer when prompted.
22. Reinstall any Windows NT 4.0 Service Packs.

Configure the user account

1. Click **Start**, **Programs**, **Administrative Tools**, and then **User Manager**.
2. In the top list box, double-click your user account.
3. Clear **Account Disabled**, and then clear **User Must Change Password at Next Logon**.
4. Select **Password Never Expires**.
5. Delete any passwords in the **Password** and **Confirm Password** boxes.
6. Click **Dialin**.
7. Select **Grant dialin permission to user** and **No Call Back**.

Configure RAS on Windows 2000

Configure the desktop computer for incoming connections
1. Click **Start**, **Settings**, and then **Control Panel**.
2. Double-click the Network and Dial-up Connections icon.
3. Click **Make New Connection**.
4. Select **Accept incoming connections** and click **Next**.
5. Select the modem from the list of devices, and click **Next**.
6. Select either of the options for allowing **Virtual Private Connections**, and click **Next**.
7. Check the users you want to be able to authenticate when connecting to the desktop from the device, and click **Next**.
8. Ensure the **Internet Protocol (TCP/IP)** check box is selected, click **Next**, and then **Finish**.

Configure RAS on Windows XP

Configure the desktop computer for incoming connections
1. Click **Start**, and then **Control Panel**.
2. Click the Network and Internet Connections icon and pick the Network Connections icon.
3. Double-click **Make New Connection** for the New Connection Wizard.
4. Select **Advanced Connection** under Network Connection Type and click **Next**.
4. Select **Accept incoming connections** and click **Next**.
5. Select the modem from the list of devices, and click **Next**.
6. Select either of the options for allowing **Virtual Private Connections**, and click **Next**.
7. Check the users you want to be able to authenticate when connecting to the desktop from the device, and click **Next**.
8. Ensure the **Internet Protocol (TCP/IP)** check box is selected, click **Next**, and then **Finish**.

Configure DUN on Windows 98/ME
To call a modem attached to a desktop computer running Windows 98/ME:
1. Install Dial-Up Adapter networking components.
2. Ensure the Dial-Up Adapter is enabled.
3. Install TCP/IP.
4. Check TCP/IP settings.
5. Enable the Dial-Up Server.

Install Dial-Up Adapter networking components
1. Click **Start**, **Settings**, **Control Panel**, and then double-click the **Network** icon.
2. Look in the list of installed network components for an entry named **Dial-Up Adapter**. If this entry exists, skip the remainder of these steps, and continue with the following section.
3. Select **Adapter** and click **Add**.
4. Select **Microsoft** as the manufacturer, and select **Dial-Up Adapter** as the network adapter.

Ensure the Dial-Up Adapter is enabled
1. Click **Start**, **Settings**, **Control Panel**, and then double-click the **System** icon.
2. Ensure **Dial-Up Adapter** is enabled.
    c) Click the **Device Manager** tab, and then double-click **Network adapters**.
    d) Double-click **Dial-Up Adapter**.
    e) On the **General** tab, confirm that the **Disable in this hardware profile** and **Remove from this hardware profile** are unchecked in Windows 98.
3. Repeat step 2 for all Dial-Up Adapters listed.

Install TCP/IP
1. Click **Start**, **Settings**, **Control Panel**, and then double-click the **Network** icon.
2. Look in the list of installed network components for an entry named **TCP/IP -> Dial-Up Adapter**. If this entry exists, skip the remainder of these steps, and continue with the next section.
3. On the **Configuration** tab, click **Add**.
4. Select **Protocol**, and then click **Add**.
5. Select **Microsoft** as the manufacturer, select **TCP/IP** as the network protocol, and then click **OK**.

Check the TCP/IP settings
1. Click **Start**, **Settings**, **Control Panel**, and then double-click the **Network** icon.
2. In the list of installed network components on the **Configuration** tab, double-click **Dial-Up Adapter**.
3. On the **Bindings** tab, select only one entry that includes TCP/IP. (If it is displayed, select the entry named **TCP/IP -> Dial-Up Adapter**. Otherwise, select **TCP/IP.**)
4. Clear the box next to any other entry that refers to TCP/IP.
5. If you made changes, disconnect the modem's cable, close all programs, and then restart your desktop computer.
6. Click **Start**, **Settings**, **Control Panel**, and then double-click the Network icon.
7. On the **Configuration** tab, select **TCP/IP -> Dial-up Adapter**, and then click **Properties**.
8. Click the **IP Address** tab, ensure that **Obtain an IP address automatically** is selected, and then close all dialog boxes.
9. Close all programs and restart your desktop computer.

Enable the Dial-Up Server
In order to perform these steps, you must have the Dial-Up Networking Upgrade 1.3 installed on your computer.
1. Click **Start**, **Settings**, **Control Panel**, and then double-click the **Add/Remove Programs** icon.
2. Click **Windows Setup**, double-click **Communications** and select the **Dial-Up Server** option.
3. Double-click **My Computer** on the Windows Desktop.
4. Double click **Dial-Up Networking**.
5. Click **Connections**, and then click **Dial-Up Server**.
6. Select the tab of the modem for which you want to change settings.
7. Select **Allow Caller Access**.
8. If Share Level Access is enabled in the **Access Control** tab of the **Network** control panel, you should now use **Change Password** to protect access to your PC and proceed to the next section.   If User Level Access is enabled, you must follow the next two steps to create a user account before using a modem to connect your mobile device to your desktop computer.
9. In the **Caller Access** box, click **Add**.
10. In the **Add User** dialog box, enter the user's name.   Click **Add**, You should now see the user's name in the **Caller Access** list box.

Connect your device to the desktop computer

You must now select the modem in ActiveSync, configure your modem connection on your device, and connect using the modem connection on your device. For instructions, see the ActiveSync Help for the topic "Connect to ActiveSync using a Modem".