ADTRAN®

NetVanta Unified Communications Technical Note

Installing and Configuring the Polycom KIRK Wireless 6000

Introduction

The Polycom KIRK Wireless Server 6000 (KWS6000) is a complete wireless enterprise solution. The KIRK Wireless Server 6000 consists of the KWS6000 itself, media resources, IP base stations, repeaters, and handsets.

The purpose of this technical note is to provide instructions for the installation and configuration of the KWS6000 for use with NetVanta Unified Communications products.

Known Integration Issues

- Attempting to initiate the ringing call pickup from the KWS6000 will result in the call disconnecting. The initiator of the original call will be diverted to voicemail. There is no workaround at this time.
- Users cannot currently deploy the KWS300 and KWS6000 in the same network due to conflicts in the way that the devices are automatically detected by the UC server.

DHCP Server Configuration

When a Polycom KWS6000 is plugged into the network, it retrieves an IP address from the Dynamic Host Configuration Protocol (DHCP) server. It also checks one of the options for the IP address of the Trivial File Transfer Protocol (TFTP) provisioning server. If this option is not present, the KWS6000 does not automatically upgrade its firmware, nor is it automatically provisioned.

To configure the DHCP server for Windows® Server 2003/2008 and Small Business Server (SBS):

1. Select **Start > Control Panel > Administrative Tools > DHCP**.

2. Right-click the domain where you want the KWS6000 to be provisioned and select **Set Predefined Options**.

3. Look for **Option 66**.

   - If Option 66 *is not* already defined, select **Add**.

Name	**UC Server Provisioning Server**
Data Type	**String**
Code	**66**
Description	**UC Server Provisioning Server IP Address**

   - If Option 66 *is* already defined:

     - If it is defined as an IP address type and the value is the IP address for the UC server, no action is required.

     - If it is not defined as an IP address type and/or the value is not the IP address for the UC server, automatic detection of the KWS6000 is not possible unless this option can be changed as per the instructions in above.

4. Select **OK.**

5. Right-click the **Scope Options** for the domain and select **Configure Options**.

6. Select the check box next to **Option 66**.

7. In the **IP address** field, enter the IP address of the UC server (for example, **123.45.67.89**).

8. Select **OK.**

NOTE: *For DHCP servers other than Windows Server 2003 and SBS, consult the appropriate documentation and complete the option configuration as indicated in Step 3.*

Preparation

This section provides instructions on how to change the KWS6000's factory IP address setting and how to apply firmware updates.

PC Network Settings

The KWS6000 is configured by default with a static IP address of **192.168.0.1**. In the event that this IP address conflicts with other IP addresses in your local network, or that this IP address is not in the same subnet as your network, then you must change the KWS6000's IP address. To access the KWS6000 and change its IP address, you must first change your PC's IP address to be on the same subnet.

NOTE: *Take note of your original network settings before making any changes. You must change these settings back after changing the network configuration on the wireless server.*

To change the IP address of your computer for Windows Server 2008/Windows Vista:

1. Select **Start** > **Control Panel**.

2. If you have the classic view, double-click **Network and Sharing Center** and then select **Manage Network Connections**. If you have the category view, navigate to **Network and Internet > View network status and tasks,** and then **Manage Network Connections**.

3. Double-click the active **LAN** or **Internet connection**.

4. Select **Properties**.

5. In the **Networking** tab, highlight the **Internet Protocol (TCP/IP)** item, and select **Properties**.

6. In the **General** tab, select **Use the following IP address**, and enter:

    IP address: 192.168.0.2
    Subnet mask: 255.255.255.0

7. Select **OK**.

To change the IP address of your computer for Windows Server 2003/Windows XP:

1. Select **Start** > **Control Panel**.

2. If you have the classic view, double-click **Network Connections**. If you have the category view, double-click **Network and Internet Connections**, and then select **Network Connections**.

3. Double-click your active **LAN or Internet connection**.

4. Select **Properties**.

5. In the **General** tab, highlight the **Internet Protocol (TCP/IP)** item, and select **Properties**.

6. In the **General** tab, select **Use the following IP address**, and enter:

    IP address: 192.168.0.2
    Subnet mask: 255.255.255.0

7. Select **OK**.

Changing the IP Address on the KWS6000

New (or factory reset) KWS6000 wireless servers are configured with a static IP address. This must be changed so that the device can communicate on your network.

To change the wireless server's IP address:

1. Open your browser and enter the IP address of the KWS6000. The factory default is **192.168.0.1**.

2. When prompted, use the following default Web access username and password:

   - Web Access Username: **admin**

   - Web Access Password: **ip6000**

3. Select **Configuration**.

4. Under **IP**, select **DHCP assigned** or **Use static IP address**.

   - If **DHCP assigned** is selected:

     – Select **Save** and then select **OK**.

     – When you return to the **General Configuration** menu, select **reboot**.

   - If **Use static IP address** is selected:

     – Enter the appropriate values on the page.

     – Select **Save** and then select **OK**.

     – When you return to the **General Configuration** menu, select **reboot**.

5. Change your PC's IP address parameters back to their original values.

Enabling Support for the KWS6000

1. Select **Start > All Programs > NetVanta UC Server > Server Configuration Wizard**.

2. Select the **Phone Types** step.

3. Select **Next** to bypass the welcome screen.

4. Select the check box next to **Polycom Kirk Wireless Server (6000)** (see the figure below).
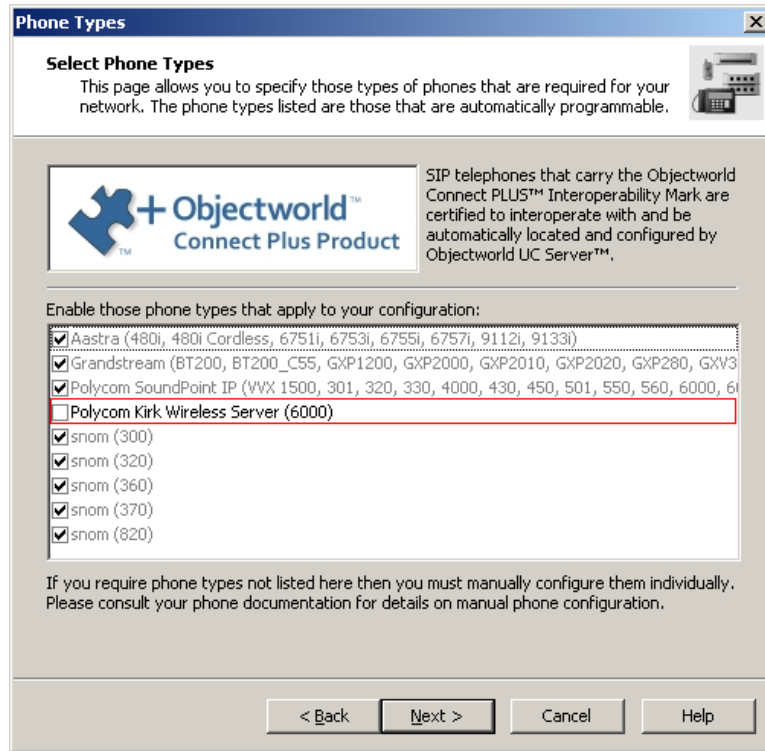
5. Continue through the wizard by selecting **Next** at each page until the wizard is finished.

Configuration

This section provides instructions on how to configure the UC server and the KWS6000 and its associated handsets so that the UC server user identities are associated with the handsets.

The configuration process consists of several steps:

1. Create a UC server user identity for each user that will be assigned a DECT handset. For information on how to create user identities, refer to the *NetVanta Unified Communications Administrator Guide*, available at *http://kb.adtran.com*, or the installation media.

2. Assign the identities to the KWS6000.

3. Associate the handsets with the identities.

4. Power on and register handsets to the KWS6000.

5. Test your configuration.

Adding an Identity

You must either have an unused identity that you can add to the phone, or you must create a new identity/user to associate with the phone. For more information about creating users and identities in the UC server, refer to the *NetVanta Unified Communications Administrator Guide*, available at *http://kb.adtran.com*, or the installation media.

### Associating an Identity with the KWS6000

After you install the device and create the users/identities, you must associate those identities with the device.

1. Launch the UC client by selecting **Start > All Programs > UC Client.**

2. Log in as the administrator or as a user with administrator privileges.

3. In the **Administration** view, select **Phones**.

4. Double-click the KWS6000 device to which you want to associate the identity.

MAC Address	Description	IP Address	Phone Type	Number of Buttons	Associated Identities
00-04-13-24-51-47	snom320/7.3.14	192.168.8.161	snom-320	12	1003
00-08-5D-19-72-A0	Aastra 55i/2.4.1.37	192.168.8.82	Aastra-6755i	9	<Not configured>
00-0b-82-14-97-46	Grandstream GXP2010 1.1.6.16	192.168.8.135	Grandstream-GXP2010	4	1002
00-0b-82-18-68-c6	Grandstream GXP280 1.1.6.27	192.168.8.96	Grandstream-GXP280	1	1000
00-13-d1-80-0b-b1	KIRK Wireless Server 6000	192.168.8.147	Polycom Kirk Wireless Server-6000	32	<Not configured>

MAC address: 00-13-d1-80-0b-b1
Description: KIRK Wireless Server 6000
IP Address: 192.168.8.147
Phone type: Polycom Kirk Wireless Server-6000
Number of buttons: 32
Associated identities: <Not configured>

5. Select **Add**.
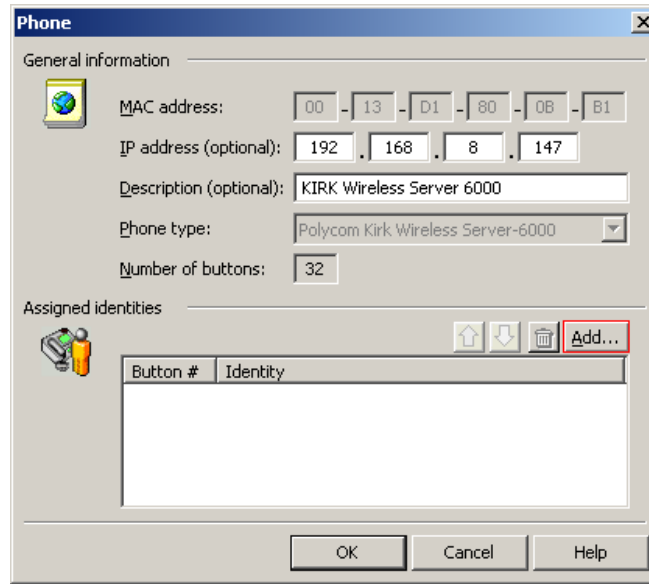
6. Select the identity you want to use and select **Select**.

7. To add additional identities to the list, select **Add** again and select another identity.

8. Select **OK**.

9. Wait for the device to automatically reboot. This should take less than 5 seconds.

- If the device does not reboot automatically, navigate back to the **Phones** pane in the UC client, right-click the specific device, and select **Restart Phones**.

- If the device does not restart at this point, disconnect and reconnect the power to the phone.

10. After the bootup process is complete, the new identities will be configured and can be assigned to the handsets.

Powering On and Registering Handsets to the KWS6000

Manually Registering the 4020/4040 Handsets

1. Insert the battery, plug in the charger, and place the handset in the charger for four hours.

2. Press the handset key ( ) for a half a second to turn on the handset.

3. When the handset is powered on, press **MENU**.

4. Scroll to **LOGIN**.

5. Press ✓ on the handset.

6. Scroll to **SUBSCRIPTION CREATE**.

7. Press ✓ on the handset.

8. Wait for the handset to find the device ID and press ✓.

9. On the **AC code** screen, press ✓.

NOTE: *The handset should now be registered, and should display the assigned identity. If it does not register, wait 10 seconds and then repeat the steps above.*

Manually Registering the 5020/5040 Handsets

1. Insert the battery, plug in the charger, and place the handset in the charger for four hours.

2. Press the left softkey to turn on the handset.

3. Press **Menu** to enter the main menu.

4. Scroll to **Settings** and press **Select**.

5. Scroll to **Advanced** and press **Select**.

6. Scroll to **Login** and press **Select**.

7. Scroll to **Create login** and press **Select**. The handset will start searching for a system.

8. Scroll to the found system and press **Select**.

9. On the **AC code** screen, press **OK** to connect to the system.

10. Press **OK**.

NOTE: *The handset should now be registered, and should display the assigned identity. If it does not register, wait 10 seconds and then repeat the steps above.*

Testing the Configuration

To ensure that the KWS6000 and handsets are correctly configured, you must run the following tests:

1. **Call to voicemail:** Place a call to the voicemail access number and set the voicemail password for that user.

2. **Internal call – Hard Phone/Softphone:** Place a call to another user with a hard phone or softphone. Make sure there is two-way audio.

3. **Internal Call – Handset to Handset:** Place a call to another user with a KWS handset. Make sure there is two-way audio.

4. **External Call to PSTN Number:** Place a call to a public switched telephone network (PSTN) number through a gateway. Make sure there is two-way audio.

Troubleshooting

1. **The phone freezes.**

   Remove and replace the battery pack. Turn on the telephone.

2. **The phone does not ring.**

   Check whether the ringer is SILENT or RINGER VOL is OFF.

   - The **Silent** icon will appear on the screen if the ringer is silenced. To adjust the ringer:
     - On the KIRK Wireless 4020/4040 handset, press the **Menu #** key.
     - On the KIRK Wireless 5020/5040, while in an idle state (no call in progress), press the **Menu** key followed by **#**.
   - To verify the ringer volume:
     - On the KIRK Wireless 4020/4040 handset:
       1) Press the **Menu** key.
       2) Scroll to **SET PROFILE RINGER VOL** by using the right arrow key.
       3) Turn the volume up and down using < and >. Confirm with ✓.
     - On the KIRK Wireless 5020/5040:
       1) Press **Menu** to enter the main menu.
       2) Scroll to **Settings** and press **Select**.
       3) Scroll to **Ringing volume** and press **Select**.
       4) Press left or right side of navigation key to adjust the volume of the ring tone.
       5) Press **Set**.

3. **The telephone will not turn on.**

   Ensure that the battery is connected. If it is connected, charge battery or replace it.

4. **The telephone turns off when receiving a call and going off-hook.**

   Charge the battery. If the problem persists, change the battery as it might be defective.