

## **Product Bulletin**

Bulletin Number: P-2010-0033-Global Date: 18 May 2010

## Avaya 2050 IP Softphone for Windows PC Release 4.0 (Build 008) General Availability – Global

Revision History		
Date Revision #		Summary of Changes
18 May 2010	Original bulletin	This is the original publication

## **1.0 Introduction**

Avaya is pleased to announce the general availability of the 2050 IP Softphone 2050 Release 4.0 (Build 4.00.008) for Windows PC. This release delivers several minor enhancements to the 2050 IP Softphone as well as a large number of fixes.

This release is being provided as a no charge update to all customers who have purchased or upgraded to Release 3.0.

Note that this release is for Windows PC on Communication Server 1000 and Communication Server 2100. Release 4.0 is also now supported on the Avaya Business Communication Manager (BCM).



### 2.0 New Features and Enhancements with 2050 IP Softphone Release 4.0

### <u>Rebranding</u>

As a result of the alignment for growth between Avaya and Nortel Enterprise Systems, the product has been renamed to "Avaya 2050 IP Softphone". In addition, all logos, icons and color schemes have all been updated to Avaya standards.



The application now installs into the C:\Program Files\Avaya folder by default. As well, a new 'Click to Accept' license agreement is presented at installation.

### Node-Locked Licensing

Software licensing was introduced with the 2050 IP Softphone Release 3.0 for Windows PC client. Software licensing eliminates the requirement to purchase a CDROM copy of the 2050 IP Softphone client application on a per-desktop basis.

With Release 4.0, support has been added for 'Node-locked' licenses that allow a license to be associated with a specific instance of the application, based on the Hardware ID or Media Access Control (MAC) address of the network interface where the client is installed. This eliminates the need for a license server located on network. Also, with node-locked licenses, occasional or roaming users who may only have intermittent connectivity to a license server can continue to use the client beyond the 30-day grace period.

The server-based licensing model introduced in Release 3.0 is still supported in Release 4.0 and remains unchanged. Customers will be able to select which type of license is desired when creating the licenses in the KRS tool.

Note: At the time of release, the ability to generate node-locked licenses through KRS is not available. A follow-up bulletin will provide additional details when available.

### Secure Signaling using DTLS

2050 IP Softphone Release 4.0 delivers the capability to encrypt the signaling communication between the client and the call server using standards-based Datagram Transport Layer Security (DTLS). DTLS guarantees a secure connection between the telephone and the call server ensuring the integrity and confidentiality of call control.

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Support for DTLS was introduced with Communication Server 1000 (CS1000) Release 6.0 and requires the following patches for proper operation:

### nortel-cs1000-tps-6.00.18.65-07.i386.000 nortel-cs1000-csv-6.00.18.65-04.i386.000

These patches are available for download from the www.nortel.com/support website.

Additional information on support for DTLS on Communication Server 1000 can be found in this document as well as in updated CS1000 Release 6.0 Product Bulletin and NTP documentation, and in Communication Server 1000 Security Management Fundamentals NTP, NN43001-604 04.AC. Updates will be provided as more details become available.

The alternative to secure signaling between the 2050 IP Softphone and the Communication Server 1000 is to deploy the Secure Multimedia Controller (SMC) 2450.

The DTLS feature is enabled/disabled on the 2050 IP Softphone via the DTLS checkbox on the server settings screen.

A 2050 IP Softphone Set	tings	×
A 2050 IP Softphone Set Profiles Server License Servers Theme Features Macros Audio Sound Devices Hardware ID Advanced Audio Listener IP Notifications	Server         Avays           Automatic (DHCP)	a 1
Hot Keys Lamp Sounds Key Type Language Expansion Module Personal Call Recording Plantronics USB Headset USB Headset Log Files About	Agtion: 1 Fingerprint: Symposium: Provisioning server Prodocol: TFTP URL: Bestore Defaults Reset	
Help	OK Cancel Apply	

This feature also requires the installation of a Certificate on the PC for proper operation. This must be installed by the customer at the time of deployment. The customer may use their own Certificate Authority ("CA") or may use "UCM" CA that is part of CS1K R 6+. Refer to the Technical Advisements section for further information on installing certificates.

### Secure Call Recording

Secure Call Recording adds the ability for secure call recording to external device (Avaya, Cyber, Nice, Other) using Duplicate media stream encryption. 2050 IP Softphone Release 2.2 added support for dual audio streams (where the second audio stream is sent to a call recorder), however, the duplicate audio stream was sent unencrypted to a call recorder. Since the audio stream to the call recorder was not encrypted, the audio stream could potentially be captured and be reconstructed by a third party. This vulnerability compromised the confidentially and integrity of the communication.

2050 IP Softphone Release 4.0 now delivers the capability to encrypt the communication between the Softphone and the call recorder. The DTLS with SRTP extensions protocol is used to establish the secure connection from the IP phone to the call recorder and to exchange SRTP keys. Once the connection is established and the keys exchanged, the SRTP protocol is used for the actual media encryption and authentication.

Support for Secure Call Recording (SCR), is a joint effort between the IP Phone and the Avaya Contact Recording and Quality Monitoring (CRQM) solution. The 2050 IP Softphone software must be at Release 4.0 or greater, the Communication Server 1000 must be at Release 6.0 or greater, and the Avaya CRQM must be on Release 7.0 or greater.

The model used to secure the media stream sent to the call recorder is called "mirror mode". In this mode, the decision on whether or not to encrypt the secondary media stream being sent to the call recorder is based on the secure state of the primary media stream. If the primary media stream (between the two calling parties) is encrypted, so too will be the media stream sent to the call recorder. If the primary media stream is not encrypted, the media stream sent to the call recorder will also not be encrypted. The ability to encrypt the media stream sent to the call recorder, independent of the encryption status of the primary media stream, is not available.

To provision SCR, two new parameters have been added to the Audio section of the Settings screen:

A 2050 IP Softphone Set	tings	×
Profiles Server License Servers Theme Features Macros Audio Sound Devices Hardware ID Advanced Audio Listener IP Notfications Hot Kays Lanp Sounds Key Type Language Expansion Module Personal Call Recording Plantronics USB Headset Log Files About	Audio       Audio         Quality       0       1       2       3       4       5       6       7       8       9       10         Less Delay       Higher Quality       I use a modem to connect to the network       Less Call recording         Secure Call Recorder vendor type:       Avay       V       Mirror mode type:       Never encrypted       V         Never encrypted       V       Notes only Avaya secure call recorder is supported       Restore Defaults	уа
Help	OK Cancel Appl	У

Vendor Type:

- Avaya (default)
- Cyber
- Nice
- Other

Mirror Mode Type:

- Never encrypted (do not encrypt the stream to the call recorder)
- Same as primary (encrypt the audio stream to the call recorder based on the encryption status of the primary stream)

SCR requires that the 2050 IP Softphone and the call recorder share security credentials to establish a secure connection. The Avaya call recorder ships with a certificate installed allowing "out of the box" secure connections with the Avaya CRQM solution. However, if the customer wishes to use their corporate Certificate Authority (CA) then a customer root certificate must be installed on the PC. Please refer to the Technical Advisements section for details on installing certificates.

For additional information on Avaya CRQM solution and its support for Secure Call Recording, please refer to the CRQM 7.0 Planning, Installation and Administration Guide NN44480-300 found on the Technical Support Portal.

### Incoming Call Pop-Up Enhancements

With Release 4.0, the incoming call pop-up window is now displayed after new call is ringing and is then updated in run time as soon as cookie with data is received. Also, along with CS1000 Release 7.0, a new 'KeyNumber' cookie has been integrated to indicate which DN the next cookie is for. This functionality allows support of incoming call pop-ups for multiple calls.

Note that pop-ups are not supported for KEM.

Note that with CC6 Call centers there is a limitation where Caller ID and Caller Name information are not provided. In this case, the 2050 IP Softphone R4.0 will display NA/NONAME in the window.

### 3.0 Quality Improvements

The Avaya 2050 IP Softphone Release 4.0 contains numerous resolved issues and closed cases. The list of resolved customer reported issues since Release 3.4 are listed below.

Case ID	Description
<u>091210-67218</u>	
<u>091216-70624</u>	2050 is not marking QoS values in packets (see Technical Advisory Section)
<u>091030-43866</u>	IP Call Recording stops working after retrieve call from Hold
<u>091203-63291</u>	Unable to configure annotation feature keys in Expansion Module.
<u>091008-30561</u>	i2050.exe process does not release GDI Objects
<u>100224-05132</u>	2050 IP Softphone on CICM: Delay when hanging up from a call
<u>100310-13208</u>	Configuration tool does not support customized skins
	Configuration tool errors when applying Node/TN info.
	The configuration tool will now allow empty values for any parameter in the
	config.ini file and will not overwrite the registry entry if it is blank. This allows
	customers to upgrade to new configuration settings without changing selected
<u>100312-14320</u>	values such as the Node/TN information that may already be set in the registry.
<u>100405-25547</u>	Inconsistent behavior of IP 2050 Settings for first launch if ConfigurationTool
090812-96650	GN Netcom 8110 USB adaptor does not work on the docking station

### 4.0 Supported Platforms

Operating Systems

- Microsoft® Windows XP<sup>™</sup> (Service Pack 3)
- Microsoft® Windows Vista<sup>™</sup> (Service Pack 1)
- Microsoft® Windows 7<sup>™</sup>

Note 1: 64 bit versions of Microsoft Windows are not supported.

Note 2: Although the 2050 IP Softphone may run in VDI (Virtual Desktop Infrastructure) environments such as VM Ware and Citrix Xen Desktop, these are not supported at this time. Avaya will be testing in these environments and support will be announced in the near future.



### Call Servers

- Avaya BCM 50 Release 3.0, 5.0, 6.0
- Avaya BCM 450 Release 1.0, 5.0, 6.0
- Avaya CS1000: Release 5.5, 6.0, 7.0
  - Avaya CS2100: CICM 10.1 MR2 on Release SE10, SE11 and SE13

Note 1: BCM Release 6.0 is required for caller id information to be displayed in incoming call pop-up window. Note 2: CS1000 Release 5.5 requires patch MPLR25653 for the incoming call pop-up feature to work properly.

## 5.0 Technical Advisements

### 6.1 Windows 7 Program Compatibility Assistant Pop-up Message

Occasionally, the screen below will be displayed when a non-administrator user exits the settings menu on Windows 7. If a user selects the option "Open the control panel using recommended settings" then next the 2050 Settings applet can be launched only under administrator privileges. If a user selects "This control panel works correctly" then next the 2050 Settings applet can be launched by non-power user as usual. In both cases this assistant pop-up message will not be shown except a user presses Cancel. The root cause of this issue has been identified and will be corrected in a future release. Users should select the "This control panel works correctly" option.

Program Compatibility Assistant
Did this control panel item work correctly?
If it didn't, try using settings that are compatible with this version of Windows.
Control Panel item: Avaya 2050 IP Softphone Publisher: Avaya Location: C:\Windows\System32\i2050Config2.cpl
Open the control panel using recommended settings
This control panel works correctly
Cancel
What settings are applied?

6.2 Enabling GQoS Settings.

With Microsoft Windows XP Service Pack 3 and Windows Vista Service Pack 1, Microsoft has changed the method for setting the Global Quality of Service settings. It is now necessary to set GQoS with the Group Policy Editor for all versions of Windows using the steps below.

1. From the start menu, click Run.

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2. In the Open box, type "gpedit.msc" and then press OK.



3. On the left side follow to "Computer Configuration" -> "Administrative Templates"-> "Network" -> "QoS Packet Scheduler" -> "DSCP value of conforming packets".

4. Check if settings on the right side are enabled.



5. For every disabled setting use step 6.



6. Double click on the disabled setting, click the "Enabled" radio button, and configure DSCP if it is needed and

📸 Group Policy		
File Action View	v Help	
(+ -> 主 💽		
S Local Computer F	Best effort service type Properties	State
E 🛃 Computer Co	Setting Explain	Enabled
🗄 🛄 Software		Enabled
E	Best effort service type	Enabled
📃 👘 🧰 Wind		Enabled
🕀 🧰 Syste		Endblog
⊡… <mark>∭</mark> Netw		
	Enter a DSCP value for conforming packets with the	
	Best errort service type	
	DSCR value: 10 III	
Print		
📋 🧟 User Configu		
H- Software	Concerned and Allocat Minerael Vice dama VD Declaritized as Vice da	
E 🙆 Administr	Supported on: At least Microsoft Windows AP Professional or Windo	
1.000	Previous Setting Next Setting	
	UK Cancel Apply	
•	Extended Standard	-
proce OK		

Next, the "QoS RSVP" service must be started using the following steps:

- 1. From the start menu, click Run.
- 2. In the Open box, type "services.msc" and then press OK.

Run	? X
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	services.msc
	OK Cancel Browse

### 3. On the right side find "QoS RSVP". If it's status isn't "Started" then use step 3.

🍇 Services						
File Action View	Help					
⇔ → 💽 😭 🛛	à 🗈 😰 🖬 🕨 🗕					
🎭 Services (Local)	Name 🛆	Description	Status	Startup Type	Log On As	*
	🖓 NVIDIA Display Driv	Provides sy		Automatic	Local System	
	🍓 Office Source Engine	Saves instal		Manual	Local System	
	🖓 OracleOraDb10g_h			Manual	Local System	
	🖓 Performance Logs a	Collects per		Disabled	Network S	
	🍓 Plug and Play	Enables a c	Started	Automatic	Local System	
	🍓 Portable Media Seri	Retrieves th		Manual	Local System	
	Rint Spooler	Loads files t	Started	Automatic	Local System	
	🖏 Protected Storage	Provides pr	Started	Automatic	Local System	
	🎭 QoS RSVP	Provides ne	Started	Automatic	Local System	
	Remote Access Aut	Creates a c		Manual	Local System	
	🖓 Remote Access Con	Creates a n		Manual	Local System	-
	🖓 Remote Desktop He	Manages a		Manual	Local System	
	🖓 Remote Packet Cap	Allows to ca		Manual	Local System	
	🖓 Remote Procedure	Provides th	Started	Automatic	Network S	
	🖓 Remote Procedure	Manages th		Manual	Network S	
	🍓 Remote Registry	Enables re	Started	Automatic	Local Servi	
	🖓 Removable Storage			Manual	Local System	
	🖓 Routing and Remot	Offers routin		Disabled	Local System	
	Be Socondarul ogon	Enables eta	Charlod	Automotio	Local Sustem	
	$\$ Extended $\lambda$ Standard /			4752		

4. Double click on "QoS RSVP", from dropdown list box select "Automatic", click "Start" and then OK.

QoS RSVP Propert	ies (Local Computer)	×
General Log On	Recovery Dependencies	_
Service name:	RSVP	
Display name:	QoS RSVP	
Description:	Provides network signaling and local traffic control setup functionality for QoS-aware programs and	
Path to executable	: 	
	stem52 vrsvp. exe	
Startup type:	Automatic	
Service status: Start You can specify th from here.	Stopped Stop Pause Resume e start parameters that apply when you start the service	
Start parameters:		
	OK Cancel Apply	



Finally, the following steps detail how to enable the QoS Packet Scheduler for network connection

- 1. From the start menu, click Control Panel.
- 2. Double click on "Network connections".



- 3. Right click on the desired network connection.
- 4. Click "Properties" from the appeared context menu.



5. Find "QoS Packet Scheduler" and make check it's checkbox if it's not and then press OK.

🚣 Local Area Connection 4 Properties 🛛 🔹 🚬
General
Connect using:
Bealtek RTL8139 Family PCI Fast Etł Configure
This connection uses the following items:
Client for Microsoft Networks File and Printer Sharing for Microsoft Networks QoS Packet Scheduler Network Monitor Driver
Instal Uninstall Properties
Description Allows your computer to access resources on a Microsoft network.
<ul> <li>Show icon in notification area when connected</li> <li>Notify me when this connection has limited or no connectivity</li> </ul>
OK Cancel

# 6.3 Installing Certificates for DTLS

- 1. Obtain the client certificate in \*.der format. If it's same in \*.pem format then rename it to \*.der.
- 2. Copy the client certificate to a desired machine where the i2050 R4.0 is attempted to be used.
- 3. Logon as an administrator
- 4. Double-click on the certificate.

Certificate	? 🗙
General Details Certification Path	
Certificate Information	
The integrity of this certificate cannot be guaranteed. The certificate may be corrupted or may have been altered.	-
Issued to: IP Clients Design	-
Issued by: IP Clients Design	
<b>Valid from</b> 21.10.2008 <b>to</b> 21.10.2013	
	nt
OK	

5.

Press "Install Certificate ... ". The Setup Wizard will be started.



### **Certificate Import Wizard**



### 6. Press Next

Certificate Import Wizard	$\mathbf{\times}$
Certificate Store Certificate stores are system areas where certificates are kept.	
Windows can automatically select a certificate store, or you can specify a location for	
Place all certificates in the following store     Certificate store:	
Browse	
	_
< <u>Back</u> <u>N</u> ext > Cancel	

### 7.

8. Select the second option: Place all certificates in the following store. Click Browse button

Select Certificate Store
Select the <u>c</u> ertificate store you want to use.
Personal Trusted Root Certification Authorities Enterprise Trust Intermediate Certification Authorities Trusted Publishers Untrusted Certificates Show physical stores

- 9.
- 10. Check the Show physical stores



- 11.
- 12. Select Trusted Root Certification Authorities->Local Machine

Select Certificate Store
Select the <u>c</u> ertificate store you want to use.
🕀 📄 Personal 🛛 🔥
🚊 🧰 Trusted Root Certification Authorities 🛛 📄
Registry
Local Computer
🕀 📃 Enterprise Trust
Intermediate Certification Authorities
Show physical stores
OK Cancel

13. **1**4. Press OK



Certificate Store Certificate stores ar	e system areas where certificates are kept.
Windows can autom	atically select a certificate store, or you can specify a location for
Automatically	select the certificate store based on the type of certificate
<u> Place all certif</u>	icates in the following store
Certificate st	ore:
Trusted Roc	t Certification Authorities\Local Computer Browse
	< Back Next > Cancel
	(East Gaves)
acc Novt	
essinext	
ess Next Certificate Import Wiz	zard 🛛 🔀
Certificate Import Wiz	Completing the Certificate Import Wizard You have successfully completed the Certificate Import wizard.
Certificate Import Wiz	Completing the Certificate Import Wizard You have successfully completed the Certificate Import wizard. You have specified the following settings:
Certificate Import Wiz	Completing the Certificate Import         Wizard         You have successfully completed the Certificate Import         wizard.         You have specified the following settings:         Certificate Store Selected by User         Trusted Root Certific         Content
Certificate Import Wiz	completing the Certificate Import         Wizard         You have successfully completed the Certificate Import         wizard.         You have specified the following settings:         Certificate Store Selected by User         Certificate         Content
Certificate Import Wiz	completing the Certificate Import         Wizard         You have successfully completed the Certificate Import         wizard.         You have specified the following settings:         Certificate Store Selected by User         Crutificate         Content
Certificate Import Wiz	completing the Certificate Import         Wizard         You have successfully completed the Certificate Import         Wizard         You have specified the following settings:         Certificate Store Selected by User         Trusted Root Certificate         Image: Ima

- 18. Press Finish
- 19. If the import was successful the message box is appeared:



## To look for certificates installed on the machine:

Run as an administrator the command: 1.

run certmgr.msc

2. The following window will be shown



- 3. 4.
  - Select View->Options->Physical certificate stores



View Options	? 🔀
View mode Organize view mode by: O <u>C</u> ertificate purpose O <u>L</u> ogical certificate stores	
Show the following:	
	OK Cancel

- 5.
- 6. Press OK
- 7. Browse the tree of certificate to Trusted Root Certificate Authorities->Local Computer->Certificates

🖼 Certificates			
<u> Eile Action View Help</u>			
Ø Certificates - Current User     ⊡ ────────────────────────────────	Issued To 🗠	Issued By	Exp 🔨
Trusted Root Certification Authorities     Trusted Root Certification Authorities     Trusted Root Certification Authorities     Trusted Root Certification Authorities	AAA Certificate Belvices	ABA.ECOM Roo	01.C
	AC Raíz Certicámara S.A.	AC Raíz Certicá AC RAIZ DNIE	03.C 09.C
	AC RAIZ FNMT-RCM	AC RAIZ FNMT	01.C 13.C
Intermediate Certification Authorities     Intermediate Certification Authorities     Intermediate Certification Authorities	A-CERT ADVANCED	A-CERT ADVAN	23.1
Trusted Publishers     Intrusted Certificates     Third-Party Root Certification Authorities     Trusted People     Certificate Enrollment Requests	ACTALIS Authentication CA G1	ACNEB Actalis Authenti	15.0 25.0
	AddTrust External CA Root	AddTrust Exter AdminCA-CD-T01	30.C 25.C
	Admin-Root-CA	Admin-Root-CA	10.1
	Agence Nationale de Certification	Agence Nationa	12.0
	America Online Root Certification	America Online America Online	19.1 29.0
	ANCERT Certificados CGN	ANCERT Certifi	11.0
			>
Local Computer store contains 330 certificates.			

- 8. 9.
  - In the table on the right side found the certificate installed

# Certificates			
<u>File Action View Help</u>			
≻ → 🗈 📧 % 🖻 🗙 📽 😫 🛛			
<ul> <li>Certificates - Current User</li> <li>Personal</li> <li>Trusted Root Certification Authorities</li> <li>Certificates</li> <li>Certificates</li> <li>Certificates</li> <li>Active Directory User Object</li> <li>Trusted Publishers</li> <li>Untrusted Certificates</li> <li>Third-Party Root Certification Authorities</li> <li>Trusted People</li> <li>Certificate Enrollment Requests</li> </ul>	Issued To A Issued To A Issued To A I.CA - Qualified root certificate I.CA - Standard root certificate IGC/A InfoNotary CSP Root IF Clients Design IPS SERVIDORES IpSCA Global CA Root IpSCA Main CA Root Izenpe.com Izenpe.co	Issued By http://www.vali I.CA - Qualified I.CA - Standard IGC/A InfoNotary CSP IP Clients Design IPS SERVIDORES ipsCA Global CA ipsCA Main CA Izenpe.com Izenpe.com Juur-SK KISA RootCA 1 KISA RootCA 3 KMD-CA Kvalific KMD-CA Root KMD-CA Server Macao Post eSi	Exp    26.0   01.0   01.1   06.0   21.1   30.1   25.1   31.0   13.1   26.0   24.0   19.1   23.1   11.0   12.1   30.0

10.

## 6.0 Ordering Guidelines and Procedures

The 2050 IP Softphone Release 4.0 for Windows PC is generally available globally as of May 18th, 2010.

Software licensing was introduced with the 2050 IP Softphone Release 3.0 for Windows PC client. Software licensing eliminates the requirement to purchase a CDROM copy of the 2050 IP Softphone Release 3 client application on a per-desktop basis. Instead, Right-to-Use Licenses are purchased from Nortel's Keycode Retrieval System (KRS) which is accessible via the Nortel support portal at the link below:

www.nortel.com/support/tools/krs.

Additional information on generating and retrieving keycodes is provided in a later section of this notice.

Ssoftware licensing is based on "pool-of-users" approach to provide increased cost-effectiveness to customers. For example, if a customer has identified that they have 100 active users of the 2050 IP Softphone Release 3 client at any given time out of a total population of 500 2050 IP Softphone users, then they should plan on purchasing 100 (or more) licenses to support their employees. An active (or "checkout") license is required in order to make a call with the 2050 IP Softphone Release 3 client. Licenses are hosted on a Licensing Server, which is a customer supplied PC and is located at the customer premise.

Two order codes are established with 2050 IP Softphone. There is a Right-to-Use (RTU) license for new 2050 IP Softphone Release 4.0 client purchases. An upgrade Right-to-Use license has been established offering a discount for installed base customers of Release 1.x and 2.x wishing to upgrade to Release 4.

New Purchases:

PEC	Description
NTDW84BA	2050 IP Softphone New User License

Upgrades from 2050 IP Softphone Releases 1.x/2.x to Release 4:

PEC	Description
NTDW84CA	2050 IP Softphone Upgrade License from RIs 1 and 2

Note: The Software CD Package will not be available for the 2050 IP Softphone Release 4.0. The full release is available for download from the Technical Support web site. Refer to the following section for additional details.

Upgrades from 2050 IP Softphone Release 3.x:

Customers who have previously purchased and installed an earlier version of 2050 IP Softphone, may download this maintenance release from www.nortel.com/support using their existing licensing. Please refer to the following section.

## 7.0 Software Download

Those users who have purchased and installed Release 3.0 and later may proceed to download the upgrade version of 4.0. If the software has not been installed, the full installation must be done first:

Full Software Download Instructions:

To download the complete software file from the Nortel web site, follow these instructions:

Note: You will need to login to complete the steps below.

1. Access the <u>www.nortel.com/support</u> web site.

- 2. Select "Phones, Clients & Accessories".
- 3. Select "2050 IP Softphone" on the Phones, Clients & Accessories page.
- 4. Select "Software Downloads" on the 2050 IP Softphone page. Select "Major Release"
- 5. Select the "2050 IP Softphone Release 4.0" link.

6. Download either the .exe file or the Windows MSI file as required for the 2050 IP Softphone client software which is installed on each PC.

7. Download the "Licence Server Software" which is installed on a customer-provided PC and provides licences to each installed 2050 IP Softphone client.

8. Refer to the applicable NTP for instructions on installing and configuring.

Release 4.0 Upgrade Software Download Instructions:

Note: Users are advised to uninstall any previous versions of the 2050 IP Softphone application before upgrading to Release 4.0. This may be done through either the Start menu or selecting "Uninstall 2050 IP Softphone" or through the Control Panel using "Add or Remove Programs". All user settings are retained in the registry after un-installation.

To download the upgrade file from the Nortel web site, follow these instructions:

Note: You will need to login to complete the steps below.

1. Access the <u>www.nortel.com/support</u> web site.

- 2. Select "Phones, Clients & Accessories".
- 3. Select "2050 IP Softphone" on the Phones, Clients & Accessories page.
- 4. Select "Software Downloads" on the 2050 IP Softphone page. Select "Major Release"
- 5. Select the "2050 IP Softphone Release 4.0" link.

6. Download either the .exe file or the Windows MSI file as required for the 2050 IP Softphone client software which is installed on each PC.

7. Refer to the applicable NTP for instructions on installing and configuring..



### 8.0 Keycode Retrieval Process from KRS

Note: Additional information on creating node-locked licenses will be provided via Product Bulletin when this option becomes available in KRS.

Before proceeding with the install, you must have the following information available:

- Fully Qualified Domain Name (FQDN) of the PC on which the Licence Server Software is installed. The 2050 IP Softphone Licence Server Software can be pre-installed and used to determine the FQDN of the PC.
- Purchase Order Number

Registering/generating keycodes for the 2050 IP Softphone:

- 1. Access the www.nortel.com/support web site.
- 2. Select "Support & Training Online Self-Service Keycode Retrieval".
- 3. At Step 1, Select "Global Login"
- 4. At Step 2, Select product family "2050 IP Softphone"
- 5. Enter login credentials.
- 6. Click on "Product Registration" on the sidebar.
- 7. Enter hostname in Site Name
  - Note: CLLI code is not used for the 2050
  - Enter the geographical location in City, Country , State fields.
- Note: This information is used for reference purposes only.
- 9. Click Save

8.

Assuming an order has been placed for a number of users. SAP will have created a non-stock PO and will send to KRS.

- 10. Click on "Generate Keycode" on the sidebar
- 11. At Step 1, Enter the Host ID into the Enter HostID field.
- 12. At Step 2, Enter the Purchase Order Number. Alternatively, you can search by Nortel Order #, COEO, Customer PO# or Alternate Order #.

Note: COEO = Common Equipment order number for carrier customers. Authorization codes are used by stocking distributors.

13. At Step 3. Select the quantity of the number of licenses desired.

14. Click Continue. The program then returns back to the Select PO screen to allow users to pull licenses from multiple POs if desired.

15. Click Go To Summary

16. Click Generate Keycode. A new keycode is generated in KRS database. The User is then directed to the Keycode Retrieve screen.

17. Select Download Keycode and apply to the system. Saves as a .lic file on the local system.

### Expansions:

- 1. Click on "Generate Keycode" on the sidebar
- 2. At Step 1, Enter the Host ID from the previous step into the Enter HostID field.
- 3. At Step 2, Enter the Purchase Order Number to pull license entitlement from.
- 4. At Step 3. Enter quantity of additional number of seats required.
- 5. Click Generate Keycode.

Note: With the IP Phone 2050, each license increment generates an additional license file. This is different from other products where a single license file is revised to include the additional values.



If you are experiencing any problems with the KRS system, click on the CONTACT KRS SUPPORT link at the bottom of the page. Some of the documents may include Product Bulletins, Sales and Marketing Bulletins, and NTPs.

### 9.0 References and Related Documents

The following documents are associated with 2050 IP Softphone for Windows PC on the CS1000:

- Communication Server 1000 IP Phones Fundamentals [NN43001-368]
- IP Softphone 2050 User Guide [NN43119-101]
- IP Softphone 2050 Call Center User Guide [NN43119-100]

These documents can be found on the Nortel Technical Support Portal at: <u>http://support.nortel.com/go/main.jsp?cscat=DOCUMENTATION&poid=10601</u>

In addition, the following documents are associated with the 2050 IP Softphone for Windows PC on BCM:

- IP Softphone 2050 Installation Guide [NN40050-300]
- IP Softphone 2050 User Guide [NN40050-100]

These documents can be found on the Nortel Technical Support Portal at: <u>http://support.nortel.com/go/main.jsp?cscat=DOCUMENTATION&poid=15181</u>

### About Avaya

Avaya is a global leader in enterprise communications systems. The company provides unified communications, contact centers, and related services directly and through its channel partners to leading businesses and organizations around the world. Enterprises of all sizes depend on Avaya for state-of-the-art communications that improve efficiency, collaboration, customer service and competitiveness. For more information please visit www.avaya.com.

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### Appendix

The following Appendix provides information on how to download and and install the licensing server. This is capability was introduced in 2050 IP Softphone Release 3.0 but is new for BCM customers (since 2050v3 was not supported with BCM). Additional information on installing and troubleshooting the License Server can be found in the following document:

Communication Server 1000 IP Phones Fundamentals [NN43001-368]

This document can be found on the Nortel Technical Support Portal at:

http://support.nortel.com/go/main.jsp?cscat=DOCUMENTATION&poid=10601

### License Server

The License Server Manager and the vendor daemon make up the License Server system. The License Server Manager is the main point of contact for 2050 IP Clients, which require license certificates.

Because the License Server components are lightweight, you can install the components on any machine running other applications, which runs one of the following operating systems

- Microsoft Windows 2000
- Microsoft Windows 2000 Server
- Microsoft Windows XP
- Microsoft Windows 2003 Server
- Microsoft Windows Vista

The Licensing Server requires ports 27000 and 27001 to be accessible. You can modify the TCP/IP port number of the License Server Manager (Imgrd) in the Server line. For information about modifying the Server line, refer to information late in this Appendix.

#### License Server components

The License Server includes the following components:

- vendor daemon-service which provides license rights to 2050 IP Softphone clients (nortelIP.exe)
- License Server Manager (Imgrd.exe)
- FLEXnet Licensing Administration Tools
  - command line tools available with the installer
  - Imtools.exe-graphical user interface (GUI) for license server management

For FLEXnet Licensing and license management provided by Macrovision, go to www.macrovision.com.

#### Installing the License Server

Use the following procedure to install the License Server components.

1 Obtain the 2050 IP Softphone License Server Installer software:

- Access the <u>www.nortel.com/support</u> web site.
- Select "Phones, Clients & Accessories".
- Select "2050 IP Softphone" on the Phones, Clients & Accessories page.
- Select "Software Downloads" on the 2050 IP Softphone page. Select "Major Release"
- Select the "2050 IP Softphone Release 4.0" link.
- Finally, select the "Setup\_Server.exe" link.

2 On your license server PC, execute the file **setup\_server.exe**.

- 3 Click Next on the Welcome window.
- **4** If you agree with the terms of the License Agreement, select the appropriate button and click **Next**. The Welcome to the InstallShield Wizard opens.
- 5 Click Next.

6 Choose the Installation Path of the target directory for the License Server component files.

A Confirmation window appears.

### 7 Click Next.

A progress bar appears to show the progress of the installation.

8 To install the License Server as a Windows Service, select the "Install as a service" checkbox.

### 9 Click Finish.

### Obtaining a valid license

1 To view your FQDN, select Start > All Programs > Avaya > 2050 IP Softphone Licensing Server > GetHostID.

### 2 Go to www.nortel.com/support/tools/krs.

### 3 Login to Keycode Retrieval System (KRS).

For information about creating key codes, see the KRS User Guide at www.nortel.com/support/tools/krs. Select Product family, Documentation, Forms and User Guides.

4 On the Retrieve Keycode page, enter your FQDN (for example, yourlicenseserver1.yourcompany.com) in the System ID (site ID) field.

5 Select the product keycode from the list, then save file, for example, **yourlicenseserver1.yourcompany.com.lic** to a directory on your PC .

Before you continue with the following steps, Avaya recommends that you shut down your license server.

6 To shut down your license server, go to Start > All Programs > Avaya > 2050 IP Softphone Licensing Server > Manual Server > Shut Down License Server.

7 Go to the directory on your PC where the License server software is located, for example, C:\Program Files\Avaya\IPSoftphone2050. Rename the file **counted\_lic**.

8 Go to the directory where yourlicenseserver1.yourcompany.com.lic is located. Move yourlicenseserver1.yourcompany.com. lic to the directory where the License Server software is located, for example, C:\Program Files\Avaya\IPSoftphone2050.

9 Rename yourlicenseserver1.yourcompany.com.lic to counted.lic.

10 Restart the License Server. Go to Start > All Programs > Avaya > 2050 IP Softphone Licensing Server > Manual Server > Restart License Server.

### Verifying user licenses

1 Go to Start > All Programs > Accessories > Command Prompt to open the Command Prompt window.

**2** From the Command Prompt window, go to the directory on your PC where the License server software is located, for example, C:\Program Files\Avaya\2050 IP Softphone Licensing Server.

#### 3 At the prompt, enter Imstat -A.

The number of user licenses and the number of licenses in use are displayed.

#### Starting the License Server Manager

Use one of the following options to start the License Server Manager:

- Manual Server
- Configure as a service

#### Manual server

If the server is run as "manual server" a console window appears on the desktop, which displays the output of both the Imgrd.exe and nortelip.exe processes.



You can select one of the following options from Start > All Programs > Avaya > 2050 IP Softphone Licensing Server > Manual Server.

- Restart Licensing Server
- Shut Down Licensing Server
- Start Up Licensing Server

#### Configure as a service

If the server is run as "server service" the server can supply licenses even when you are not logged on to the computer. You can observe the status of the service in the Windows Services administrative tool. The output of the Imgrd.exe and nortelip.exe processes, writes to a log file called "ServiceLog.log" in the installation path of the licensing server.

You can select one of the following options from Start > All Programs > Avaya > 2050 IP Softphone Licensing Server > Server Service.

- Install Licensing Server as a Service
- Uninstall Licensing Server Service
- Restart Licensing Server Service

### License file

You can modify the following elements in the license file

- Host name on the SERVER line
- TCP/IP port number on the SERVER line

The SERVER line specifies the host name and hostid of the license server system and the TCP/IP port number of the license server manager (Imgrd).

The format of the SERVER line is:

### SERVER host hostid [port]

Field	Description
host	The system host name or IP address. On NT/2000/XP, ipconfig / all; on Windows 95/98/ME, winipcfg/all return the host name.
hostid	The hostid generated by the Get Host ID command.
	KRS requires the host ID in order to provision the server system
	with valid licenses.
port	TCP/IP port number to use. A valid number is any used port number between 0 and 64000.
	ports in the range of 27000 to 27009 is used.