



# **Avaya CallPilot® Quickstart Guide**

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# Chapter 1: Customer service

Visit the Avaya Web site to access the complete range of services and support that Avaya provides. Go to [www.avaya.com](http://www.avaya.com) or go to one of the pages listed in the following sections.

## Navigation

- [Getting technical documentation](#) on page 5
- [Getting product training](#) on page 5
- [Getting help from a distributor or reseller](#) on page 5
- [Getting technical support from the Avaya Web site](#) on page 6

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## Getting technical documentation

To download and print selected technical publications and release notes directly from the Internet, go to [www.avaya.com/support](http://www.avaya.com/support).

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## Getting product training

Ongoing product training is available. For more information or to register, you can access the Web site at [www.avaya.com/support](http://www.avaya.com/support). From this Web site, you can locate the Training contacts link on the left-hand navigation pane.

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## Getting technical support from the Avaya Web site

The easiest and most effective way to get technical support for Avaya products is from the Avaya Technical Support Web site at [www.avaya.com/support](http://www.avaya.com/support).

# Chapter 2: Avaya CallPilot® 5.0 installation

The Avaya CallPilot® 5.0 Quickstart Guide provides basic instructions on new hardware installation and basic configuration of an Avaya CallPilot 5.0 system. After using this guide to set up a basic CallPilot configuration, you should be able to dial a mailbox, leave a message and retrieve a message using the telephone. For more detailed configuration information, see the appropriate technical documentation.

This document is designed to be followed from start to finish and is intended for experienced installers.

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## Prerequisites to CallPilot 5.0 installation

Before you proceed with installation of a CallPilot 5.0 system using this guide, you should have the following knowledge and skills:

- Understanding of basic programming and provisioning for CallPilot 5.0.
- Understanding of basic programming and provisioning for the Avaya Communication Server 1000 (Avaya CS 1000) or Meridian 1 (M1) system.
- Knowledge of personal safety precautions to take to minimize risk of injury when installing components.



### **Voltage:**

#### **Risk of injury by electric shock**

To minimize risk of injury by electric shock, take care when working with power equipment and connections.



### **Danger:**

#### **Risk of injury by laser**

Never look directly into the end of a fiber cable or use an optical device to look at the end of a fiber cable unless you are certain that the other end of the cable is not connected. The laser traveling through a fiber cable can injure the retina.

- Understanding of electrostatic discharge and how to prevent it. Electrostatic discharge (ESD) is the transfer of charge between bodies at different electrical potentials. ESD can change the electrical characteristics of a semiconductor device and degrade or destroy it. ESD can also disrupt the normal operation of an electronic system by causing equipment malfunction or failure. Follow these guidelines to prevent ESD:
  - To dissipate or neutralize electrostatic charges, use proper grounding and use conductive or dissipative materials.

- When handling modules, always wear an antistatic wrist strap connected to the same ESD grounding point as the equipment being worked on. Any charge in your body will go to ground rather than transferring to hardware modules.
- Always set modules on appropriate antistatic material. Proper antistatic packaging effectively shields the product from charge and reduces the generation of charge caused by movement of the product within the container.
- Knowledge of general practices to protect equipment modules from damage. Follow these guidelines to prevent damage to equipment modules:
  - Handle modules by the faceplate. Do not touch pins or electrical connections.
  - Do not leave slots open. All slots must be filled with modules or be covered with slot covers, if empty, in order to maintain safety compliance, proper cooling, and EMI containment in the shelf.
  - Ensure that your environment meets the necessary requirements for temperature, humidity, and cleanliness. Refer to the environmental requirements for your switch and server in the CallPilot server configuration guide for your switch model.
  - Replace the optional air filter regularly (approximately every three months) in order to maintain proper cooling and airflow through the shelf.
  - Do not over-tighten thumb screws or lug nuts. Tighten until snug plus a quarter turn. If you use a power tool to tighten screws, use a low torque setting (2–3 lbs/sq in).

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## CallPilot 5.0 installation tasks

The following is a list of the CallPilot 5.0 installation tasks covered in this guide, listed in the correct sequence. To link to detailed procedures for each task, click the text.

- [CS 1000/M1 system status check tasks](#) on page 11
- [Avaya CallPilot® resource configuration](#) on page 15
- [Avaya CallPilot® server preinstallation](#) on page 39
- [Avaya CallPilot® rack-mount server installation](#) on page 45
- [Avaya CallPilot® server configuration](#) on page 61
- [Avaya CallPilot® server testing](#) on page 69

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## Time requirements

The following table shows the approximate time required to complete each task in the work flow.

**Table 1: Time requirements**

<b>Task</b>	<b>Time to completion</b>
CS 1000/M1 system status check	15 minutes
CallPilot resource configuration	2 hours
CallPilot server preinstallation	1 hour
CallPilot server installation	1 hour
CallPilot server configuration	2 hours
CallPilot server testing	1.5 hours
Total time to completion = 7 hours 45 minutes	



# Chapter 3: Avaya Communication Server 1000/M1 system status check

This task describes how to check the Communication Server 1000 (CS 1000) or the Meridian 1 (M1) system status.

To successfully install a basic Avaya CallPilot® system, you must provision or verify the following parameters on the telephony switch (CS 1000 or M1):

- PBX IP and host name
- VAS ID
- ELAN ID
- system parameters
- ACD
- DFDN
- CDN
- ACD agents
- telephones

Avaya CallPilot can be provided only on a per-customer basis on the CS 1000 or M1 system. ELAN messages used for communication between the telephony switch and CallPilot contain a customer number to which CallPilot belongs. In these procedures, ensure that you enter the correct customer number in the overlays.

---

## CS 1000/M1 system status check tasks

The following is a list of tasks you perform to check the status of the CS 1000 or M1 system. To link to detailed procedures for each task, click the text.

- [Checking the current IP address of the PBX \(LD 117\)](#) on page 12
- [Checking the currently configured VAS IDs](#) on page 12
- [Checking the ELAN interface status of the PBX \(LD 137\)](#) on page 12
- [Enabling the ELAN interface of the PBX \(LD 137\)](#) on page 13
- [Checking the status of the ELAN connection to the PBX \(LD 48\)](#) on page 13

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## Checking the current IP address of the PBX (LD 117)

Perform the following procedure to check the current IP address in the CS 1000 or M1 system.

1. Connect to the PBX.
2. If you have not already done so, log on using the proper account with the following syntax:  
`logi <login name>`
3. Press Enter.
4. At the prompt, type the password for the login name and press Enter.
5. Enter LD 117.
6. Enter STAT HOST to display the IP addresses and host names configured in the CS 1000 or M1 system.



**Note:**

If there is no IP provisioning completed, see the CS 1000 System and CallPilot Server Configuration guide (NN44200-312) for advanced provisioning. When provisioning is complete, return to this guide and continue to the next procedure.

7. To exit the overlay, enter \*\*\*\*.

---

## Checking the currently configured VAS IDs

1. Connect to the PBX.
2. Enter LD 22.
3. At the REQ prompt, enter PRT.
4. At the TYPE prompt, enter VAS.
5. If there are some VAS IDs provisioned, take note of the VAS ID information. If there are no VAS IDs provisioned, this guide explains the steps to provision them in the next chapter.

---

## Checking the ELAN interface status of the PBX (LD 137)

Perform the following procedure to check the ELAN interface status.

1. Connect to the PBX.
2. Enter LD 137.
3. Enter STAT ELNK. The status of the ELAN interface appears.

 **Note:**

If the ELAN interface is not configured, continue to [Enabling the ELAN interface of the PBX \(LD 137\)](#) on page 13. If it is configured, continue to [Checking the status of the ELAN connection to the PBX \(LD 48\)](#) on page 13.

4. To exit the overlay, enter \*\*\*\*.

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## Enabling the ELAN interface of the PBX (LD 137)

Perform the following procedure to enable the ELAN interface. If it is already enabled, skip to the next procedure.

1. Connect to the PBX.
2. Enter LD 137.
3. Enter CHG ELNK ACTIVE NAME, where NAME is the host name for the primary IP address.
4. To exit the overlay, enter \*\*\*\*.

---

## Checking the status of the ELAN connection to the PBX (LD 48)

Perform the following procedure to check the status of the ELAN connection to the PBX.

1. Connect to the PBX.
2. Enter LD 48.
3. Enter STAT ELAN to display a list of current AML links.

 **Note:**

Take note of any enabled and active ELANs. This will be useful when deciding if a new VAS ID and ELAN ID are required.

4. To exit the overlay, enter \*\*\*\*.



# Chapter 4: Avaya CallPilot® resource configuration

This task describes how to configure Avaya CallPilot 5.0 resources on the Avaya Communication Server 1000 (Avaya CS 1000) or Meridian 1 (M1) system.

CallPilot can be provided only on a per-customer basis on the CS 1000 or M1 system. AML messages used for communications between the telephony switch and CallPilot contain a customer number to which CallPilot belongs. In these procedures, ensure that you enter the correct customer number in the overlays.

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## CallPilot resource configuration tasks

The following is a list of tasks you perform to configure CallPilot 5.0 resources on the CS 1000 or M1 system. To link to detailed procedures for each task, click the text.

- [Configuring a new ELAN ID and VAS ID \(LD 17\)](#) on page 15
- [Configuring system parameters \(LD 17\)](#) on page 17
- [Defining CallPilot in the customer data block \(LD 15\)](#) on page 18
- [Configuring the Route Data Block \(LD 16\)](#) on page 20
- [Configuring Automatic Call Distribution \(LD 23\)](#) on page 21
- [Configuring the DFDN \(LD 23\)](#) on page 22
- [Configuring the CDN queue \(LD 23\)](#) on page 23
- [Configuring ACD agents \(LD 11\)](#) on page 24
- [Provisioning telephones \(LD 11\)](#) on page 25
- [Enabling card slots \(LD 32\)](#) on page 27
- [Saving CS 1000/M1 changes \(LD 43\)](#) on page 27

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## Configuring a new ELAN ID and VAS ID (LD 17)

Define and configure the ELAN subnet for the AML link and its associated VAS ID in the configuration record. This provides the Ethernet connection over which AML messages are

exchanged between the CS 1000 or M1 system and CallPilot. A separate ELAN must be created for CallPilot and Contact Center for the purpose of integration.

Perform this procedure only if there is no VAS ID provisioned or available.

1. Connect to the PBX.
2. Enter LD 17.
3. Enter the appropriate values as described in the following table to configure a new ELAN ID. For prompts not listed in the following table, press Enter to accept the default.

**Table 2: LD 17 - Configuring the ELAN ID**

Prompt	Response	Notes
REQ	CHG	
TYPE	ADAN	
ADAN	NEW ELAN xx	Where xx is the next available number, 16 – 31.
CTYP	ELAN	
DES	a..a	Enter a relevant description (for example, CallPilot).
LCTL	<cr>	

4. Enter the appropriate values as described in the following table to configure a new VAS ID. For prompts not listed in the following table, press Enter to accept the default.

**Table 3: LD 17 - Configuring the VAS ID**

Prompt	Response	Notes
REQ	CHG	
TYPE	VAS	
VAS	NEW	
VSID	xx	Enter the number entered for the ELAN ID above.
ELAN	xx	Enter the number entered for the ELAN ID above.
SECU	YES	

5. To exit the overlay, enter \*\*\*\*.

Tech tip: To view the new ELAN, enter LD 22. Enter PRT at the REQ prompt, then ADAN. A list of all provisioned IDs appears. Use the capture text function in hyperterminal to save a text file of the output.

## Configuring system parameters (LD 17)

Tech tip: To view a list of all provisioned system parameters, enter LD 22 and enter PRT at the REQ prompt, then CFN. Use the capture text function in hyperterminal to save a text file of the output.

1. Connect to the PBX.
2. Enter LD 17.
3. Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.

**Table 4: LD 17 - Configuring system parameters**

Prompt	Response	Notes
REQ	CHG	
TYPE	PARAM	
NCR	xxx	Enter the number of DS0 channels multiplied by 2 plus the current NCR. For example, if the current NCR is 500 and there are 24 DS0 channels, enter 548.
CSQI	xxx	Enter the number of CallPilot DS0 channels multiplied by 2. For example, if there are 24 DS0 channels, enter 48.
CSQO	xxx	Enter the number of CallPilot DS0 channels multiplied by 2. For example, if there are 24 DS0 channels, enter 48.

4. To exit the overlay, enter \*\*\*\*.

## Defining CallPilot in the customer data block (LD 15)

Tech tip: To view current system parameters, go to LD 21 and enter PRT at the REQ prompt, and then CDB and the appropriate customer number. The result is a list of all the current information in the Customer Data Block. Use the capture text function in hyperterminal to save a text file of the output.

1. Connect to the PBX.
2. Enter LD 15.
3. Enter the appropriate values as described in the following table to add Call Park Allowed and Message Center Included. For prompts not listed in the following table, press Enter to accept the default.

**Table 5: LD 15 - Configuring Call Park Allowed and Message Center Included**

Prompt	Response	Notes
REQ	CHG	
TYPE	ft	
CUST	xx	Customer number for CallPilot.
OPT	CPA MCI	
IDEF	YES NO	If Call Forward by Call Type (CFCT) is enabled on the CS 1000 or M1 switch, enter YES. Otherwise, enter NO.

4. Enter the appropriate values as described in the following table to define Call Redirection. For prompts not listed in the following table, press Enter to accept the default.

**Table 6: LD 15 - Configuring Call Redirection**

Prompt	Response	Notes
REQ	CHG	
TYPE	rdr	
CUST	xx	Customer number for CallPilot.
FNAD	xxxx	Enter the FDN for CallPilot.

Prompt	Response	Notes
FNAT	xxxx	Enter the FDN for CallPilot.
FNAL	xxxx	Enter the FDN for CallPilot.
CFNA	4	
CFN0	1-(4)-15	Number of normal ringing cycles for CFNA, Option 0.
CFN1	1-(4)-15	Number of normal ringing cycles for CFNA, Option 1.
CFN2	1-(4)-15	Number of normal ringing cycles for CFNA, Option 2.

5. Enter the appropriate values as described in the following table to define End-to-End Signaling Tone. For prompts not listed in the following table, press Enter to accept the default.

**Table 7: LD 15 - Configuring End-to-End Signaling Tone**

Prompt	Response	Notes
REQ	CHG	
TYPE	fttr	
CUST	xx	Customer number for CallPilot.
EEST	YES NO	Enter NO if remote sites are set to NO.

6. Enter the appropriate values as described in the following table to define Integrated Services Digital Network. For prompts not listed in the following table, press Enter to accept the default.

**Table 8: LD 15 - Configuring Integrated Services Digital Network**

Prompt	Response	Notes
REQ	CHG	
TYPE	net	
CUST	xx	Customer number for CallPilot.

Prompt	Response	Notes
ISDN	YES NO	Enter NO if NMS is not installed on the CS 1000 or M1 system.
PNI	xxxxx	Private Network Identifier. Within one network, use the same PNI value in LDs 15 and 16. When you interwork with different networks, enter the PNI of this CS 1000 or M1 system in LD 15, and the PNI of the target or remote CS 1000 or M1 system in LD 16. The default PNI = 0 prevents the operations of features such as NRAG, NACD and NMS.
HLOC	xxxx	Home Location Code defined in LD 90.   <b>Note:</b> Customers with multiple NXX's would data fill this information in the CLID table in overlay 15.
LSC	xxxx	Local Steering Code defined in LD 15.

7. To exit the overlay, enter \*\*\*\*.

Tech tip: To view a list of installed packages, enter LD 22 and enter PRT at the REQ prompt, then PKG. Use the capture text function in hyperterminal to save a text file of the output.

---

## Configuring the Route Data Block (LD 16)

Perform the following procedure to configure the Route Data Block.

1. Connect to the PBX.
2. Enter LD 16.

3. Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.

**Table 9: LD 16 - Configuring the Route Data Block**

Prompt	Response	Notes
REQ	CHG	
TYPE	rdB	
CUST	xx	Customer number for CallPilot.
ROUTE	xxx	Enter the number of the route you wish to modify.
DES	aaa	Description for the route.
IDEF	LOC	
RCLS	EXT	

4. To exit the overlay, enter \*\*\*\*.

Tech tip: To view all configured routes, enter LD 21. Enter PRT at the REQ prompt, RDB, and then the customer number, and press Enter through the remaining prompts. Use the capture text function in hyperterminal to save a text file of the output.

---

## Configuring Automatic Call Distribution (LD 23)

Configure only one ACD agent queue to service CallPilot, unless you are enabling the Symposium Voice Services Support feature. This queue holds all the agents that correspond to DS0 channels on the CallPilot server.

1. Connect to the PBX.
2. Enter LD 23.
3. Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.

**Table 10: LD 23 - Configuring Automatic Call Distribution**

Prompt	Response	Notes
REQ	NEW	
TYPE	ACD	
CUST	xx	Customer number for CallPilot.

Prompt	Response	Notes
ACDN	xxxx	This is the ACD DN the agents point at.
MWC	NO	
MAXP	xxxx	Maximum number of agent channels.
CALP	POS	
IVR	YES	
ALOG	YES	

- To exit the overlay, enter \*\*\*\*.

---

## Configuring the DFDN (LD 23)

Before you configure the CDN queue, define the default ACD DN to be referenced in the CDN. During normal operation, the CDN is in control mode, and callers are queued to be routed and then answered by CallPilot services. Under error conditions (for example, if the AML link is down), the CDN operates in default mode and calls are routed to the default ACD DN defined for the CDN.

This procedure describes how to set up the default ACD DN so that these calls are handled by the attendant. For the attendant to process incoming calls to CallPilot when the CDN is in default mode, define a dummy ACD DN and set it to night call forward to the attendant.

- Connect to the PBX.
- Enter LD 23.
- Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.

**Table 11: LD 23 - Configuring DFDN**

Prompt	Response	Notes
REQ	NEW	
TYPE	ACD	
CUST	xx	Customer number for CallPilot.
ACDN	xxxx	Enter the DFDN.
MWC	NO	
MAXP	1	Maximum number of agent channels.

Prompt	Response	Notes
		Enter 1 to make this a DFDN queue.
NCFW	X, XXXX	Enter the NCFW DN of where calls will be routed to when the ACD queue is in night mode.

- To exit the overlay, enter \*\*\*\*.

---

## Configuring the CDN queue (LD 23)

The control DN is the single point to which the end user calls to access voice mail or use multimedia functions such as fax capabilities.

Perform this procedure to configure the following CDN queues:

- primary CDN for Voice Messaging. This becomes the main CDN queue.
- secondary CDN for Multimedia Messaging, if you want to provide users with fax capability.
  - Connect to the PBX.
  - Enter LD 23.
  - Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.

**Table 12: LD 23 - Configuring the CDN queue**

Prompt	Response	Notes
REQ	NEW	
TYPE	CDN	
CUST	xx	Customer number for CallPilot.
CDN	xxxx	Control DN of the CallPilot system (for example, 4300).
DFDN	xxxx	The default ACD created above, in the procedure <a href="#">Configuring the DFDN (LD 23)</a> on page 22.

- To exit the overlay, enter \*\*\*\*.

## Configuring ACD agents (LD 11)

For CallPilot, you must define channels as ACD agents on M2008 digital sets. All agents are added to the configured ACD queues. Each agent must have the VCE and MMA Class of Service. To get the VCE class of service on the upper 16 units (15 to 31), you must first specify the FLXA Class of Service. Each agent must be provisioned with the following feature keys: ACD, SCN, NRD, MSB, TRN, and AO3.

Tech tip: Each channel maps to the MGATE card slot in the CS 1000 or M1 system that the DS30 or DS30X cable is connected to from the CallPilot. For example, if your MGATE card is in slot 8 and your DS30 or DS30X cable 1-1 is connected, your first channel TN may be 4.0.1.0 for a large system or 0.0.8.0 for a small system. For the purpose of this document, provision at least 2 agent channels. Additional agent channels can be configured later.

1. Connect to the PBX.
2. Enter LD 11.
3. Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.

**Table 13: LD 11 - Configuring ACD agents**

Prompt	Response	Notes
REQ	NEW	
TYPE	2008	
TN	aaa.bbb.ccc.ddd	Terminal Number, where a = loop, b = shelf, c = MGATE card slot, d = channel for that card (0–31).
DES	dddddd	Description.
CUST	xx	Customer number for CallPilot.
CLS	WTA UNR VCE MMA FLAX	
KEY	0 ACD xxxx 0 yyyy	xxxx = the ACD defined above in the procedure <a href="#">Configuring Automatic Call Distribution (LD 23)</a> on page 21. yyyy = the position ID of the agent,

Prompt	Response	Notes
		For example: KEY: 0 ACD 4500 0 4571 0 represents CLID table entry
KEY	1 SCN xxxx a y. – 1 SCN xxx y –	xxxx = Single Call Non ringing DN y represents CLID table entry
KEY	2 MSB	
KEY	3 NRD	
KEY	4 TRN	
KEY	5 AO3	

Tech tip: Take note of the TN, Key 0 position ID, and Key 1 SCN configured here. These parameters are required later in the CallPilot server configuration.

4. Repeat step 3 for each ACD agent channel required.
5. To exit the overlay, enter \*\*\*\*.

---

## Provisioning telephones (LD 11)

In the examples in this procedure, an i2004 Model NTDU92 is used. To configure other models, refer to IP Phones: Description, Installation, and Operation (553-3001-368) and Telephones & Consoles: Description, Installation and Operation (553-3001-367)

1. Connect to the PBX.
2. Enter LD 11.
3. Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.

**Table 14: LD 11 - Provisioning telephones**

Prompt	Response	Notes
REQ	NEW	
TYPE	a..a	Telephone type For example: i2004
TN	aaa.bbb.ccc.ddd	Terminal Number, where a = loop, b = shelf, c = card slot, d = card channel (0–31).

Prompt	Response	Notes
		For example: 66 0 0 10 IP Phones require a VGMC card. The TNs you configure for IP Phones are virtual circuits. Digital and analog telephones require a digital or analog card.
DES	dddddd	Description. For example: johns
CUST	xx	Customer number for CallPilot. For example: 0
ZONE	xx	For example: 0
FDN	xxxx	CDN for call answering. For example: 4300
CLS	FNA MWA HTA	
HUNT	xxxx	For example: 4300
KEY	0 SCR xxxx	Where xxxx is the line number of the telephone. This is the number dialed or the line selected when the user makes a call from the telephone. For example: 4710
KEY	16 MWK xxxx	Where xxxx is the CDN of the CallPilot system. For example: 4300

4. Repeat step 3 for each telephone to be configured. Configure at least two telephones for testing purposes.
5. To exit the overlay, enter \*\*\*\*.
6. Connect two telephones to either a phone line or a proper network connection, depending on the telephone type. Refer to the user guides specific to the telephones.
7. Ensure that you have dial tone on both telephones, and check that you can dial one phone from the other.

---

## Enabling card slots (LD 32)

If the MGATE card slots are not automatically provisioned, perform the following procedure to enable them.

 **Note:**

When installing 202i platform skip this item. 202i does not use the MGATE card.

1. Connect to the PBX.
2. Enter LD 32.
3. To display the status of the MGATE card, enter STAT n (where n is the card slot used by the MGATE). For example: STAT 18.
4. If the MGATE card is disabled, enter ENLC n (where n is the card slot used by the MGATE) to enable it. For example: ENLC 18.
5. Repeat steps 3 and 4 for each required MGATE card.
6. To exit the overlay, enter \*\*\*\*.

---

## Saving CS 1000/M1 changes (LD 43)

Perform the following procedure to save all configuration changes. If a reboot occurs before you save the system, all your changes could be lost.

Tech tip: The prompt for LD 43 is just a period ".". Entering the command EDD will complete a data dump to the on board flash.

1. Connect to the PBX.
2. Enter LD 43.
3. At the "." prompt, enter EDD.
4. To exit the overlay, enter \*\*\*\*.



# Chapter 5: Avaya CallPilot® server general description

This section describes the hardware components of the Avaya CallPilot servers.

For CallPilot Release 5.0, there are the following server models: 600r, 202i, 1005r, and 1006r.

The 600r system is a small-capacity system that can handle up to 20,000 mailboxes. The 1005r and 1006r servers are a large-capacity system that can handle up to 50,000 mailboxes. These servers are rack-mounted servers that fit into a standard 19" or 23" rack.

The 202i server is a small-capacity system that can handle up to 8000 mailboxes. It is designed to integrate with Avaya Meridian 1\* and Avaya Communications Server 1000\* products. The 202i server occupies two slots of a Meridian 1 shelf or Communications Server 1000 Media Gateway Expansion. When the server is locked into position, its connectors attach to the backplane, which provides power and communications links.

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## 600r CallPilot server

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### Front panel

[Figure 1: 600r CallPilot server - front panel](#) on page 30 shows the front panel on the 600r. The front panel LEDs and control switches are highlighted in [Figure 2: 600r CallPilot server - front panel LEDs](#) on page 30 and [Table 15: 600r CallPilot server - front panel LEDs](#) on page 30.

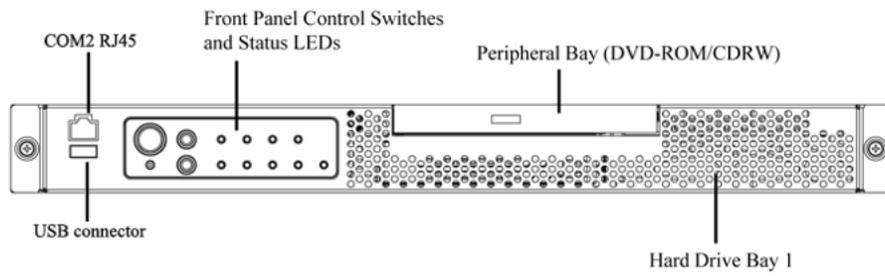


Figure 1: 600r CallPilot server - front panel

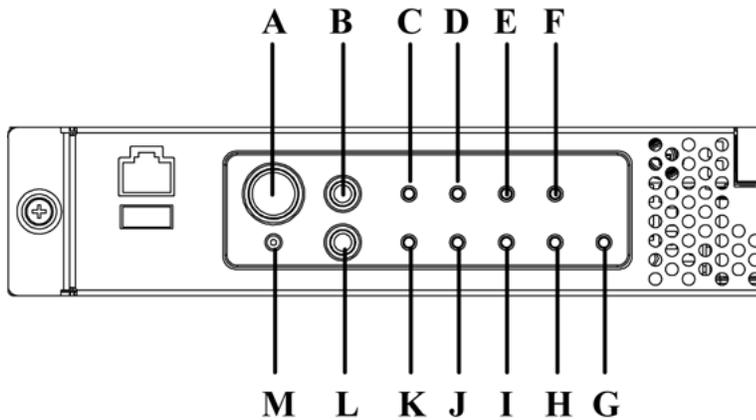


Figure 2: 600r CallPilot server - front panel LEDs

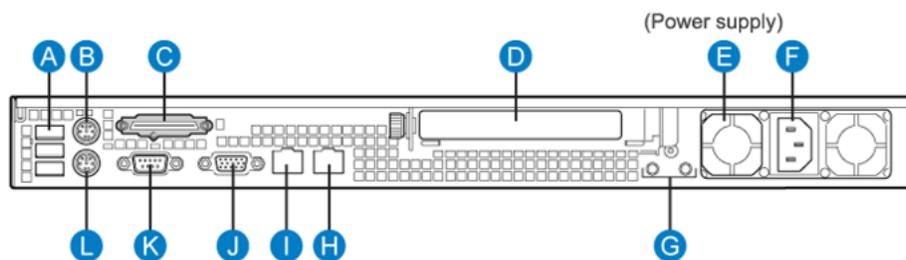
Table 15: 600r CallPilot server - front panel LEDs

Label	Description
A	Power button
B	Reset button
C	Critical fault LED
D	Major fault LED
E	Minor fault LED
F	Power LED
G	Disk 0 activity/fault LED (green/amber)
H	Not used
I	Main power LED (green)
J	NIC activity LED (green)

Label	Description
K	System ID LED (white)
L	ID button
M	NMI button (not used)

## Back panel

[Figure 3: 600r CallPilot server - back panel](#) on page 31 shows the back panel on the 600r. The back panel controls and features are described in [Table 16: 600r CallPilot server - back panel controls and features](#) on page 31.



**Figure 3: 600r CallPilot server - back panel**

**Table 16: 600r CallPilot server - back panel controls and features**

Label	Description
A	USB 0, USB1, USB2 (bottom to top)
B	PS/2 mouse input
C	SCSI port (requires terminator)
D	MPB96 card
E	Power supply
F	AC power input
G	Ground studs
H	ELAN input
I	Avaya server subnet (CLAN) input
J	Video input
K	COM1 DB-9 serial port
L	PS/2 keyboard input

# 1005r CallPilot server

## Front panel

Figure 4: 1005r CallPilot server - front panel on page 32 shows the front panel on the 1005r. The front panel LEDs and control switches are described in Table 17: 1005r CallPilot server - front panel LEDs and controls on page 32.

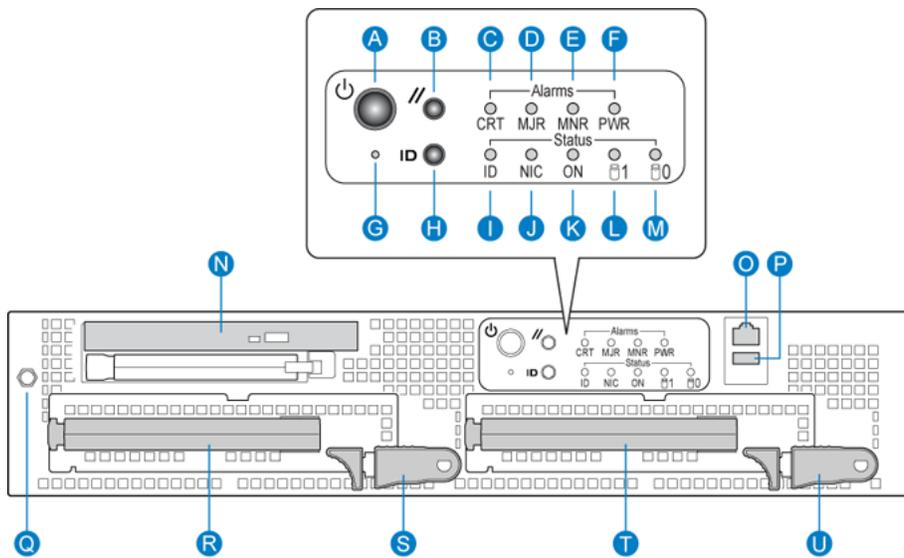


Figure 4: 1005r CallPilot server - front panel

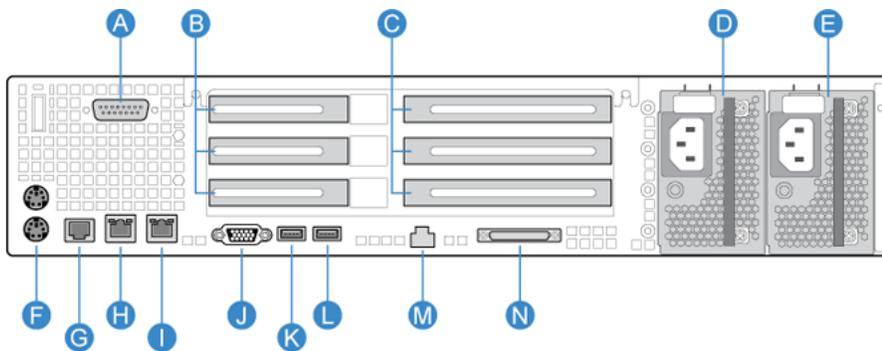
Table 17: 1005r CallPilot server - front panel LEDs and controls

Label	Description
A	Power button
B	Reset button
C	Critical alarm LED
D	Major alarm LED
E	Minor alarm LED
F	Power alarm LED
G	NMI switch (not used)
H	ID switch

Label	Description
I	ID LED
J	NIC activity LED
K	Status LED
L	Hard drive 1 activity and status
M	Hard drive 0 activity and status
N	DVD/CD/CD-RW
O	RJ45 COM1 serial port
P	USB 2
Q	ESD connection
R	Hard drive 1 pull handle
S	Hard drive 1 release lever
T	Hard drive 0 pull handle
U	Hard drive 0 release level

## Back panel

[Figure 5: 1005r CallPilot server - back panel](#) on page 33 shows the back panel on the 1005r. The back panel controls and features are described in [Table 18: 1005r CallPilot server - back panel controls and features](#) on page 33.



**Figure 5: 1005r CallPilot server - back panel**

**Table 18: 1005r CallPilot server - back panel controls and features**

Label	Description
A	DB15 Telco alarm connector (not used)

Label	Description
B	PCI low profile cards (1, 2, 3 from bottom to top)
C	MPB 96 cards (1, 2, 3 from bottom to top)
D	Power supply 1
E	Power supply 2
F	PS/2 mouse and keyboard input
G	RJ45 COM2 serial port
H	Avaya server subnet (CLAN) input
I	ELAN input
J	Video input
K	USB 1
L	USB 0 (dongle connects here)
M	Server management LAN port
N	SCSI port (does not require terminator)

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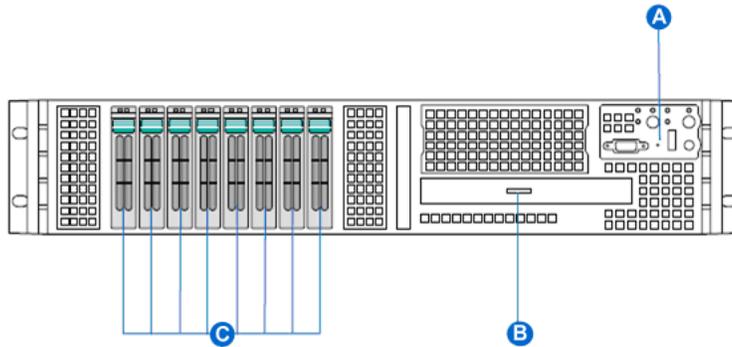
## 1006r rack-mount server

The 1006r server is the CallPilot high-end capacity multimedia telephony server. It is a rack-mounted unit, measuring approximately 87.3mm (3.44 in.) high by 435.3 mm (17.77 in.) wide by 704.8 mm (27.75 in.) deep and weighing 30kg (67 lb.) when fully loaded. The 1006r server has a capacity of up to 192 voice channels and 2,400 hours of storage.

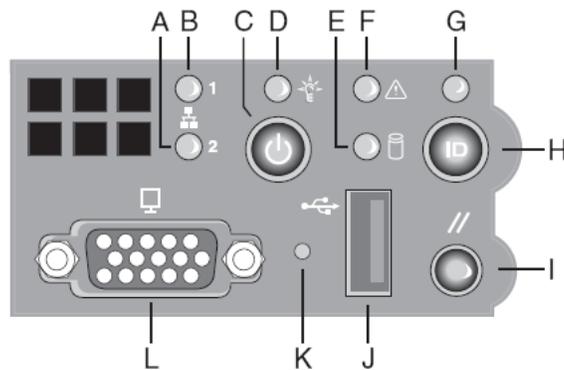
Your server configuration depends on what was ordered from Avaya. There are three PCI card slots.

- One MPB96 card (in a PCI slot) for 96 MPU of DSP capacity. No additional MPB96 cards are required.
- For high capacity, three MPB96 cards are installed in a 1006r, providing a maximum of 192 channels and 288 MPUs.

The front view of the 1006r server chassis shows the drive bays, the peripheral DVD/CD/CDRW drive, and the front serial and USB ports.



Label	Control or feature
A	System Control Panel (see figure below for details)
B	Slimline Optical Drive Bay
C	2.5-inch Hard Drive Bays (8)

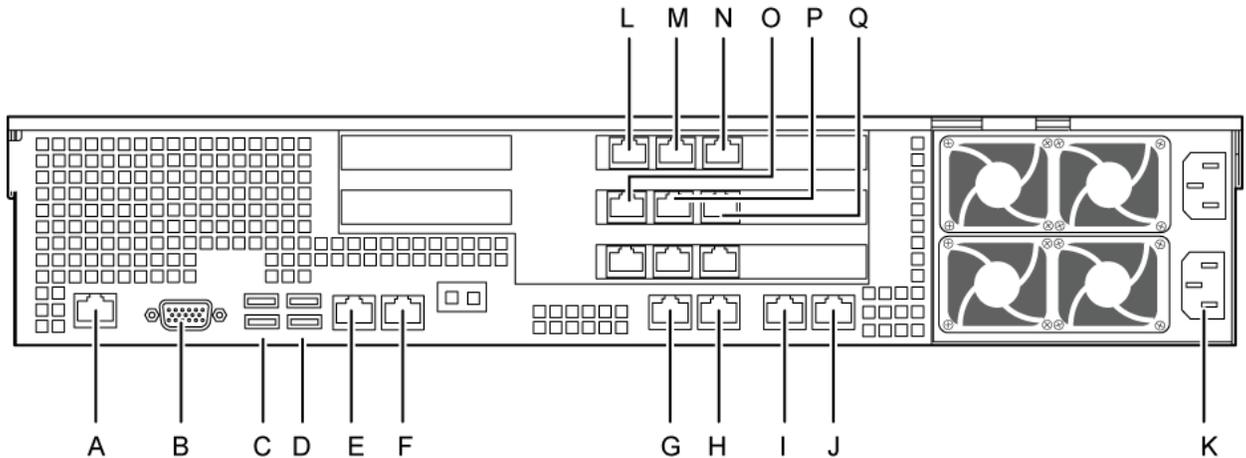


Label	Control or feature	Function
A B	NIC 2 Activity LED NIC 1 Activity LED	Continuous green light indicates a link between the system and the network to which it is connected. A blinking green light indicates network activity.
C	Power/Sleep button	Toggles the system power on/off. This button also functions as a sleep button if enabled by an ACPI-compliant operating system.
D	Power/Sleep LED	Continuous green light indicates the system has power applied to

Label	Control or feature	Function
		it or the system is in ACPI S0 state. Blinking green indicates the system is in sleep or ACPI S1 state.
E	Hard disk drive activity LED	Random blinking green light indicates hard disk drive activity. No light indicates no hard disk drive activity.
F	System status LED	Solid green indicates normal operation. Blinking green indicates degraded performance. Solid amber indicates a critical or nonrecoverable condition. Blinking amber indicates a noncritical condition. No light indicates POST is running or the system is off.
G	System identification LED	Solid blue indicates system identification is active. No light indicates system identification is not activated.
H	System identification button	Toggles the front panel ID LED and the server board ID LED on/off. The server board ID LED is visible through the rear of the system and allows for server identification and location when working behind a rack of servers.
I	Reset button	Reboots and initializes the system.
J	USB 2.0 Port	Connector to attach a USB component to the front of the system.
K	NMI button	When the NMI button is pressed with a paperclip or pin, the server is placed in a halt state for diagnostic purposes and allows the issuance of a non-maskable interrupt. After issuing the interrupt, a memory download can be performed to determine the cause of the problem.
L	Video port	Connector to attach a video monitor to the front of the system.

Label	Control or feature	Function
		The front and rear video ports cannot be used at the same time.

The following diagram shows the back panel controls and features. On the right are the AC power supply banks. The PCI card brackets are in the middle of the back panel, while the connectors and ports are along the bottom and left side.



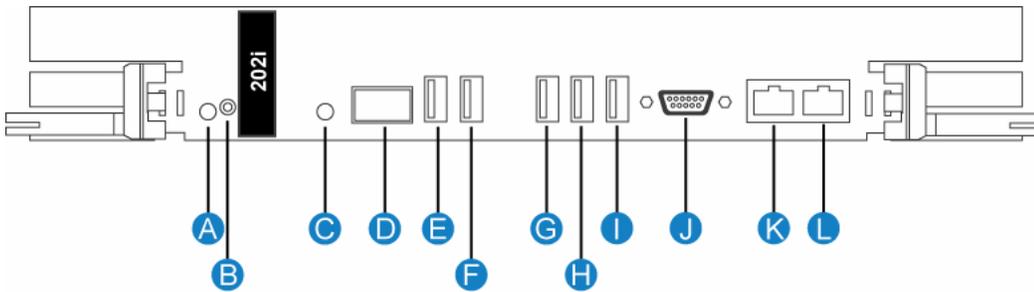
Label	Control or feature	Label	Control or feature
A	RJ-45 Serial A Connector	J	HB2
B	Rear Video	K	Power Receptacles
C	Dual USB port	L	MPB96-1 DS30-3
D	Dual USB port	M	MPB96-1 DS30-2
E	ELAN	N	MPB96-1 DS30-3
F	CLAN	O	MPB96-2 DS30-3
G	HB1	P	MPB96-2 DS30-2
H	Mirror	Q	MPB96-2 DS30-1
I	Not connected		

For a more detailed description of the 1006r server and its components, and how the server can be integrated into your network, see 1006r Server Hardware Installation (NN44200-320).

## 202i CallPilot server

### Front panel

[Figure 6: 202i CallPilot server - front panel](#) on page 38 shows the front panel on the 202i. The front panel LEDs and control switches are described in [Table 19: 202i CallPilot server - front panel LEDs and controls](#) on page 38.



**Figure 6: 202i CallPilot server - front panel**

**Table 19: 202i CallPilot server - front panel LEDs and controls**

Label	Description
A	Red power status LED
B	Recessed reset button
C	Hard drive activity
D	Alpha-numeric HEX status display
E	USB peripheral connector
F	USB peripheral connector
G	USB peripheral connector
H	USB peripheral connector
I	USB peripheral connector
J	VGA video connection
K	NIC port - ELAN
L	NIC port - CLAN

# Chapter 6: Avaya CallPilot® server preinstallation

This task describes the Avaya CallPilot server preinstallation.

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## Recommended tools

The following is a list of recommended tools for the job:

- antistatic ESD wrist strap kit
- cordless power drill with various Phillips, Robertson, and nut driver bits
- hand-held Phillips, Robertson and standard screwdrivers in various sizes
- handheld hex nut drivers
- needle-nosed pliers
- tweezers
- tape measure
- flashlight
- cable tie wraps (various lengths, mainly small ones required)
- side cutters
- utility knife or box cutter
- RJ45 crimper with various dyes (if making phone and Ethernet cables)
- null modem serial cable (for troubleshooting purposes)
- cable identification labels
- equipment log, to record system information (for example, model, serial number, and installed options)

- pen and note pad

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## CallPilot server preinstallation tasks

The following is a list of tasks you perform to prepare for CallPilot server installation. To link to detailed procedures for each task, click the text.

- [Choosing a location](#) on page 40
- [Preparing the site](#) on page 40
- [Connecting to the network](#) on page 41
- [Unpacking the 600r, 1005r, or 1006r server](#) on page 41
- [Unpacking the 202i server](#) on page 42

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## Choosing a location

Choose a site for the CallPilot server by considering following factors:

- The DS30 cables that connect the NTRH40CA MPB96 board on the CallPilot server to the MGate card on the switch can be up to 600 meters (1968 feet) long. This allows you to install the CallPilot server in a different building from the switch.
- The DS30X cable that connects the NTRH40AA MPB96 board on the CallPilot server to the MGate card on the switch is 20 meters (60 feet) long. The total distance from switch to CallPilot must be taken into consideration. Include rack transitions, cable bends, and any routing necessary in your calculations before you install.
- A monitor, keyboard, and mouse are required to connect to the CallPilot server for local console access. These peripherals should be located in the same rack as the CallPilot server, or at least within visual distance of the server's status LEDs.
- The area must have proper cooling and airflow. Consider installing a shelf with perforated holes for the peripheral devices, above or below the CallPilot server.

---

## Preparing the site

Perform the following procedure to prepare the site for the CallPilot server.

1. Ensure that the site is clean and clear of any debris.
2. Place a table or secure surface near the install location of the CallPilot server for unpacking and inspection. The surface or table should be large enough to

accommodate a .9 m X .9 m (3' X 3') box weighing approximately 10.4 kg (23 lbs) for the 600r CallPilot server, 20 kg (44 lbs) for the 1005r CallPilot server, or 34kg (75 lbs) for the 1006r CallPilot server.

3. Place an Electrostatic Discharge (ESD) mat on the unpacking surface.
4. Install the rack, or ensure that a pre-existing rack is properly installed with sufficient space for the CallPilot server and peripheral devices. The 600r is a 1U form factor and the 1005r and 1006r are 2U form factors. The 202i requires 2 consecutive slots in the switch.
5. Ensure that an external analog phone line is available for the USB modem.
6. Ensure that a single-point ground reference is available for all the power outlets serving the CallPilot server and its peripherals.

---

## Connecting to the network

The CallPilot server has two network connections: the ELAN network interface for the ELAN subnet and the CLAN network interface for the Avaya server subnet.

The ELAN subnet connects the CallPilot server to the CS 1000 or M1 switch. Install the ELAN subnet on the same network as the CS 1000 or M1 switch you are using for the CallPilot system, as a dedicated Ethernet switch or hub segregated from any other network.

The Avaya server subnet is used for the following features: Desktop Messaging, CallPilot Reporter, My CallPilot, CallPilot Manager remote access, and Application Builder.

Both the ELAN subnet and the Avaya server subnet use standard network Ethernet Cat 5e cables. If cables are made on site, ensure that IEEE 802.3 standards are maintained and followed.

---

## Unpacking the 600r, 1005r, or 1006r server

Perform the following procedure to unpack the 600r, 1005r, or 1006r CallPilot server.

As you unpack each item, check it off against the packing list.

1. Place the cardboard carton containing the CallPilot server on the floor, close to the secure surface or table.
2. Open the box, carefully remove the server, and place it on the ESD mat on the table or secure surface. Check that the USB dongle with keycode and feature list is included, and for the 600r model, ensure that a SCSI terminator is included.

3. Open the other boxes containing the peripheral devices and check that the following devices are included:

- monitor
- keyboard
- mouse
- USB modem
- Tandberg tape drive
- tapes
- SCSI cable
- power cords
- SCSI terminator
- USB dongle holder

Place the peripheral devices in a safe, secure area near the installation site.

4. Open the software package and check that the following software is included:

- CallPilot image DVD for your system
- CallPilot service Update/PEP CD
- CallPilot Application CD
- CallPilot Desktop CD
- CallPilot My CallPilot CD
- CallPilot Language Prompts CDs (3)
- CallPilot Documentation CD
- printed DTR documentation

Place the software in a safe, secure area near the installation site.

5. Inspect the server and peripheral devices. Do not discard the CallPilot server box in case a return is necessary.
6. Locate the external SCSI terminator (included loose within the server shipping carton). Connect the terminator to the rear SCSI port.

---

## Unpacking the 202i server

Perform the following procedure to unpack the 202i CallPilot server.

As you unpack each item, check it off against the packing list.

1. Remove the 202i server from the carton and its antistatic bag.
2. Place the 202i server on an antistatic surface.
3. Open the boxes containing the peripheral devices and check that the following devices are included:
  - monitor
  - keyboard
  - mouse
  - USB modem (optional)
  - Tandberg RDX (external USB) drive
  - Tandberg tape drive
  - USB to SCSI converter (for tape drive)
  - tape cartridge
  - ELAN hub (if supplied)
  - USB DVD drive
4. Place the peripheral devices in a safe, secure area near the installation site.
5. Open the software package and check that the following software is included:
  - CallPilot image DVD for your system
  - CallPilot service Update/PEP CD
  - CallPilot Application CD
  - CallPilot Desktop CD
  - CallPilot My CallPilot CD
  - CallPilot Language Prompts CDs (3)
  - CallPilot Documentation CD
  - printed DTR documentation

Place the software in a safe, secure area near the installation site.

6. Inspect the server and peripheral devices. Do not discard the CallPilot server box in case a return is necessary.



# Chapter 7: Avaya CallPilot® rack-mount server installation

This task describes the Avaya CallPilot rack-mount server installation.

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## CallPilot rackmount server installation tasks

The following is a list of tasks you perform to install the CallPilot rack-mount server. To link to detailed procedures for each task, click the text.

- [Rack-mounting the server](#) on page 45
- [Installing peripheral devices](#) on page 46
- [Installing cables and grounds](#) on page 47
- [Performing preboot checks](#) on page 48
- [Connecting the server to power and starting it](#) on page 49

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## Rack-mounting the server

Perform the following procedure for four- or two-post rack-mounting.

The CallPilot server includes installation instructions for the 19" and 23" Universal Rack Mount kits. Refer to the those instructions for more details.

1. Attach the inner rail to the chassis on both sides.
2. Attach the front-tab mounting bracket to the chassis on both sides. The bracket is reversible for a flush mount install.
3. Using the four outer studs, assemble the mounting brackets to the outer rail. Insert the four thread covers of the 4 inner studs. For a two-post install, flip the mounting brackets so they are facing in to each other.

Tech tip: Hand-tighten the nuts at this stage so you can adjust the distance for the server and rack.

4. Install the two outer rail subassemblies. Eight mounting screws are required for a four-post install. For a two-post install, six mounting screws are required.

5. Tighten all the nuts that you previously hand-tightened.
6. Slide the system into the rack. Check that the inner rail fits together with the outer rail.
7. To secure the server in place, install screws in the front-tab mounting bracket to the rail. For a two-post install, install four screws through the clearance slots in the side of the outer rail assembly into the inner rail.

---

## Installing peripheral devices

Perform the following procedure to install the peripheral devices on the CallPilot server.

1. Optionally, install a perforated shelf for the modem and Tandberg tape drive to sit on. Avaya recommends that you use a perforated shelf rather than placing the modem and tape drive directly on the CallPilot server equipment. The holes in the perforated shelf promote air flow and cooling.
2. Place the modem and tape drive on the perforated shelf or, on an alternative surface.
3. Connect one end of the USB cable into the modem. Connect the other end of the USB cable into the rear panel of the server module: USB 2 for the 600r CallPilot server, or USB 1 for the 1005r CallPilot server, or the lower socket of the dual USB port D on the 1006r CallPilot server. (see [1006r rack-mount server](#) on page 34.
4. Connect the analog phone line to the RJ-11 jack labeled TELCO on the modem.
5. Connect one end of the SCSI cable to the tape drive. Connect the other end of the SCSI cable to the SCSI port on the rear panel of the CallPilot server. Ensure that all connectors are tightened.

 **Note:**

You must remove the SCSI terminator before you can connect the tape drive. Ensure that there is a terminator installed on the tape drive. The 600r hard drive and tape drive are on the same SCSI bus. If a terminator is not installed in the loop, the hard drive may be damaged when the system is powered up.

6. Set the SCSI ID on the tape drive to 6.
7. Install the monitor, keyboard, and mouse in the same location as the server.
8. For 1005r and 600r servers using PS/2 connectors, plug the keyboard and mouse cables into the PS/2 connectors on the rear panel according to the labels. For the 202i platform using USB, plug the keyboard and mouse cables into the appropriate USB ports. For the 1006r platform, plug the USB keyboard and mouse into dual USB port B on the back of the server (see [1006r rack-mount server](#) on page 34).

9. Plug the monitor into the video connector on the rear panel. Tighten screws on the connector.
10. Install the USB dongle into USB port 0. Ensure that the feature key is in place.

---

## Installing cables and grounds

Perform the following procedure to install cables and grounds for the CallPilot server.

This procedure assumes that the cable and RJ45 are terminated properly according to IEEE 802 Ethernet standards and are of sufficient length. This procedure does not cover Ethernet cables of customized length.

1. Install and connect the ELAN Ethernet cable to the NIC 2 connector labeled on the back of the server from the ELAN hub or Ethernet switch. Or, use an Ethernet cross-over cable to connect directly to the CS 1000 or M1 switch. If you use this method, no device other than CallPilot can connect to the ELAN subnet.

 **Note:**

Connect the CS 1000 or M1 switch ELAN to the same subnet as the CallPilot server ELAN.

2. Install and connect the Ethernet cable for the Avaya server subnet (CLAN) to the NIC 1 connector labeled on the back of the server from the Avaya server subnet (CLAN) hub or Ethernet switch. Not all sites require a Avaya server subnet; this subnet is used for the following features: Desktop Messaging, CallPilot Reporter, My CallPilot, CallPilot Manager remote access, and Application Builder.

 **Note:**

Leave the Ethernet cable for the Avaya server subnet (CLAN) unplugged on the server side until antivirus software is installed on the server.

3. Install the power cords to all devices, but plug them only into the receptacle, not into the end device. The devices requiring power are:
  - 1005r and 1006r servers — two power cords, redundant power supplies
  - 600r server — one power cord
  - monitor — one power cord
  - tape drive — one power cord
  - ELAN subnet Ethernet switch or hub — one power cord
  - Avaya server subnet Ethernet switch or hub — one power cord

 **Note:**

The single-point ground (SPG) required by the system can be an isolated ground (IG) bus or AC equipment ground (ACEG) bus in the service panel or transformer.

The system must be connected to a safety ground or protective earth in accordance with NEC requirements. For international use, the system must be connected to safety ground or protective earth in accordance with Paragraph 2.5 of EN60950/IEC950.

4. Check the version of your MPB96 card or cards before proceeding. The versions are identified as follows:
  - The NTRH40CAE5 MPB96 board has three RJ-45 connectors on its faceplate. If you have an NTRH40CA, proceed to step 5.
  - The NTRH40AAE5 MPB96 board has a single DB-44 connector on its faceplate. The MPB96 connects to the MGate using a DS30X cable. If you have an NTRH40AAE5, proceed to step 6.
5. Install and connect the DS30 cables from the switch MGATE card to the CallPilot MPB96. There is no restriction as to which cable is connected first, as the NTRH40AC MPB96 can get its timing from any of the three RJ-45 ports.
  - The RJ-45 connectors in the top MPB96 card are numbered from 1 to 3 starting at the right side of the server's back panel (next to the power supplies) They are cabled to MGate cards 1 to 3 respectively
  - If there are three MPB96 cards in your server, the RJ-45 connectors in the middle card are cabled (from right to left) to MGate cards 4 to 6. The bottom MPB96 card is not connected to the switch.

Continue with [Performing preboot checks](#) on page 48

6. Install and connect the DS30X cable from the switch MGATE card to the CallPilot MPB96, starting from the switch side. The following are guidelines:
  - The 3 connectors of each DS30X cable going to the MGate card are labeled with DS30X-1 to DS30X-3. Connect the DS30X-1 first, the DS30X-2 second, and the DS30X-3 third. This is important for timing off the MGATE card.
  - If more than one MPB96 card is installed, first connect the DS30X cable to the topmost MPB96 card, then to the middle card, and then to the bottom card.
  - Tighten all connectors. Loose connectors can cause loss of service.

Tech tip: It is easier to run the DS30X cable in starting from the telephony switch side. Protect the end connector of the cable.

---

## Performing preboot checks

Perform the following preboot checks on the CallPilot server to ensure a smooth system boot.

1. Check that a single-point ground (SPG) is followed for every device requiring power in the CallPilot system. Check that power cords and UPS devices are plugged into SPGs.
2. Check that all connectors and cables are properly tightened down and connected where applicable.
3. Check that the dongle is plugged into the proper port and the feature key is in it.

---

## Connecting the server to power and starting it

For 600r servers: when you apply AC power to the 600r server, the server starts automatically. This is part of the BIOS startup sequence. It is important to follow the steps in the order given.

1. Plug the power cords into all peripheral devices, including the monitor, tape drive, and Ethernet switch or hub as applicable to system setup.
2. Turn on all peripheral devices.
3. Plug the power cords into the CallPilot server. Check that the status LEDs on the power supply are lit green.
4. Do one of the following:
  - For the 1005r and 1006r servers, push the power switch on the front panel to power on the server.
  - For the 600r server, if the server does not start automatically when you plug in the power cords, push the power switch on the front panel to power on the server.
5. Check that the status LEDs on the power supply are blinking green.
6. Wait while the server configures Windows 2003. After the server automatically restarts several times, the Windows logon screen appears.



# Chapter 8: Avaya CallPilot® 202i server installation

This task describes the Avaya CallPilot 202i server installation.

---

## CallPilot 202i server installation tasks

The following is a list of tasks you perform to install the CallPilot 202i server. To link to detailed procedures for each task, click the text.

- [Installing the software feature key \(dongle\)](#) on page 51
- [Positioning the 202i server on the switch shelf](#) on page 52
- [Connecting peripheral devices](#) on page 52
- [Connecting the 202i server to power and starting it](#) on page 58

---

## Installing the software feature key (dongle)

Perform the following procedure to install the software feature key (dongle).

1. If needed a screwdriver can be used to lift the clip that secures the software feature key to the motherboard.

 **Caution:**

Ensure you do not bend the clip so that it can no longer apply downward pressure.

2. Insert the software feature key into the socket on the replacement server, lip side up. When the software feature key (dongle) is correctly installed, it is firmly seated in the socket.
3. If installed incorrectly use the tweezers to pull the dongle from the socket and reinstall it.

---

## Positioning the 202i server on the switch shelf

 **Important:**

Do not push the 202i server into place against the backplane until you are ready to observe the startup cycle.

The 202i is an IPE device which must be inserted into the switch to receive power from and communicate with the switch. DS30 connectivity with the switch is over the switch backplane so no MGate cards or DS30 cables are required.

The 202i server is installed in two consecutive peripheral equipment slots as follows.

Switch	Slots
Meridian 1 tiered systems	0 to 15
Option 11C	1 to 9 in any Option 11C cabinet
Option 11C Mini Expansion	Two slots in the expansion cabinet
Communication Server 1000 Expansion	A pair of consecutive slots in any Media Gateway Expansion.

1. Ensure no cables are connected to the slots in which you are installing the 202i server.
2. Open the lock latches at the top and bottom of the 202i server faceplate.
3. Slide the 202i server into an unoccupied pair of slots. Ensure the 202i server is positioned correctly between the slots.

The 202i server receives power and starts as soon as the 202i server makes contact with the switch backplane.

---

## Connecting peripheral devices

Perform the following procedure to connect the peripheral devices on the CallPilot 202i server.

 **Important:**

Legacy Option11C cabinet PBXs with the flat door panels have 1" faceplate spacing between the card faceplate and cabinet door. To facilitate live full time USB peripheral connection on the wall mount Option11C you must use a short profile right angle 10" USB extension cable Avaya CPC N0171258. Other Avaya PBXs have greater spacing and do not require the mentioned cable.

## Installing the USB modem

To install the modem, you need the following items:

- analog external modem that includes
    - RJ-11 analog phone cord
    - 56 Kbps modem
  - analog line jack
1. Connect one end of the RJ-11 phone cord to the line jack on the modem and the other end to an analog jack.



### Caution:

#### Risk of equipment damage

Connect the modem to an analog line only. The use of a non analog line (for example, digital or multiline) can damage the modem.

2. Perform one of the following procedures.

If the switch is	THEN
a large Meridian 1 (such as Option 51) or CS 1000M	<ol style="list-style-type: none"> <li>a. Install the NTRH32AAE6 USB adapter plate kit following the instructions supplied with the kit to provide coupler access from the front to the rear of the switch.</li> <li>b. Use the USB extension cable provided with the NTRH32AAE6 USB adapter plate kit to route two USB connections from the faceplate to along side the M1 chassis towards the rear access panel.</li> <li>c. Plug in the USB cable to the front side of the USB coupler.</li> <li>d. Connect the modem USB cable to the I/O panel side and out the door cut-outs to the peripheral DVD player.</li> </ol>
an Option 11C	<ol style="list-style-type: none"> <li>a. Given the short front faceplate area within the Option11C cabinet with the door closed, plug in the right angle N0171258 USB cable to one of the lower three USB ports on the 202i faceplate.</li> </ol>

	<p>b. Route the cable to the right side of the faceplate towards the Meridian Mail card slot on the far right.</p> <p>c. Route the modem USB cable up through the right side of the Meridian Mail slots to join the mating right angle USB extension cable.</p>
an Option 11C Mini Expansion or CS1000E	Route the USB cable from one of the lower three peripheral USB ports on the 202i server faceplate and out the side access panel cut-out to the USB modem.

 **Note:**

The modem receives power from the 202i server USB port.

Ensure the modem is receiving power by checking that at least one LED on the front panel is lit.

- Place the modem in an area where it cannot be accidentally damaged or where people cannot trip over attached cords.

---

## Installing the N0169520 DVD/CD-ROM,

 **Note:**

Any third-party customer-supplied USB extension cable must not exceed five meters in length to avoid possibly signal degradation.

Use of common external third-party USB expander hubs may work to help reduce cable congestion but is not supported by Avaya product support.

Perform one of the following procedures.

If the switch is	THEN
a large Meridian 1 (such as Option 61C/81C) or CS 1000M	<p>a. Install the NTRH32AAE6 USB adapter plate kit following the instructions supplied with the kit to provide coupler access from the front to the rear of the switch.</p> <p>b. Use the USB extension cable provided with the NTRH32AAE6 USB adapter plate kit to route two USB connections from the faceplate to along side the M1 chassis towards the rear access panel.</p>

	<p>c. Plug in the USB cable to the front side of the USB coupler.</p> <p>d. Connect the DVD USB cable to the I/O panel side and out the door cut-outs to the peripheral DVD player.</p>
an Option 11C	<p>a. Given the short front faceplate area within the Option11C cabinet with the door closed, plug in the right angle N0171258 USB cable to one of the lower three USB ports on the 202i faceplate.</p> <p>b. Route the cable to the right side of the faceplate towards the Meridian Mail card slot on the far right.</p> <p>c. Route the DVD player USB cable up through the right side of the Meridian Mail slots to join the mating right angle USB extension cable.</p>
an Option 11C Mini Expansion or CS1000E	Route the USB cable from one of the lower three peripheral USB ports on the 202i server faceplate and out the side access panel cut-out to the USB DVD player.

## Installing the tape drive

The 202i server no longer contains SCSI connections as found in earlier 200 series products. To connect to the legacy SCSI tape drive, you need the USB-to-SCSI adapter cable found in new SLR75 tape drive kit purchases or separately purchased as a FRU (for more information see the product catalog or consult with your Avaya sales representative).

You need an external Tandberg SLR75 tape drive with USB to SCSI adapter cable or RDX drive or a CLAN network connection in order to facilitate CallPilot backups.

This section describes the procedures for the following drive:

external SCSI Tandberg SLR75 tape drive

 **Note:**

Any third-party customer-supplied USB extension cable must not exceed five meters in length to avoid possibly signal degradation.

Use of common external third-party USB expander hubs may work to help reduce cable congestion but is not supported by Avaya product support.

1. Perform the following steps.

IF the switch is	THEN
a large Meridian 1 (such as Option 61C/81C) or CS 1000M	a. Install the NTRH32AAE6 USB adapter plate kit following the instructions supplied with the kit to provide coupler access from the front to the rear of the switch. b. Use the USB extension cable provided with the NTRH32AAE6 USB adapter plate kit to route two USB connections from the faceplate to along side the M1 chassis towards the rear access panel. c. Plug in the USB cable to the front side of the USB coupler. d. Connect the tape drive USB cable to the I/O panel side and out the door cut-outs to the peripheral tape drive.
an Option 11C	a. Given the short front faceplate area within the Option11C cabinet with the door closed, plug in the right angle N0171258 USB cable to one of the lower three USB ports on the 202i faceplate. b. Route the cable to the right side of the faceplate towards the Meridian Mail card slot on the far right. c. Route the tape drive cable up through the right side of the Meridian Mail slots to join the mating right angle USB extension cable.
an Option 11C Mini Expansion or CS 1000E	Route the USB cable from one of the lower three peripheral USB ports on the 202i server faceplate and out the side access panel cut-out to the USB tape drive.

2. Set the SCSI ID (on the back of the tape drive) to 6.
3. Connect the SCSI terminator to one of the two SCSI ports on the back of the tape drive.
4. Connect the USB to SCSI converter to the remaining SCSI port on the tape drive. The USB to SCSI converter does not require its own power supply.
5. Plug the power cable in to the tape drive.
6. Turn on the tape drive.
7. Plug the USB cable into the USB to SCSI converter and then into the CallPilot USB port.

---

## Installing cables and grounds

Perform the following procedure to install cables and grounds for the CallPilot server.

This procedure assumes that the cable and RJ45 are terminated properly according to IEEE 802 Ethernet standards and are of sufficient length. This procedure does not cover Ethernet cables of customized length.

1. Install and connect the ELAN Ethernet cable to the ELAN connector labeled on the faceplate of the 202i from the ELAN hub or Ethernet switch. Or, use an Ethernet cross-over cable to connect directly to the CS 1000 or M1 switch. If you use this method, no device other than CallPilot can connect to the ELAN subnet.

 **Note:**

Connect the CS 1000 or M1 switch ELAN to the same subnet as the CallPilot server ELAN.

2. Install and connect the Ethernet cable for the Avaya server subnet to the CLAN connector on the faceplate of the 202i from the Avaya server subnet hub or Ethernet switch. Not all sites require an Avaya server subnet; this subnet is used for the following features: Desktop Messaging, CallPilot Reporter, My CallPilot, CallPilot Manager remote access, and Application Builder.

 **Note:**

Leave the Ethernet cable for the Avaya server subnet unplugged on the server side until antivirus software is installed on the server.

3. Install the power cords to all devices, but plug them only into the receptacle, not into the end device. The devices requiring power are:
  - monitor — one power cord
  - tape drive — one power cord
  - USB DVD-ROM – one power adapter
  - USB Tandberg RDX drive – one power adapter
  - ELAN subnet Ethernet switch or hub — one power cord
  - Avaya server subnet Ethernet switch or hub — one power cord

Peripheral	Power supply
monitor	one power cord
tape drive	one power cord
USB DVD/CD-ROM	one power adapter
USB Tandberg RDX drive	one power adapter
ELAN subnet Ethernet switch or hub	one power cord
Avaya server subnet (CLAN) switch or hub	one power cord

 **Note:**

The single-point ground (SPG) required by the system can be an isolated ground (IG) bus or AC equipment ground (ACEG) bus in the service panel or transformer. The system must be connected to a safety ground or protective earth in accordance with NEC requirements. For international use, the system must be connected to safety ground or protective earth in accordance with Paragraph 2.5 of EN60950/IEC950.

---

## Performing preboot checks

Perform the following preboot checks on the CallPilot server to ensure a smooth system boot.

1. Check that a single-point ground (SPG) is followed for every device requiring power in the CallPilot system. Check that power cords and UPS devices are plugged into SPGs.
2. Check that all connectors and cables are properly tightened down and connected where applicable.

---

## Connecting the 202i server to power and starting it

The 202i server receives power and starts as soon as the 202i server makes contact with the switch backplane.

 **Note:**

Ensure the switch in which the 202i is installed is powered on.

1. Plug the power cords into all peripheral devices, including the monitor, tape drive, DVD-ROM, Tandberg RDX drive and Ethernet switch or hub as applicable to system setup.
2. Ensure all peripheral devices are powered up (including the 202i shelf).
3. Push the 202i server gently but firmly until it is flush with the backplane.
4. Close the lock latches to secure the 202i server to the backplane. The 202i server power LED flashes three times.
5. Watch the HEX display on the 202i server.

The HEX display shows T:01 through T:08, and then HOST. This takes about 13 seconds.

Result: The operating system boot sequence begins, and communication with the switch occurs. The HEX display shows NT (for about 30 seconds) followed by OK.

 **Note:**

The system reboots more than once. The HEX display repeats with each reboot.

 **Note:**

Before OK appears, one of the following messages can appear, but not for more than 1 second: CDLN, C:01,. This is normal operation.

If OK does not appear, see the CallPilot server maintenance and diagnostics guide for your server for troubleshooting instructions.

6. Ensure the operating system logon window appears on the monitor.

If the logon window does not appear, see the CallPilot <server model> Server Maintenance and Diagnostics guide for your server for troubleshooting instructions.



# Chapter 9: Avaya CallPilot® server configuration

This task describes the Avaya CallPilot server configuration.

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## CallPilot server configuration tasks

The following is a list of tasks you perform to configure the CallPilot server. To link to detailed procedures for each task, click the text.

- [Logging on to the CallPilot server](#) on page 61
- [Completing the Setup Wizard and installing PEPs](#) on page 61
- [Running the Configuration Wizard](#) on page 62
- [Configuring new mailboxes and additional tasks](#) on page 65
- [Backing up the system](#) on page 66

---

## Logging on to the CallPilot server

Perform the following procedure to log on to the CallPilot server.

1. From the local console, for the user name, enter administrator.
2. From the local console, for the password, enter Bvw250.

---

## Completing the Setup Wizard and installing PEPs

Perform the following procedure to install Service Updates (SU) and PEPs on the CallPilot server.

1. After you log on, the Setup Wizard appears automatically. Click Next on the Welcome page of the Setup Wizard.
2. Insert the PEP CD into the DVD-ROM drive.

3. In the Service Update (SU)/PEP Installation page, select Yes, I have updates that I want to install now.
4. Click Next. A message appears, prompting you to install SUs and PEPs.
5. Browse to the PEP CD in the DVD-ROM (Z:) drive. For every PEP or SU to be installed, review the readme file for important steps required for the PEP or SU.  
  
Tech tip: Ensure you read the readme file; readme files can contain important steps pertaining to specific PEPs or SUs that are not covered in this procedure.
6. To install an SU or PEP, double-click the runme.exe or runme.bat file and click OK.
7. In the Service Update (SU)/PEP Installation page, select SU or PEP to install and click Next.
8. A confirmation message appears. Click Yes to continue.
9. If you are prompted to restart the server, do so.
10. Repeat steps 3 to 9 for each PEP or SU to be installed.



**Note:**

If the system reboots, log back in to the system. If the Setup Wizard does not start automatically, select Start > Programs > CallPilot > Setup Wizard.

11. In the Setup Wizard Welcome screen, click Next.
12. In the Service Update (SU)/PEP Installation page, select No, I do not have updates that I want to install now.
13. Click Next.
14. In the Platform Validity page, check that the values listed are correct and marked with green check marks. Click Next.
15. In the Telephony Board Validation page, click Next.
16. In the Upgrade of CallPilot page, click No, I do not have data to restore.
17. Click Finish.

---

## Running the Configuration Wizard

This procedure covers basic provisioning only. You can perform additional provisioning and advanced configuration, such as media allocation, channels, CDNs, and languages, after completing the basic provisioning steps in this procedure. Alternatively, you can run the Configuration Wizard at any time to make configuration changes or add additional information. Additional provisioning and advanced configuration adds time to the installation.

1. If CallPilot Manager is not already open in Internet Explorer, type `http://localhost/cpmgr` in the address bar.
2. Log on to CallPilot Manager using the following default credentials:
  - Mailbox number: 000000
  - Password: 124578
  - Server: localhost
  - Location: leave this field blank
3. Click Login.
4. When prompted, change the default administrator password for mailbox 000000 as follows:
  - a. Type the current password, 124578.
  - b. Type a new password.
  - c. Type the new password again.
5. On the Welcome to CallPilot Manager page, click Configuration Wizard.
6. On the Configuration Wizard: Welcome page, click Next.
7. On the Keycode and serial number page, do the following:
  - a. Type the Serial number assigned to the USB dongle that is plugged into the CallPilot system.
  - b. Type the Keycode assigned to the CallPilot register from the dongle.
  - c. Click Next.
8. On the Feature Verification page, review the parameters to ensure they are correct, and then click Next.
9. On the Server Information page, do the following:
  - a. Type the Computer name.
  - b. Select the Time Zone.
  - c. Type the Area Code and Country Code.
  - d. Type the LDAP search base.
  - e. Click Next.
10. On the Password Information page, when prompted, change the administrator password for the workstation local login as follows:
  - a. Type a new password (secure format required).
  - b. Type the new password again.
  - c. Click Next.

- d. If a warning message appears, click OK.
11. In the Multimedia Allocation page, click Next.
12. In the M1 Switch Information page, do the following:
  - a. From the Switch type options, select the switch type. Choose M1 for a large system format and M1 Option 11 for a small system format.
  - b. In the Switch Customer Number box, type the switch customer number that the CallPilot system uses.
  - c. In the Switch IP Address box, type the IP address of the PBX.

Tech tip: Every channel represents an agent resource that the CallPilot system can use. The channels require provisioning on the telephony switch side first. Two test channels should have already been provisioned. Add the two test channels as follows:

- a. From the list of channels, click the Channel Name (STI01-001-001 or STI1-001-002).
  - b. In the Channel Detail Information page, type the information for the first provisioned channel. Refer to the TN, position ID, and SCN configured in the procedure [Configuring ACD agents \(LD 11\)](#) on page 24.
  - c. Leave the Channel Allocation configured as Multimedia.
  - d. Click OK.
  - e. For the second provisioned channel, repeat steps d to g.
  - f. Click Next.
13. In the Meridian 1 CND Information page, click New.
  14. In the CND Detail page, do the following:
    - a. In the CND box, type the CDN configured in the procedure [Configuring the CDN queue \(LD 23\)](#) on page 23.
    - b. From the Application Name list, select Voice Messaging.
    - c. Click OK.
  15. In the CND Information page, click Next.
  16. Insert the CallPilot 5.0 Language CD into the DVD drive.
  17. In the Language Source Directory page, do the following:
    - a. Select the Install Language option.
    - b. In the Language CD Location box, type Z:.
    - c. Click Next.
  18. In the Language Installation page, do the following:

- a. Select languages and automated speech recognition to be installed.
    - b. Select the Primary and, optionally, Secondary languages to install.
    - c. Click Next.
  19. In the CallPilot Local Area Network Interface page, do the following:
    - a. For Equipment LAN network interface card, select ELAN.
    - b. For IP address, type the IP address assigned to the ELAN NIC.
    - c. For Subnet Mask, type the network subnet mask assigned to the ELAN NIC.
    - d. For Customer LAN network interface card, select CLAN.
    - e. For IP address, type the IP address assigned to the CLAN NIC.
    - f. For Subnet Mask, type the subnet mask assigned to the CLAN NIC.
    - g. For Gateway, type the gateway assigned to the CLAN NIC.
    - h. Click Next.
  20. In the Ready to Configure page, click Finish, and then wait for the configuration to be applied.
-  **Note:**  
With two languages installed, the configuration process takes approximately 20 minutes to complete. Each language prompt installed adds approximately 10 minutes to the configuration process.
21. When the configuration is complete, restart the CallPilot server.

---

## Configuring new mailboxes and additional tasks

Perform the following procedure to create new mailboxes on the CallPilot server.

In this procedure, you create two test mailboxes. Creating additional mailboxes and other items adds additional time to the installation.

1. Log on to the CallPilot server using the new password you configured in the previous procedure.

 **Note:**

When you run Internet Explorer for the first time, you are asked to make IE the default browser for the server. Click Yes.

2. On the Welcome to CallPilot Manager page, click Add User.
3. On the Express User Add page, do the following:

- a. From the Template Name list, select Regular User Template.
  - b. In the First Name box, type John.
  - c. In the Last Name box, type Smith.
  - d. In the Mailbox Number/Extension DN box, type the test DN provisioned in the procedure [Provisioning telephones \(LD 11\)](#) on page 25.
  - e. Leave the Location Name as is.
  - f. Click Add.
  - g. In the User Add Result page, click Add Another User.
  - h. Repeat steps a through f to create a second mailbox for the second test DN. This time, substitute the name Jane Smith and use the second test DN provisioned in the procedure [Provisioning telephones \(LD 11\)](#) on page 25.
4. In the CallPilot Manager toolbar, select User > Search.
  5. Search for the users you just created, and ensure that they are present with the correct information.
  6. In the CallPilot Manager toolbar, select Maintenance > Channel Monitor.
  7. In the Channel Monitor page, under Channel Status, check that two channels are shown in dark blue indicating an idle status.

Tech tip: If a channel status is red, check the DS30 cabling and then check the telephony switch provisioning. A cable may be plugged into the wrong slot or a card may be disabled or not provisioned.

---

## Backing up the system

 **Note:**

At this point, a backup is recommended but not necessary. It serves as a point to restore from if something should happen during testing. It also serves as a way to test the tape drive to ensure it is in working order. This procedure takes approximately 20 min.

The following procedure describes how to perform a backup to a tape drive.

 **Note:**

For information about the advanced method of backing up to a network device, refer to the Software Administration and Maintenance NTP (NN44200-600) or the CallPilot Manager online Help.

1. If the tape drive is not already turned on, turn it on, and then ensure that an SLR 75 tape is inserted.
2. In the CallPilot Manager toolbar, select System > Backup/Restore.
3. In the Backup/Restore page, do the following:
  - a. From the Select a task list, select Review and schedule backups.
  - b. Click Add Backup.
4. In the Add New Backup Schedule page, do the following:
  - a. From the Select a backup type list, select Full System Backup.
  - b. From the Select a backup device list, select PrimaryServerTape.
  - c. From Additional Options, select Backup will overwrite any existing data on tape.
  - d. Click Next.
5. In the Add New Backup Schedule page, do the following:
  - a. From the Select the backup frequency list, select One time only.
  - b. In Select the specific date and time. <your time zone>, select the current date and time using the 24-hour clock.
  - c. In the Description box, type a relevant description of the backup.
  - d. Click Next.
6. In the Confirm Schedule page, review the backup information, and then click Finish.
7. In the Backup/Restore page, select the backup profile you just created and click Backup Now.
8. In the message that prompts you to start the backup immediately, click OK.
9. When the backup is complete, check the summary log to ensure that no errors occurred.



# Chapter 10: Avaya CallPilot® server testing

This task describes how to test the Avaya CallPilot server.

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## CallPilot server testing tasks

The following is a list of tasks you perform to test the CallPilot server. To link to detailed procedures for each task, click the text.

- [Checking CallPilot connectivity and channels](#) on page 69
- [Verifying that you can log on to mailboxes](#) on page 70
- [Verifying that you can leave a message](#) on page 71
- [Verifying that you can retrieve a message](#) on page 71
- [Verifying that each CallPilot channel is functioning correctly](#) on page 71
- [Testing pcAnywhere using a remote PC](#) on page 72

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## Checking CallPilot connectivity and channels

Perform the following procedure to check CallPilot connectivity and channels.

1. To check the ELAN connectivity, do the following:
  - a. From the CallPilot server console, select Start > Run.
  - b. Type cmd, and then click OK. The command prompt appears.
  - c. Type ping [IP address of your PBX], and then press Enter. For example, ping 192.167.100.3

Tech tip: You should get ping replies back from the PBX. If you do not, do the following:

- Check the ELAN cable connections.
- Check the provisioning, to ensure the PBX is on the same subnet.
- Check the provisioning of the telephony switch.

2. To check the CLAN connectivity, do the following:

- a. From the CallPilot server console, click Start > Run.
- b. Type cmd, and then click OK. The command prompt appears.
- c. Type ping [IP address of your Avaya server subnet Gateway], and then press Enter. For example, ping 192.167.249.1

Tech tip: You should get ping replies back from the Gateway. Sometimes the ping reply may be turned off on the Gateway. If you think that is the case, try another known IP that will reply on the Avaya server subnet. You can also check the following:

- Check the cable for the Avaya server subnet.
  - Check your provisioning and ensure that they are on the same subnet.
3. Check that channels are in a state ready to accept calls.
    - a. In the CallPilot Manager toolbar, select Maintenance > Channel Monitor.
    - b. In the Channel Monitor page, check that both provisioned channels are shown in dark blue, indicating that they are in an idle state waiting for a call.

---

## Verifying that you can log on to mailboxes

Perform the following procedure to check that you can log on to mailboxes.

 **Note:**

This will also test to ensure the CallPilot server answers when you dial the voice messaging DN.

1. On a test telephone, dial the CDN that is configured.
2. Ensure that a greeting plays with an automated voice, and that you are prompted for a mailbox in the primary language you installed.
3. Type the test mailbox number for the telephone you are on, followed by the # key.
4. Type the password for the mailbox, followed by the # key. The default password is 12 + mailbox number. For example, if the mailbox number is 4500 the password is 124500.
5. When prompted, type a new password, followed by the # key. Re-enter the new password followed by the # key to confirm the changed password.

---

## Verifying that you can leave a message

Perform the following procedure to check that you can leave a message.

1. On a test telephone, dial the DN of that telephone. You are automatically forwarded to CallPilot voice messaging.
2. After the tone, leave a test message.

---

## Verifying that you can retrieve a message

Perform the following procedure to check that you can retrieve a message.

1. On a test telephone, dial the CallPilot voice messaging CDN.
2. Log on to the mailbox where the message was left in the procedure [Verifying that you can leave a message](#) on page 71.
3. Press 2 on the telephone to play the message.

---

## Verifying that each CallPilot channel is functioning correctly

Perform the following procedure to check that CallPilot channels are functioning correctly.

1. Log on to CallPilot Manager on the local console.
2. In the CallPilot Manager toolbar, select Maintenance > Channel Monitor.
3. From both test telephones, simultaneously dial the CallPilot voice messaging CDN.  
  
Call from one test telephone and leave it off the hook while you dial from the other, so that both channels are occupied at the same time. If you have other channels that require testing, stop all other channels except the ones being tested.
4. In CallPilot Manager, observe the channel status of both channels change from dark blue to light blue, indicating the channels are in an active state.
5. Hang up both telephones and observe both channels. The channels change from light blue to dark blue, indicating they are in idle mode waiting for a call.

---

## Testing pcAnywhere using a remote PC

Perform the following procedure to test pcAnywhere using a remote PC.

This procedure requires a PC with modem, a connected telephone line, and the pcAnywhere client installed. pcAnywhere is preinstalled with one license on the CallPilot server but requires a separate client license and software. Avaya does not include a copy for client installation.

1. Configure your client pcAnywhere using the dialing information of the telephone line connected to the CallPilot server modem.
2. Start pcAnywhere and connect to the CallPilot server through the remote PC.
3. Log on to the CallPilot server.
4. Check that you have full remote control of the system.
5. Disconnect the pcAnywhere client.

---

## What is next?

For advanced configuration and provisioning information, refer to the following NTPs:

- *Administrator Guide* (NN44200-601) and CallPilot Manager online Help
- *Software Administration and Maintenance* (NN44200-600)
- *Desktop Messaging and My CallPilot Installation and Administration* (NN44200-305)
- *600r Server Hardware Installation* (NN44200-307)
- *600r Server Maintenance and Diagnostics* (NN44200-703)
- *1005r Server Hardware Installation* (NN44200-306)
- *1005r Server Maintenance and Diagnostics* (NN44200-704)
- *1006r Server Hardware Installation* (NN44200-320)
- *1006r Server Maintenance and Diagnostics* (NN44200-709)
- *202i Server Hardware Installation* (NN44200-317)
- *202i Server Maintenance and Diagnostics* (NN44200-708)
- *Reporter Guide* (NN44200-603)
- *Application Builder Guide* (NN44200-102)

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## Customer Documentation Map

The following diagram shows the overall organization and content of the CallPilot documentation suite.

**Table 20: CallPilot Customer Documentation Map**

Fundamentals
Avaya CallPilot® Fundamentals Guide (NN44200-100)
Avaya CallPilot® Library Listing (NN44200-117)
Planning and Engineering
Avaya CallPilot® Planning and Engineering Guide (NN44200-200)
Avaya CallPilot® Network Planning Guide (NN44200-201)
Avaya Communication Server 1000 Converging the Data Network with VoIP Fundamentals (NN43001-260)
Solution Integration Guide for Avaya Communication Server 1000/CallPilot®/NES Contact Center/Telephony Manager (NN49000-300)
Installation and Configuration
Avaya CallPilot® Upgrade and Platform Migration Guide (NN44200-400)
Avaya CallPilot® High Availability: Installation and Configuration (NN44200-311)
Avaya CallPilot® Geographic Redundancy Application Guide (NN44200-322)
Avaya CallPilot® Installation and Configuration Task List Guide (NN44200-306)
Avaya CallPilot® Quickstart Guide (NN44200-313)
Avaya CallPilot® Installer Roadmap (NN44200-314)
Server Installation Guides
Avaya CallPilot® 201i Server Hardware Installation Guide (NN44200-301)
Avaya CallPilot® 202i Server Hardware Installation Guide (NN44200-317)
Avaya CallPilot® 202i Installer Roadmap (NN44200-319)
Avaya CallPilot® 703t Server Hardware Installation Guide (NN44200-304)
Avaya CallPilot® 1002rp Server Hardware Installation Guide (NN44200-300)
Avaya CallPilot® 1002rp System Evaluation (NN44200-318)
Avaya CallPilot® 1005r Server Hardware Installation Guide (NN44200-308)

Avaya CallPilot® 1005r System Evaluation (NN44200-316)

Avaya CallPilot® 1006r Server Hardware Installation Guide  
(NN44200-320)

Avaya CallPilot® 600r Server Hardware Installation Guide (NN44200-307)

Avaya CallPilot® 600r System Evaluation (NN44200-315)

#### Configuration and Testing Guides

Avaya Meridian 1 and Avaya CallPilot® Server Configuration Guide  
(NN44200-302)

Avaya T1/SMDI and Avaya CallPilot® Server Configuration Guide  
(NN44200-303)

Avaya Communication Server 1000 System and Avaya CallPilot® Server  
Configuration Guide (NN44200-312)

#### Unified Messaging Software Installation

Avaya CallPilot® Desktop Messaging and My CallPilot Installation and  
Administration Guide (NN44200-305)

#### Administration

Avaya CallPilot® Administrator Guide (NN44200-601)

Avaya CallPilot® Software Administration and Maintenance Guide (NN44200-600)

Avaya Meridian Mail to Avaya CallPilot® Migration Utility Guide (NN44200-502)

Avaya CallPilot® Application Builder Guide (NN44200-102)

Avaya CallPilot® Reporter Guide (NN44200-603)

#### Maintenance

Avaya CallPilot® Troubleshooting Reference Guide (NN44200-700)

Avaya CallPilot® Preventative Maintenance Guide (NN44200-505)

#### Server Maintenance and Diagnostics

Avaya CallPilot® 201i Server Maintenance and Diagnostics Guide  
(NN44200-705)

Avaya CallPilot® 202i Server Maintenance and Diagnostics Guide  
(NN44200-708)

Avaya CallPilot® 703t Server Maintenance and Diagnostics Guide  
(NN44200-702)

Avaya CallPilot® 1002rp Server Maintenance and Diagnostics Guide  
(NN44200-701)

Avaya CallPilot® 1005r Server Maintenance and Diagnostics Guide  
(NN44200-704)

Avaya CallPilot® 1006r Server Maintenance and Diagnostics Guide  
(NN44200-709)

Avaya CallPilot® 600r Server Maintenance and Diagnostics Guide  
(NN44200-703)

Avaya NES Contact Center Manager Communication Server 1000/  
Meridian 1 & Voice Processing Guide (297-2183-931)

#### End User Information

##### End User Cards

Avaya CallPilot® Unified Messaging Quick Reference Card  
(NN44200-111)

Avaya CallPilot® Unified Messaging Wallet Card (NN44200-112)

Avaya CallPilot® A-Style Command Comparison Card (NN44200-113)

Avaya CallPilot® S-Style Command Comparison Card (NN44200-114)

Avaya CallPilot® Menu Interface Quick Reference Card (NN44200-115)

Avaya CallPilot® Alternate Command Interface Quick Reference Card  
(NN44200-116)

Avaya CallPilot® Multimedia Messaging User Guide (NN44200-106)

Avaya CallPilot® Speech Activated Messaging User Guide  
(NN44200-107)

Avaya CallPilot® Desktop Messaging User Guide for Microsoft Outlook  
(NN44200-103)

Avaya CallPilot® Desktop Messaging User Guide for Lotus Notes  
(NN44200-104)

Avaya CallPilot® Desktop Messaging User Guide for Novell Groupwise  
(NN44200-105)

Avaya CallPilot® Desktop Messaging User Guide for Internet Clients  
(NN44200-108)

Avaya CallPilot® Desktop Messaging User Guide for My CallPilot  
(NN44200-109)

Avaya CallPilot® Voice Forms Transcriber User Guide (NN44200-110)

The Map was created to facilitate navigation through the suite by showing the main task groups and the documents contained in each category. It appears near the beginning of each guide, showing that guide's location within the suite.



# Chapter 11: Installing the Avaya CallPilot® 5.0 image

The Avaya CallPilot 5.0 software comes preinstalled from the factory. If the installed image becomes corrupted, perform this procedure to install the CallPilot 5.0 image again.

## Installing the CallPilot 5.0 image

1. Insert the CallPilot Image DVD for the platform type you are recovering into the DVD drive.
2. Using the button on the front panel of the server, power the server off, and then power it back on.
3. Select 1. Install CallPilot 5.0 [server model] server image and exit to DOS (recommended), and then press Enter.

A message appears, asking if you are upgrading to CallPilot 5.0 from a previous release.

4. Type N.

A message appears, asking if you want to continue and overwrite all of the data on the system.

5. Type Y.

The imaging program automatically installs a fresh image of the operating system, CallPilot software, and additional third-party software on the server. When the installation is complete, a message appears stating that the CallPilot 5.0 image is installed on your server.

6. Remove the DVD.
7. Restart the server by pressing Ctrl + Alt + Delete.

The server starts the Windows 2003 configuration. During the Windows 2003 configuration, the server restarts several times. After the last restart sequence, the Windows login dialog appears.

8. Return to [Avaya CallPilot® server configuration](#) on page 61.

Installing the Avaya CallPilot® 5.0 image

# Chapter 12: Configuring phantom DNs

This appendix describes how to configure phantom DNs.

There are two reasons to configure phantom DNs on the switch:

- to create a dialable number for Avaya CallPilot® services such as Application Builder configurations and voice forms
- to create virtual fax DNs for users who want a separate fax number

## Checking for existing phantom loops

A phantom loop must exist before you begin to configure phantom DNs. Use this procedure to identify a phantom loop.

1. Connect to the PBX.
2. Enter LD 97.
3. At the REQ prompt, enter PRT.
4. At the TYPE prompt, enter SUPL.
5. Use the capture text function in hyperterminal to save a text file of the output.
6. Review the output for a superloop tagged PHANTOM. If a phantom loop does not exist, perform the procedure below to create one.

## Configuring a phantom superloop

1. Connect to the PBX.
2. Enter LD 97.
3. At the REQ prompt, enter CHG.
4. At the TYPE prompt, enter SUPL.
5. At the SUPL prompt, enter xxxx, where xxxx is the loop number, prefixed with N to designate the loop as a phantom loop, or with V to designate a virtual loop. For Large Systems, xxxx = N0–N156 in multiples of 4. For Small Systems, xxxx = N96 - N112 in multiples of 4.
6. To exit the overlay, enter \*\*\*\*.

## Creating a phantom DN

1. Connect to the PBX.
2. Enter LD 10.
3. Enter the appropriate values as described in the following table to modify the system parameters. For prompts not listed in the following table, press Enter to accept the default.

**Table 21: LD 10 - Creating a phantom DN**

Prompt	Response	Notes
REQ	NEW	
TYPE	500	
TN	aaa.bbb.ccc.ddd	Terminal number, where aaa = loop, bbb = shelf, ccc = card, and ddd = unit.
CDEN	xx	Card density supported by the loop, where xx = DD for double density, or 4D for quadruple density.
DN	xxxx	DN for Avaya CallPilot.
CLS	WTA UNR	
FTR	DCFW nn xxxx   <b>Note:</b> After you type the response and press Enter, the ftr prompt appears again. To continue, press Enter again.	nn = maximum number of digits in the DCFW DN xxxx = the CDN to which this DN forwards For example: DCFW 04 4300

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