



PARTNER[®]
Advanced Communications System

System Planner

518-456-161
Issue 4
March 2002

Copyright 2002
Avaya Inc.
All Rights Reserved
Printed in USA

Document 518-456-161
Issue 4
March 2002

Notice

Every effort was made to ensure that the information in this book was complete and accurate at the time of printing. However, information is subject to change.

Federal Communications Commission Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense. This system is Class B compliant in some configurations. For additional FCC information, see the PARTNER Customer Support Document.

Canadian Department of Communications (DOC) Interference Information

This digital apparatus does not exceed the Class A limits for radio noise emissions set out in the radio interference regulations of Industry Canada.

Le Présent Appareil Numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le reglement sur le brouillage radioélectrique édicté par le Industrie Canada.

Preventing Toll Fraud

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or working on your company's behalf). Be aware that there may be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

The final responsibility for securing both this system and its networked equipment rests with you – an Avaya Inc. system administrator, your telecommunications peers, and your managers. Avaya Inc. does not warrant that this product or any of its networked equipment is either immune from or will prevent either unauthorized or malicious intrusions. Avaya Inc. will not be responsible for any charges, losses, or damages that result from such intrusions. For important information regarding your system and toll fraud, see the PARTNER Customer Support Document.

Avaya Fraud Intervention

If you suspect you are being victimized by toll fraud and you need technical support assistance, call the Avaya Customer Care Center at **1 800 628-2888**.

Warranty

Avaya Inc. provides a limited warranty on this product. Refer to the "Limited Use Software License Agreement" card provided with your package. For additional warranty information, see the PARTNER Customer Support Document.

Trademarks

PARTNER, PARTNER Messaging, PARTNER MAIL VS, PARTNER MAIL, MLS-34D, MLS-18D, MLS-12D, MLS-12, MLS-6, MDC 9000, MDW 9000, MDW 9010 MDW 9030P, and SYSTIMAX are registered trademarks of Avaya Inc. in the U.S. and other countries.

Ordering Information

Call: Avaya Publications Center
Voice 1 800 457-1235 International Voice 410 568-3680
Fax 1 800 457-1764 International Fax 410 891-0207

Write: GlobalWare Solutions
200 Ward Hill Avenue
Haverhill, MA 01835 USA
Attn: Avaya Account Manager

Order: Avaya Publications Center
Document No. 518-456-161
Issue 4, March 2002

For additional documents, refer to the PARTNER Customer Support Document.

Customer Support

If you need assistance when programming or using your system, contact your local Authorized Dealer or call the Avaya Customer Care Center at **1 800 628-2888**. Consultation charges may apply.

Obtaining Products

See "Obtaining Products" in the PARTNER Customer Support Document.

Avaya Web Page

For information about Avaya products and service, go to www.avaya.com. For product documentation for all Avaya products and related documentation for PARTNER ACS, go to www.avayadocs.com.

Heritage Statement

Intellectual property related to this product (including trademarks) and registered to Lucent Technologies Inc. has been transferred or licensed to Avaya Inc. Any reference within the text to Lucent Technologies Inc. or Lucent should be interpreted as reference to Avaya Inc. The exception is cross references to books published prior to May 1, 2001, which may retain their original Lucent titles. Avaya Inc., formed as a result of Lucent's planned restructuring, designs, builds, and delivers voice, converged voice and data, customer-relationship management, messaging, multiservice networking, and structured cabling products and services. Avaya Labs is the research and development arm for the company.

Important Safety Instructions

The following list provides basic safety precautions that should always be followed when using your telephone equipment.

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Unplug all telephone connections before cleaning. DO NOT use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. This product should be serviced by (or taken to) a qualified repair center when service or repair work is required.
5. DO NOT use this product near water, for example, in a wet basement location.
6. DO NOT place this product on an unstable cart, stand or table.
7. Never push objects of any kind into slots or openings as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
8. DO NOT use the telephone to report a gas leak in the vicinity of the leak.



CAUTION: DO NOT block or cover the ventilation slots or openings; they prevent the product from overheating. DO NOT place the product in a separate enclosure unless proper ventilation is provided. DO NOT place the product flat on a surface. The control unit must be wall-mounted.

SAVE THESE INSTRUCTIONS

We'd like your opinion . . .

We welcome your feedback on this document. Your comments can be of great value in helping us improve our documentation.

**PARTNER® Advanced Communications System
System Planner
Issue 4, March 2002
518-456-161**

1. Please rate the effectiveness of this document in the following areas:

	Excellent	Good	Fair	Poor
Ease of Finding Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completeness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appearance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Examples	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Illustrations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall Satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Please check the ways you feel we could improve this document:

- | | |
|--|---|
| <input type="checkbox"/> Improve the overview/introduction | <input type="checkbox"/> Make it more concise |
| <input type="checkbox"/> Improve the table of contents | <input type="checkbox"/> Add more step-by-step procedures/tutorials |
| <input type="checkbox"/> Improve the organization | <input type="checkbox"/> Add more troubleshooting information |
| <input type="checkbox"/> Add more figures | <input type="checkbox"/> Make it less technical |
| <input type="checkbox"/> Add more examples | <input type="checkbox"/> Add more/better quick reference aids |
| <input type="checkbox"/> Add more details | <input type="checkbox"/> Improve the index |

Please add details about your major concerns. _____

3. What did you like most about this document? _____

4. Feel free to write any comments below or on an attached sheet. _____

If we may contact you concerning your comments, please complete the following:

Name: _____ Telephone Number: (____) _____

Company/Organization: _____ Date: _____

Address: _____

You may FAX your response to 908 953-6912. Thank you.

Internet Security-Related Issues

There are certain security risks associated with using the 1600 DSL module due to its Internet connections. Appendix A provides a Security Notification Checklist. As the authorized installer, you should review this information with your customer to ensure all security requirements are understood. Then complete the Security Notification and Checklist with the customer.

General Information

The purpose of these planning forms is to facilitate the installation of your system. The authorized installer will use these forms to configure your new PARTNER system to your specifications. By filling in the appropriate information and selecting the preferred options and features in advance, you will help to quickly get your system up and running. As you become more familiar with your PARTNER system you may change or enhance the system to get the most out of the system's many features and capabilities.

The Table of Contents on the following page provides an overview of the forms included in this planner. All new customers are required to complete Forms A, B, and C. However, the remaining forms can be used to plan additional features that are optional in your PARTNER system. As you complete these forms, please refer to the instructions for each form for additional guidance.

NOTE ► Several forms in this Planner require a printer setting of 1200 dots per inch (dpi). Lower dpi settings will cause the image resolution on some of the forms to be unclear.

Table of Contents

Form	Required	Page No.
Form A—Customer Information	ALL	1
Form B—System Configuration: Lines	ALL	3
Form C—Extension Settings	ALL	6
Form C1—Extension Settings Worksheet		8
Form C—Extension Settings: Feature Descriptions		11–14
Form D—Auxiliary Equipment	If you are attaching auxiliary equipment.	15
Form E—System Configuration: Default Settings	If you wish to change certain system defaults.	17
Forms F1-F5: System Configuration: Lists	If you are setting system speed dials, using disallowed/ allowed lists, using hunt groups, using forced account codes, pooling lines, etc.	19
Form F1—System Speed Dial		20
Form F2a—Disallowed Lists		23
Form F2b—Allowed Lists		24
Form F3—Hunt Groups		26
Form F4—Forced Account Code		28
Form F5—Customized Extensions/Pool Access Restrictions		30–31
1600 DSL Module Planning Checklist		33
Appendix A: Security Notification and Checklist		41

Form A—Customer Information

CUSTOMER BILLING NAME:	BILLING PHONE NUMBER:
CUSTOMER CONTACT:	CONTACT PHONE NUMBER:
PERSON TO BE TRAINED:	TRAINEE PHONE NUMBER:
SALES PERSON/ACCT EXEC:	SALES/AE PHONE NUMBER:
GENERAL CONTRACTOR: <i>(only required if new construction)</i>	CONTRACTOR PHONE NUMBER:
INSTALLATION ADDRESS:	
INSTALLATION DUE DATE:	
NOTES TO INSTALLER:	
FEATURES OF INTEREST: <i>(list in order of priority)</i>	
SERVICE VERIFICATION: <i>Provide the name of the telephone service representative who verified your service and the date the service was verified. This is not required for all installations. See next page for details.</i>	
VERIFIER NAME:	DATE VERIFIED:
INSTALLER NAME:	
DATE OF INSTALLATION:	

Form A: Instructions for Customer Information

Service Verification

In almost all cases, the default telephone service provided by your local Phone Company will be appropriate for the PARTNER system. However, if you are switching telephone systems from a competitor's system to a PARTNER system, or if this is the first time telephone service is being established at this site, you will need to verify that your local phone company is providing you with default telephone service (Loop Start) or the installation of your PARTNER system may not be completed on the expected due date. Please provide the person's name and the date they verified default phone service in the "Service Verification" space provided on the previous page.

Form B—System Configuration: Lines

Who is the customer contact responsible for the layout of the system? Name: _____ Telephone: _____

If the line is a personal or dedicated line fill in the following

Line No.	Desired Telephone Numbers	ANSWERING OPTION ¹	CALLER ID SERVICE	OTHER SUBSCRIPTION SERVICES	NAME OF LINE OWNER OR Equipment	Call Coverage	EXTENSION NUMBER
01							
02							
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							

1. AA, DXD, ASA, Hunt, VMS-AA, VMS-MAIL, LIVE, AUX. See back for details.

Form B: Instructions for System Configuration: Lines

COLUMN 2: DESIRED TELEPHONE NUMBERS:

Write in the telephone numbers assigned to each line. Please list the lines that will be used by multiple extensions first, then list dedicated and/or personal lines.

COLUMN 3: ANSWERING OPTION

In this space, write in the abbreviation from the list below that indicates how incoming calls to each line will be answered. In most cases, some form of automated answering option will be selected. **NOTE: To avoid confusing caller, it is recommended that only one type of automated answer option be used to handle incoming calls throughout the system.**

Automated Answer Options:

AA	Automated Attendant	Automated system answers and routes calls. Must be purchased separately.
DXD	Direct Extension Dialing	Allows caller to dial extensions without waiting for the receptionist. <i>Available with ACS R2.0 or later.</i>
ASA	Automatic System Answer	Plays a recorded message then either places the call on hold, disconnects the call or continues to ring available extensions. <i>Available with ACS R2.0 or later.</i>
Hunt	Hunt Group	Sends calls simultaneously to a group of extensions. Up to 4 calling groups can be programmed in the system.
VMS-AA	Automated Attendant Service of PARTNER Messaging, PARTNER MAIL, or PARTNER MAIL VS	This is system-wide voicemail service. If the receptionist does not answer an incoming call, VMS-AA lets the caller select an extension or route.
VMS-MAIL	Voicemail on a personal line	PARTNER Messaging, PARTNER MAIL, PARTNER MAIL VS, or PARTNER Voice Messaging PC Card must be purchased separately.

Other Options:

LIVE	Human Operator	If all calls to a specific line will always be answered by a human operator, write in LIVE.
AUX	Auxiliary Equipment	If all calls will always be answered by a piece of auxiliary equipment, such as a fax machine, write in AUX.

COLUMN 4 & 5: CALLER ID AND OTHER SUBSCRIPTION SERVICES

Check the box if Caller ID Service is activated on this line. In the next column, write in any other telephone subscription services (ordered from your local telephone company) that are active on this line (i.e., repeat call service).

COLUMN 6:

Write in the owner (or assigned auxiliary equipment) for the personal or dedicated line.

COLUMN 7:

Check the box if you wish the owner of the personal or individual line to have the ability to activate Call Coverage for that line.

COLUMN 8:

Write in the extension number of the owner of the personal or individual line.

Form C—Extension Settings

Note: See Form C1 to enter character codes for Ext. Display.

EXT	OWNER	EXT. DISPLAY <i>up to 20</i>	PHONE SET TYPE	LINES ASSIGNED with Ringing Options			CHANGE DEFAULT SETTINGS						BUTTON FEATURES	
				Intermed	Delayed	No Ring	Lang	Distinctive Ring	Abbrev. Ringing	Privacy	Forced Acct Code	Call Coverage Rings		Voice Interrupt on Busy
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														

Form C—Extension Settings (Continued)

EXT	OWNER	EXT. DISPLAY <i>up to 20</i>	PHONE SET TYPE	LINES ASSIGNED <i>with Ringing Options</i>			CHANGE DEFAULT SETTINGS						BUTTON FEATURES	
				Intermed	Delayed	No Ring	Lang	Distinctive Ring	Abbrev. Ringing	Privacy	Forced Acct Code	Call Coverage Rings		Voice Interrupt on Busy
36														
37														
38														
39														
40														
41														
42														
413														
44														
45														
46														
47														
48														
49														
50														
51														
52														
53														
54														
55														
56														
57														

Form C1—Extension Settings Worksheet

May be used if Ext. Display is checked on Form C.

Ext. Jack No.	Write 2-Digit Code for Each Character To Be Displayed—See Table at Right																	
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		

Character Codes

Letters:

A = 21	N = 62
B = 22	O = 63
C = 23	P = 71
D = 31	Q = 72
E = 32	R = 73
F = 33	S = 74
G = 41	T = 81
H = 42	U = 82
I = 43	V = 83
J = 51	W = 91
K = 52	X = 92
L = 53	Y = 93
M = 61	Z = 94

Numbers:

blank = 11

0 = 00	5 = 50
1 = 10	6 = 60
2 = 20	7 = 70
3 = 30	8 = 80
4 = 40	9 = 90

Form C1—Extension Settings Worksheet (Continued)

Ext. Jack No.	Write 2-Digit Code for Each Character To Be Displayed—See Table at Right																	
34																		
35																		
36																		
37																		
38																		
39																		
40																		
41																		
42																		
43																		
44																		
45																		
46																		
47																		
48																		
49																		
50																		
51																		
52																		
53																		
54																		
55																		
56																		
57																		

Character Codes

Letters:	
A = 21	N = 62
B = 22	O = 63
C = 23	P = 71
D = 31	Q = 72
E = 32	R = 73
F = 33	S = 74
G = 41	T = 81
H = 42	U = 82
I = 43	V = 83
J = 51	W = 91
K = 52	X = 92
L = 53	Y = 93
M = 61	Z = 94
Numbers:	
blank = 11	
0 = 00	5 = 50
1 = 10	6 = 60
2 = 20	7 = 70
3 = 30	8 = 80
4 = 40	9 = 90

Form C: Instructions for Extensions Settings

COLUMN 5 – LINES ASSIGNED WITH RINGING OPTIONS

List the lines (or pool code for a pool of lines, if appropriate) that you would like assigned to each extension. For each line you enter, you have the option of listing it as an immediate ringing line, a delayed ringing line, or a no ring line. The default option for lines is immediate ringing. (For pools, the default option is no ringing).

NOTE: Any line not listed will be removed from that extension and will not be accessible from that extension.

COLUMN 6 – CHANGE DEFAULT SETTINGS

Language: Default = English. If you wish to display messages in a different language, write in the language. This is relevant only for extensions with display phones.

Distinctive Ring: Default = Active. By default, outside, intercom, and transferred calls each have their own ringing pattern. To change the default so that all calls ring the same, write “NA” (Not Active) in this column.

Abbreviated Ringing: Default = 1 ring. When a phone is in use, a new call will ring once. The line button light will continue to flash until the call is answered.

Privacy: Default = Not Activated. By default, any user sharing a line can join calls at another extension (Privacy is Not Assigned). If all calls are to be private, write “A” (Assigned) in this column. Always use this feature for Fax and modem extensions.

Forced Acct Code: Default = Not Activated. If a user should be required to enter an account code before placing an outside call, write “A” (Activated) in this column.

Coverage Rings: For calls going to a covering extension the Default = 2 rings. For calls going to a voicemail box the Default = 3 rings. You can choose between 1 to 9 rings. Enter the number of rings desired before a call is sent to the covering extension/or voicemail box. Can be set per extension for ACS 3.0 or later. Can only be set system wide for earlier releases.

Voice Interrupt on Busy: Default = Not Activated. To identify an extension as being eligible for Voice Interrupt on Busy calls, write “A” (Activated) in this column.

COLUMN 7 – BUTTON FEATURES

In the space provided for each extension, list the features (by the feature numbers indicated) that should be pre-programmed onto the buttons on the telephone set. The number of available buttons varies from set type to set type. A complete description of the available button features is included on the following page.

Form C—Extension Settings: Feature Descriptions

Feature Descriptions

#	FEATURE	DESCRIPTION	Ext. 10 Only	Button Light Required	Button Light Recommended
1	Automatic System Answer	(ACS R2.0 or later only) Turns Automatic System Answer on and off. When the feature is on, a call that is not answered by the receptionist is answered by the system; the system plays a brief message, then places the call on hold, continues to ring all extensions that have the line, or disconnects the call. To use Automatic System Answer, extension 10 must be programmed with an ASA button.	●	●	
2	Direct Extension Dial	(ACS R2.0 or later only) Turns Direct Extension Dial on and off. When the feature is on, a call that is not answered by the receptionist is answered by the system; the system plays a brief message, then lets the caller dial an extension number or wait for the receptionist. To use Direct Extension Dialing, extension 10 must be programmed with a DXD button.	●	●	
3	Night Service	Turns Night Service on and off. Phones in the Night Service Group ring immediately when the feature is active, regardless of normal ringing. To use Night Service, extension 10 must be programmed with a Night Service button. Night Service Group extensions should be identified on Form F5.	●	●	
4	Outgoing Call Restriction	Allows the user at extension 10 to change the outgoing call restriction for a particular extension. An Auto Dial button with lights must be programmed for each extension to be changed.	●	●	
5	Wake Up Service	Allows the user at extension 10 to schedule an intercom call to a target extension at a designated time. If Music-On-Hold (#602) is active, music is played when the phone is answered; otherwise, nothing is heard.	●	●	
6	Fax Management	Transfers calls to the fax machine at the designated extension with one touch. The lights show when the fax is busy or when it is having trouble and not answering—for example, when it is out of paper.		●	
7	Call Screening	(R3.0 or later only and you must have a voice messaging system and an MLS or PARTNER system phone) Allows the user to listen to a caller leaving a message in the user's mailbox. Once the voice mail system has answered the call, the call screening begins. While the call is being screened, the user is connected to the call in a listen only mode on the speakerphone. This feature can be programmed for any extension. This feature must be assigned by Centralized Programming from either Extension 10 or Extension 11.		●	

Feature Descriptions—(Continued)

#	FEATURE	DESCRIPTION	Ext. 10 Only	Button Light Required	Button Light Recommended
8	Caller ID Inspect	When a user at a display phone is already on a call, this feature shows Caller ID information for another line (if Caller ID information is available on that line) without disconnecting the current call or putting it on hold. When the feature is active, the button light is on.		●	
9	Caller ID Logging	(ACS R2.0 or later only) Users at a display phone can access a Caller ID log to ascertain caller's phone numbers automatically. When a user has logged calls, the word CALLS displays.		●	
10	Caller ID Name Display	When a user at a display phone is on a call on a line that has Caller ID information available, this feature lets the user switch between the caller's phone number (the default display) and the caller's name (if available). When the feature is active- indicating that the caller's name should be displayed-the button light is on.		●	
11	Do Not Disturb	Prevents calls from ringing at the extension. When the feature is active, the button light is on. Intercom calls get a busy signal, and outside callers hear ringing. Use only if someone else answers the extension's outside calls. If VMS Cover and Do Not Disturb are both active, intercom, transferred, and outside calls on owned lines go directly to the extension's voice mailbox. If Call Coverage and Do Not Disturb are both active, intercom, transferred, and outside calls on lines assigned ownership go directly to the covering extension. Transfer Return type calls will ring a phone with Do Not Disturb active.		●	
12	Privacy	Lets system phone users press a programmed button to turn Privacy on and off, preventing or allowing users to join calls at the user's extension as needed.		●	
13	Record-A-Call	This feature applies only to systems that have PMVS (R5.0 or later) equipped with four ports, and an MLS or PARTNER system phone. This feature is not available on tip/ring phones.		●	
14	VMS Cover	This feature only applies if you have a voice messaging system. It defines the number of times a call rings before it is sent to a user's voice mailbox.		●	
15	Voice Interrupt on Busy Talk-Back	This feature is available only on system phones. This feature lets you program a button that is used to respond to a voice interrupt on busy call while the user is active on another call.		●	
16	Intercom Auto Dialing-Ring	Places a ringing intercom call to an extension, or transfers a call. If on a button with lights, the lights show calling activity at the destination extension.			●
17	Intercom Auto Dialing-Voice Signal	Places a voice-signaled intercom call to the extension's phone speaker, or transfers a call with a voice-signaled announcement. If on a button with lights, the lights show calling activity at the destination extension.			●
18	Manual Signaling - Ring	Beeps the designated extension. If the user presses <i>(Intercom)</i> first, pressing the button places a ringing intercom call to the extension, or transfers a call. If on a button with lights, the lights show calling activity at the destination extension.			●

Feature Descriptions—(Continued)

#	FEATURE	DESCRIPTION	Ext. 10 Only	Button Light Required	Button Light Recommended
19	Manual Signaling - Voice	Beeps the designated extension. If the user presses <i>(Intercom)</i> first, pressing the button places a voice-signaled intercom call to the extension, or transfers a call with a voice-signaled announcement. If on a button with lights, the lights show calling activity at the destination extension.			●
20	Account Code Entry	Allows the user to enter an account code for a call by pressing the button, entering up to 16 digits for the account code, then pressing the button again. If on a button with lights, the lights show when the feature is in use.			●
21	Background Music	Turns background music on and off at the speaker of an idle system phone. If on a button with lights, the lights show when the feature is in use.			●
22	Call Coverage	(ACS R2.0 or later only) Directs all intercom, transferred, and outside calls on lines assigned ownership to the designated extension. You may program originating and covering extension numbers on the button. If on a button with lights, the lights show when the feature is in use.			●
23	Call Forwarding	Forwards all calls to the designated extension. Unless Do Not Disturb is on, phone beeps once each time a call is forwarded. You may program originating and destination extension numbers on the button. If on a button with lights, the lights show when the feature is in use.			●
24	Contact Closure 1	Allows user to activate Contact Closure 1. User must belong to Contact Closure Group. See Form D.			●
25	Contact Closure 2	Allows user to activate Contact Closure 2. User must belong to Contact Closure Group. See Form D.			●
26	Call Park	Parks a call at your extension so it can be picked up from any other extension.			
27	Call Pickup	Picks up a ringing, held, or parked call at the designated extension.			
28	Conference Drop	Drops the last outside party added to a conference call.			
29	Direct Line Pickup	Allows the user to access a ringing, active or held call on a line that is not assigned to the extension. Direct Line Pickup is subject to Line Access Restrictions.			
31	Exclusive Hold	This feature is available only on system phones. This feature prevents other extensions from picking up outside calls placed on hold at a specific extension with a system phone.			
32	Group Calling - Ring/Page	Allows users to ring, page, or transfer calls simultaneously to all of the extensions in any one of four Calling Groups.			
33	Group Hunt Ring/Signal	Lets you distribute call volume among extensions in a group, to off-load call activity from a single user.			
34	Group Pickup	Allows user at any extension in the system to answer any outside, intercom, or transferred call ringing at an extension in a Pickup Group (where G is a Pickup Group number from 1 – 4).			
35	Intercom Autodial	Lets telephone system place intercom calls with a single touch, by pressing a programmed button.			

Feature Descriptions—(Continued)

#	FEATURE	DESCRIPTION	Ext. 10 Only	Button Light Required	Button Light Recommended
36	Last Number Redial	Redials the last outside number dialed (maximum 28 digits). This feature is useful for immediately redialing a busy number.			
37	Manual Signaling	This feature applies only to PARTNER and MLS-model phones. This feature lets you program a button on your PARTNER or MLS-model phone that you can use to signal a predetermined co-worker's extension.			
38	Message Light On	Turns on the message light at a specified extension (where XX is a system extension number).			
39	Message Light Off	Turns off the message light at a specified extension (where XX is a system extension number).			
40	Recall	Causes the system to send a timed switchhook flash over the telephone line to recall a new dial tone or to access a PBX, central office, or Centrex feature, such as Call Waiting.			
41	Save Number Redial	This feature is available only on system phones. This feature saves into temporary memory the last outside number (up to 28 digits) dialed from an extension with a system phone.			
42	Simultaneous Paging	Accesses the loudspeaker paging system, if you have one connected to the system through the PAGE jack on the primary processor module, and all of the idle system phones with speakers assigned to Calling Group 1.			
43	Station Lock	This feature is available only on system and standard touch-tone phones. This feature lets users enter a four-digit code on their telephone dialpad to lock their extension.			●
44	Touch-tone Enable	This feature is available only on system phones. This feature lets a system phone user send touch-tone signals on an outside call over a rotary line.			
45	Voice Mail Message	This feature is available only if you have a voice messaging system. It is available only on system phones. Lets callers leave voice mail messages to called extension.		●	
46	Voice Mail Box Transfer	This feature is available only if you have a voice messaging system. It is available only on system phones. This feature lets a system phone user transfer a caller directly to a specific extension's voice mailbox, in order for a caller to leave a message without first ringing the extension.			
47	Auto Dial Buttons	Places a call to an outside telephone number. Outside telephone numbers can be up to 28 digits. If a dial-out code is required to dial outside numbers (for example, on PBX or Centrex lines), include it in the stored number followed by pauses, if necessary. Write in Numbers here:			

Form D—Auxiliary Equipment

Please check the box next to any auxiliary equipment you have attached to your phone or phone system.

System vs. Line/Extension based Auxiliary Equipment

System	<input type="checkbox"/>	Battery Backup	<input type="checkbox"/>	Uninterruptible Power Supply	<input type="checkbox"/>	Fax Machine
	<input type="checkbox"/>	Music-on-Hold	<input type="checkbox"/>	ASA/DXD Card		
Extension	<input type="checkbox"/>	Call Waiting	<input type="checkbox"/>	Hotline	<input type="checkbox"/>	External Hotline
	<input type="checkbox"/>	Extra Alert	<input type="checkbox"/>	Electrical surge protector (IROB)	<input type="checkbox"/>	Answering Machine
	<input type="checkbox"/>	Modem	<input type="checkbox"/>	Credit Card Scanner	<input type="checkbox"/>	Passageway Software
	<input type="checkbox"/>	Specialty Handset	<input type="checkbox"/>	Headset		

<input type="checkbox"/>	Contact Closure 1 <i>(i.e., a door lock)</i>	<i>Specify operation type</i>	1 second on _____ 5 seconds on _____	3 seconds on <i>(default)</i> _____ Toggle
<input type="checkbox"/>	Contact Closure 2	<i>Specify operation type</i>	1 second on _____ 5 seconds on _____	3 seconds on <i>(default)</i> _____ Toggle
<input type="checkbox"/>	Call Reporting (SMDR)	<i>Specify operation type</i>	Report type: Report all calls or outgoing calls only? Output format: How many digits should appear (up to 24)? Talk time: Should the duration of each call appear?	
<input type="checkbox"/>	Loudspeaker paging		Number of zones:	

Specify the Line or Extension that the equipment is connected to:

AUXILIARY EQUIPMENT	LINE #	DEDICATED YES/NO	EXTENSION #	HUNT GROUP	PRIVACY ON/OFF

Form D: Instructions for Auxiliary Equipment

NOTE ► The following settings may be useful for auxiliary equipment: For a dedicated line (such as a Fax line, see Form B), assign the line to the equipment extension and remove it from other extensions. To prevent other extensions from interrupting calls, write “A” (Assigned) in the Automatic Extension Privacy (#304) column. In general, do not assign auxiliary equipment extensions to a Pickup Group, Calling Group, Hunt Group, or Night Service Group.

If DXD is checked, specify the following: Direct Extension Dial Delay (#112)-By default, a call rings 2 times before it is answered by the system. Write number (0-9) if different from default _____. Direct Extension Dial Record/Playback (I 892)-message of up to 48 seconds that caller hears when call is answered with the Direct Extension Dial feature. Write message below and record from extension 10 or 11: **DXD:** (PARTNER ACS R2.0 or later only)

If ASA is checked, specify the following: Automatic System Answer Delay (#110)-By default, a call rings 2 times before it is answered by the system. Write number (0-9) if different from default _____. Automatic System Answer Mode (#121)-By default, ASA calls are put on hold after the greeting plays. Check if calls should continue to ring or be disconnected: Ring Disconnect ASA Record/Playback (I 891)-message of up to 65 seconds that caller hears when the call is answered by the Automatic System Answer feature. Write message below and record from extension 10 or 11:

Description of each equipment with default settings and recommended program options.

Battery Backup: This is required in some countries because power can be lost several times a day. It is not typically used in the United States.

UPS: Uninterruptible Power Supply. Used as protection in the event of occasional power losses.

Form E—System Configuration: Default Settings

For many features, your PARTNER system is pre-programmed with a default setting. In the table below, either confirm the default setting (see backside of page for details on these) or write in the preferred setting.

1. How many lines are assigned to each extension?	Lines 31 (R4)
2. If you wish to use a password for Night Service and dialing restrictions, write the 4-digit password.	
3. While a call is being transferred which of the following would you like the caller to hear? Circle one.	Ringin g Silence Music
4. How many times should a transferred call ring before it is sent to the transfer return extension?	Transfer Return Rings: _____
5. Would you prefer that the music-on-hold jack be activated or de-activated?	
6. The PARTNER system will automatically calculate daylight savings, unless you specify NO.	YES: _____ NO: _____
7. If any of your lines will not be "Touch-Tone" lines, write in the telephone number of each rotary line?	Rotary Lines:
8. If any of your lines will be pooled together, circle POOL. Otherwise, if all your lines will operate independently circle KEY. <i>If you circled POOL, see Form F5 for more details.</i>	KEY POOL

Form E: Instructions for System Configuration: Default Settings

QUESTION 1: LINES PER EXTENSION:

For the PARTNER ACS processor or 308EC module, the default setting assigns 3 lines to each extension.

For the 206 module, the default setting assigns 2 lines to each extension.

For the 400 module, the default setting assigns 4 lines to each extension.

For the 1600 DSL module, the default setting assigns 31 lines to each extension (R4).

For the 012E module, the default setting assigns 0 lines to each extension (R5).

QUESTION 2: SYSTEM PASSWORD:

The default setting is "No Password." If a password is desired, this password will be required to override dialing restrictions and to turn Night Service on and off.

QUESTION 4: RINGS BEFORE THE TRANSFER RETURNS:

By default, a transferred call rings 4 times before it goes to the transfer return extension. If preferred setting is different than 4, write in the preferred number of rings. (Options are 1 through 9).

QUESTION 8: POOL VS. KEY

Most PARTNER customers operate their lines in KEY mode. This mode works well for customers with a minimum number of incoming lines (i.e., less than 5). In Key mode, the selected lines will show up as distinct buttons on each user's phone. The user can view the buttons to determine which lines are in use, and which are open before initiating a call. In HYBRID mode, some of the lines are pooled together. This pooling is transparent to the user. For instance if 3 lines are pooled under the company's main number, up to 3 users can select the button marked with that number before the pool is busy. This mode is appropriate for companies requiring a lot of lines.

If you wrote POOL in this box, see Form F5. Pooling is only available for PARTNER ACS R2.0 or later. By default, the system is configured for KEY mode.

Forms F1-F5: System Configuration: Lists

In this form, you need to create five different tables. One for each of the following:

- System Speed Dial
- Disallowed and Allowed Lists
- Hunt Groups
- Forced Account Code
- Customized Extensions/Pool Access Restrictions

Form F1—System Speed Dial

Optional for PARTNER Advanced Communications System. For additional instructions, see next page.

To Dial: On system phones, press **Feature** + 3–digit code. On standard phones, press **#** + 3–digit code while receiving intercom dial tone.

Code	Name/Company	* ¹	Telephone No. ²
600			
601			
602			
603			
604			
605			
606			
607			
608			
609			
610			
611			
612			
613			
614			
615			
616			
617			
618			
619			
620			
621			
622			
623			
624			
625			
626			
627			
628			
629			
630			
631			
632			
633			

Code	Name/Company	* ¹	Telephone No. ²
634			
635			
636			
637			
638			
639			
640			
641			
642			
643			
644			
645			
646			
647			
648			
649			
650			
651			
652			
653			
654			
655			
656			
657			
658			
659			
660			
661			
662			
663			
664			
665			
666			
667			

Code	Name/Company	* ¹	Telephone No. ²
668			
669			
670			
671			
672			
673			
674			
675			
676			
677			
678			
679			
680			
681			
682			
683			
684			
685			
686			
687			
688			
689			
690			
691			
692			
693			
694			
695			
696			
697			
698			
699			

1. You can dial System Speed Dial numbers that are marked with * at any time, regardless of dialing restrictions placed on your extension. System Speed Dial numbers are programmed by the System Manager (report problems and suggested revisions to your System Manager).
2. Telephone number can be up to 28 digits, including 0–9, *, #, and special dialing functions.

Form F1: System Speed Dial Supplemental Instructions

With System Speed Dialing, a user can dial a stored number by pressing four buttons: the **Feature** button (# on a standard phone) followed by a 3-digit code. Storing a telephone number as a Speed Dial number lets users dial more quickly. Other kinds of numbers—such as account codes and other dialing sequences—also can be stored as Speed Dial numbers.

The system allows up to 100 System Speed Dial numbers that everyone on the system can use, as well as up to 20 Personal Speed Dial numbers for each extension (for the personal use of the extension user).

Please have the System Speed Dial Numbers form filled out when the technician arrives to install the system. After installation, photocopy this form and distribute a copy to everyone using the system. Users should keep this form near their phones for reference when placing calls.

General Guidelines

Each System Speed Dial number is assigned a 3-digit code from 600-699.

For example, suppose employees frequently call Acme Supplies and Acme's telephone number is stored for code 620. To call Acme, a user simply dials **Feature** **6** **2** **0**. If Acme moves, or the phone number changes, program the new telephone number and users still dial **Feature** **6** **2** **0** to reach Acme.

Record the following information for each System Speed Dial number:

Name/Company

Write the name of the person or company to which the number belongs. For other types of numbers, such as account codes, enter a description of the number.

* Column (Marked System Speed Dial Numbers)

If users should be able to call a particular System Speed Dial number, regardless of any dialing restrictions placed on their extensions, "mark" the number so it can be dialed at all times. Mark the number by placing a check mark in this column, and by pressing * before the number when storing it.

For marked numbers, the stored number does not appear on a display phone when a user dials the Speed Dial code. Account codes cannot be marked.

Telephone Number

Write the number exactly as it should be dialed. Numbers can be up to 28 digits, including the digits 0–9, *, #, and the special dialing functions discussed next. To store a telephone number, include the dial-out code, toll-call prefix, and area code (if needed), along with the number.

Form F2a—Disallowed Lists

Disallowed Phone Number Lists (#404)															
Required only if Disallowed List Assignment (#405) is specified on Form F5.															
Write the telephone numbers that users are prevented from dialing.															
List 1		List 2		List 3		List 4		List 5		List 6		List 7		List 8	
Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹
01		01		01		01		01		01		01		01	
02		02		02		02		02		02		02		02	
03		03		03		03		03		03		03		03	
04		04		04		04		04		04		04		04	
05		05		05		05		05		05		05		05	
06		06		06		06		06		06		06		06	
07		07		07		07		07		07		07		07	
08		08		08		08		08		08		08		08	
09		09		09		09		09		09		09		09	
10		10		10		10		10		10		10		10	

1. Telephone Number can be up to 12 characters, including 0–9, * and #. Write! for wildcard (press Hold to program).

Form F2b—Allowed Lists

Allowed Phone Number Lists (#407) Required only if Allowed List Assignment (#408) is specified on Form F5. Write the telephone numbers that users can dial regardless of assigned restrictions.															
List 1		List 2		List 3		List 4		List 5		List 6		List 7		List 8	
Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹	Entry	Telephone No. ¹
01															
02															
03															
04															
05															
06															
07															
08															
08															
10															

1. Telephone Number can be up to 12 characters, including 0–9, * and #. Write! for wildcard (press Hold to program).

Form F2a & F2b: Instructions for Creating Disallowed and Allowed Lists

Use this form to specify lists of Disallowed and Allowed telephone numbers.

You can create up to 8 lists each of Disallowed and Allowed telephone numbers. Each list can have up to 10 numbers.

1. Under the List number, write a name for the list (for example, “Suppliers”).
2. In the “Telephone No.” column, write the entries for the list. You can specify complete telephone numbers or categories of numbers.
 - To specify a complete number, write it exactly as it would be dialed, including (if needed) a dial-out code, toll-call prefix, and area code.
 - To specify a category, provide one or more entries to describe an entire class of calls (such as an area code or local exchange). Preventing calls to a category may require more than one entry, to allow for different ways of dialing a number (see “Examples of Disallowed List Entries” below).

After a list has been created, it can be assigned to an extension (see Form C).

Disallowed Phone Number Lists (#404)

With Disallowed lists, you can prevent users from dialing specific telephone numbers or categories (for example, calls to 976 exchanges for pre-recorded messages such as horoscopes, and calls to 900 area code “chat lines”).

Examples of Disallowed List Entries:

- Preventing Calls to 976 Exchange Numbers
- Preventing Calls to 900 Area Code
- Preventing International (011) Calls
- Preventing Use of a Specific Local Telephone Company Feature Consisting of a * and Two or Three Digits.

Allowed Phone Number Lists (#407)

Allowed telephone numbers are exceptions to restrictions. For example, you might put 976 numbers on a Disallowed list, but allow dialing of 976-1212 for weather reports. Or you might restrict an extension to local dialing only, but assign an Allowed List to permit the user to call specific customers or suppliers.

Form F3—Hunt Groups

Hunt Group Extensions (#505)								
Assign Extensions to Hunt Groups								
Ext. Jack No.	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7 (Voice Mail)	Group 8 (Fax Detection)
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								

Hunt Group Extensions (#505)								
Assign Extensions to Hunt Groups								
Ext. Jack No.	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7 (Voice Mail)	Group 8 (Fax Detection)
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								

Form F3: Instructions for Identifying Hunt Group Assignments

To assign extensions to any of the following groups (each extension can be in one or more groups), write the group number or place a check mark in the appropriate columns.

Hunt Group Extensions 1–6 (#505)

Calls can ring or be transferred to the first non-busy extension in a Hunt Group. A call rings at an extension in a Hunt Group three times; if it is not answered, it hunts to the next non-busy extension, continuing until someone answers or the caller hangs up. (If you voice signal a Hunt Group, only the first extension is signaled; the call does not keep hunting if there is no answer.) Incoming calls on specific lines can be directed to a Hunt Group using Group Call Distribution (#206). Do not put PARTNER Messaging, PARTNER MAIL, or PARTNER MAIL VS extensions in Hunt Groups 1–6.

VMS Only (Hunt Group 7)

For extensions where PARTNER Messaging, PARTNER MAIL, or PARTNER MAIL VS is connected, check this box to assign the extension to Hunt Group 7. For PARTNER Voice Messaging, extensions 78 and 79 need to be assigned to Hunt Group 7. The system recognizes any extensions assigned to Hunt Group 7 as Voice Mail Service (VMS—PARTNER Messaging, PARTNER MAIL, PARTNER MAIL VS, or PARTNER Voice Messaging) extensions. Do not assign any extensions other than VMS extensions to Hunt Group 7. Also, do not assign PARTNER Messaging, PARTNER MAIL, PARTNER MAIL VS, or PARTNER Voice Messaging extensions to any other Hunt Groups, to any Calling or Pickup Groups, or to the Night Service Group.

Fax Only (Hunt Group 8)

Hunt Group 8 is used only for fax detection and transfer. Do not assign any extension other than fax extension to Hunt Group 8.

Form F4—Forced Account Code

Forced Account Code List (#409)																								
Entry	Account Code (up to 6 digits) ¹						Write Description	Entry	Account Code (up to 6 digits) ¹						Write Description									
01								34								67								
02								35									68							
03								36									69							
04								37									70							
05								38									71							
06								39									72							
07								40									73							
08								41									74							
09								42									75							
10								43									76							
11								44									77							
12								45									78							
13								46									79							
14								47									80							
15								48									81							
16								49									82							
17								50									83							
18								51									84							
19								52									85							
20								53									86							
21								54									87							
22								55									88							
23								56									89							
24								57									90							
25								58									91							
26								59									92							
27								60									93							
28								61									94							
29								62									95							
30								63									96							
31								64									97							
32								65									98							
33								66									99							

1. Valid entries are 0–9; Write! for wildcard (press Hold to program).

Form F4: Instructions for Forced Account Codes

Forced Account Code List (#409)

If an extension has been designated for Forced Account Code Entry (#307) on Form F4, the user must dial an account code before an outside telephone number can be dialed. Account codes, each up to 16 digits in length, can be used to associate telephone calls with a particular department or client. Account codes print on SMDR call reports and on reports generated by call accounting packages.

If Forced Account Code Verification is desired, entries must be made in the Forced Account Code List (#409). When the system verifies an account code, it compares only the first six digits of the user-entered account code to the entries in the Forced Account Code List. For a match to be successful, the user must dial at least the account code's associated list entry, even though the user can dial up to 16 digits for an account code. Wildcard entries are allowed on this list.

(R3.0 or later only) Users can dial "911" without entering an account code.

Form F5—Customized Extensions/Pool Access Restrictions

Ext. Jack No.	Identify Extension Settings if different from default										Identify Line Ringing (CTP) Option if different from default				Identify Restrictions/Permissions if different from default					Identify Group Assignments								
	Display Language (#303)	Auto Exit Privacy (#304)	Abbreviated Ringing (#305)	Forced Acct. Code Entry (#307)	Distinctive Ringing (#308)	Automatic VMS Cover (#310)	Voice Interrupt on Busy (#312)	Call Coverage Rings (#320)	VMS Cover Rings (#321)	Line Access Mode (#313)	Hybrid Mode Only List Individual lines (#301) for Pooled Extensions	Immediate ✓ lines	Delayed	No Ring ✓ pools	Line/Pool3 Not Assigned	OUT only	IN only	NO Access	NR ✓	1 - 8 NA ✓	1 - 8	1 - 4	1 - 4	1 - 6	7	8	Night Service Group Extensions (#504)	
	E ✓	NA ✓	A ✓	NA ✓	A ✓	NA ✓	NA ✓	2 ✓	3 ✓	P ✓	NA ✓																	
10										K	ALL																	
11																												
12																												
13																												
14																												
15																												
16																												
17																												
18																												
19																												
20																												
21																												
22																												
23																												
24																												
25																												
26																												
27																												
28																												
29																												
30																												
31																												
32																												
33																												

Form F5—Customized Extensions/Pool Access Restrictions (Continued)

Ext. Jack No.	Identify Extension Settings if different from default											Identify Line Ringing (CTP) Option if different from default				Identify Restrictions/Permissions if different from default					Identify Group Assignments													
	Display Language (#303)	Auto Exit Privacy (#304)	Abbreviated Ringing (#305)	Forced Acct. Code Entry (#307)	Distinctive Ringing (#308)	Automatic VMS Cover (#310)	Voice Interrupt on Busy (#312)	Call Coverage Rings (#320)	VMS Cover Rings (#321)	Line Access Mode (#313)	Hybrid Mode Only List Individual lines (#301) for Pooled Extensions	Write line numbers or pool access codes in each column to show desired Line Ringing options.				Write line numbers or pool access codes for Line Access Restriction (#302) or Pool Access Restriction (#315)																		
	E ✓	NA ✓	A ✓	NA ✓	A ✓	NA ✓	NA ✓	2 ✓	3 ✓	P ✓	NA ✓	Immediate ✓ lines	Delayed	No Ring ✓ pools	Line/Pools3 Not Assigned	OUT only	IN only	NO Access	NR ✓	1 - 8	1 - 8	1 - 4	1 - 4	1 - 6	7	8								
34																																		
35																																		
36																																		
37																																		
38																																		
39																																		
40																																		
41																																		
42																																		
43																																		
44																																		
45																																		
46																																		
47																																		
48																																		
49																																		
50																																		
51																																		
52																																		
53																																		
54																																		
55																																		
56																																		
57																																		
78																																		
79																																		

Form F5: Instructions for Pool Access Restrictions

Pool Access Restriction (#315)

By default, access to all lines and pools is set to No Restriction. To change the default, write the line numbers or pool access codes in the appropriate columns, as follows:

Outgoing only—User can place outside calls and receive only transferred calls on specified line or pool.

Incoming only—User cannot place outside calls but can receive calls on specified line or pool.

No Access—User cannot place or receive outside calls on specified line or pool (but can receive transferred calls, pick up calls on hold, or join calls in Key mode and on key extensions in Hybrid mode).

NOTE: Pool Access Restriction for key extensions in Hybrid mode is set to No Access. Pooling and Hybrid mode are available only if you are using PARTNER ACS R2.0 or later.

Outgoing Call Restriction (#401)

Write “IN” or “LOC” to indicate restrictions for all outgoing calls on all lines at that extension, as follows:

IN—User can make only intercom calls to other system extensions.

LOC—User can make only intercom and local outside calls (no calls that require a “0” or “1” prefix).

Any available outside lines can still be used to dial numbers on an Allowed Phone Number List assigned to the extension, numbers on the Emergency Phone Number List, or Marked System Speed Dial numbers.

PARTNER® ACS 1600 DSL Module Planning Checklist

Use this job aid to help you collect, organize and record the settings necessary for a PARTNER installation that includes the 1600 DSL module. Always double-check this data before allowing this document to be used to program the module.

- NOTES** ▶
- There is a worksheet at the end of this document that you can use for settings that will not fit in the table.
 - All sample IP addresses used are in the private domain. In most cases, public addresses are required.

Customer: _____	Phone: _____	Email: _____
Contact: _____	Phone: _____	Email: _____
Sales person: _____	Phone: _____	Email: _____
Installer: _____	Phone: _____	Email: _____
ISP contact: _____	Phone: _____	Email: _____
SDSL contact: _____	Phone: _____	Email: _____
SDSL tech support contact: _____	Phone: _____	Email: _____

Required Information	Notes	Sample values	Enter values for current installation
1. SDSL settings			
SDSL activation date ¹	When service will be available at the customer site. NOTE: The SDSL provider should verify SDSL signal at the customer demarcation point.	4-10-01 AM	
Voice Gateway ¹	The manufacturer connecting the SDSL calls to the PSTN.	Lucent PathStar, Copper Com, Jetstream, Tollbridge	
Jitter delay ¹	In most cases, the defaults for this setting are appropriate. If voice quality is poor, use the sample values shown.	Frame Relay = 17msec; ATM = 6msec	
DSLAM ¹	The manufacturer of the SDSL voice and data stream multiplexer.	Lucent Stinger, Copper Mountain	
Datalink protocol ¹	The transport protocol: ATM or Frame Relay.	ATM, Frame Relay	

1. Obtained from SDSL provider
2. Obtained from ISP
3. Obtained from customer/LAN VAR

Required Information	Notes	Sample values	Enter values for current installation
2. Custom DSLAM settings	<i>If your SDSL provider uses a DSLAM not included on the list at right, you must obtain and program the information in this section to complete the configuration.</i>	Lucent Stinger Nokia Copper Mountain Paradyne AccessLan	
Set SDSL speed automatically ¹	<i>Allows the 1600 DSL to automatically match the current SDSL speed. Always try the highest speed first.</i>	Set SDSL Speed to Auto Cycle (Nokia) ; Set SDSL Speed to Auto Sense (Copper Mountain) ; SDSL Sync Delay (Lucent)	
Conexant AutoBaud Mode ¹	<i>Certain DSLAMs use this mode to negotiate line speed.</i>	Enable/Disable	
Manual SDSL speed ¹	<i>The static data rate for the SDSL line.</i>	A value divisible by 8 Kb between 144 Kbps and 2320 Kbps	
Set Data to FRAMED mode (Nokia) ¹	<i>Leave at default value (Y) unless instructed otherwise by the service provider.</i>	Y or N	
SDSL Interface Mode (Bit Order) ¹	<i>Copper Mountain DSLAM uses "Magnitude, Sign." All others use "Sign, Magnitude."</i>	"Magnitude, Sign"; "Sign, Magnitude"	
3. Frame Relay PVC settings	<i>Obtain these permanent virtual circuit settings if your SDSL provider uses the Frame Relay protocol. Remember that separate PVC settings are required for the voice and data connections.</i>		
DLCI number ¹	<i>Identifies the logical channel established over the Frame Relay/SDSL connection. There is one DLCI for data and one for voice. The SDSL provider should give you two numbers.</i>	45, 46	Voice:
			Data:
Encapsulation ¹	<i>The manner in which headers are assigned to packets. Differentiates between voice calls and data.</i>	Proprietary Voice DLCI, RFC 1490	Voice:
			Data:

1. Obtained from SDSL provider

2. Obtained from ISP

3. Obtained from customer/LAN VAR

Required Information	Notes	Sample values	Enter values for current installation
Transmit/Receive CIR ¹	<p>The Committed Information Rate (CIR) to and from the provider. Default values may be used unless instructed by provider. Value should be the same for both voice and data PVCs.</p> <p>There are three values associated with CIR:</p> <ul style="list-style-type: none"> Committed Burst Size (Bc) Circuit throughput Excess Burst Size (Be) <p>Leave each of these settings at default values unless instructed otherwise by the service provider.</p>		
FRF.12 End-to-End Fragmentation ¹	Leave this setting at the default value unless instructed otherwise by the service provider.	Enabled or Disabled	Voice:
			Data:
Fragment Size ¹	Leave this setting at the default value unless instructed otherwise by the service provider.	100 - 1600	Voice:
			Data:
4. ATM PVC Settings	Obtain these permanent virtual circuit settings if your SDSL provider uses the ATM protocol. Remember that separate PVC settings are required for the voice and data connections.		
VPI ¹	Unique Virtual Port Identifier value assigned to each ATM connection	32, 33	Voice:
			Data:
VCI ¹	Unique Virtual Circuit Identifier value assigned to each ATM connection.	34, 35	Voice:
			Data:
Encapsulation ¹	The manner in which headers are assigned to packets. Differentiates between voice calls and data. This does not default automatically. It must be set manually.	Proprietary Voice, RFC 1483	Voice: Proprietary Voice
			Data: RFC 1483
Service Category ¹	The manner in which bits are handled in the PVC. Differentiates between voice calls and data. Defaults automatically to UBR for PVCs using proprietary voice encapsulation.	CBR, UBR	Voice: CBR
			Data: UBR

1. Obtained from SDSL provider

2. Obtained from ISP

3. Obtained from customer/LAN VAR

Required Information	Notes	Sample values	Enter values for current installation
5. VoIP settings	<i>Obtain these settings if your SDSL provider uses VoIP with the Lucent PathStar or other VoIP voice gateway. These settings are in addition to the required ATM or Frame Relay settings.</i>		
IP address of Notified Entity ¹	<i>IP address of the VoIP gateway</i>	192.168.32.2	
IP address for MGCP signaling ¹	<i>Media Gateway Control Protocol. This is the IP address of the voice PVC on the 1600 DSL; used for signal control.</i>	192.168.32.3	
TOS byte value ¹	<i>Leave at 7 unless specified by SDSL provider.</i>	1-7	
IP address for RTP signaling ¹	<i>Real Time Protocol. This is also the IP address of the voice PVC on the 1600 DSL; used for controlling the voice PVC.</i>	192.168.32.3	
TOS byte value ¹	<i>Leave at 7 unless specified by SDSL provider.</i>	1-7	
6. IP Router Settings	<i>IP router settings apply to the data PVC only.</i>		
SDSL (WAN) port address ²	<i>The public address that external routers use to find the 1600 DSL module. Select the data PVC when configuring.</i>	192.168.32.40	
WAN port subnet mask ²	<i>Required regardless of transport protocol.</i>	255.255.255.0	
Normal/High priority ²	<i>Sets the priority of the data port; leave at normal for data PVC; set to high if using MGCP voice (VoIP).</i>	Normal/High	
Default route (gateway) IP address ²	<i>IP address of the ISP. The address to which the router sends packets it otherwise does not know how to route.</i> NOTE: <i>The netmask for the default route does not require a manual setting. The netmask is determined automatically.</i>	192.168.32.2	
10/100BaseT Ethernet address ³	<i>Address for the LAN port of the 1600 DSL module.</i>	192.168.32.2	

1. Obtained from SDSL provider

2. Obtained from ISP

3. Obtained from customer/LAN VAR

Required Information	Notes	Sample values	Enter values for current installation
10/100BaseT Ethernet subnet mask ³	<i>Specifies the size of the network to which the LAN port is connected.</i>	255 . 255 . 255 . 0	
User ID ³	<i>Restricts access to the 1600 DSL at the User level. Case-sensitive. Up to 17 alphanumeric characters.</i>	myID	
User password ³	<i>Restricts access to the 1600 DSL at the User level. Case-sensitive. Up to 17 alphanumeric characters.</i>	mypassword	
NetMan password ³	<i>Restricts access to the 1600 DSL at the network manager level (all functions). Case-sensitive. Up to 17 alphanumeric characters.</i>	mypassword	
DHCP ³	<i>Specify whether the DHCP feature of the 1600 DSL should be turned on.</i>	E (to enable); D (to disable)	
Physical Port for DHCP Server (gateway server address) ³	<i>If 1600 DSL module is the DHCP server, enter the IP address of the LAN port.</i>	192 . 168 . 32 . 17	
DHCP Lease time ³	<i>Duration of dynamically assigned IP addresses.</i>	28800 seconds	
DNS server address ²	<i>Optional.</i> NOTE: <i>The netmask for the DNS server does not require a manual setting. The netmask is determined automatically.</i>	192 . 168 . 35 . 1	
High IP Address for range pool (Address pool end address) ³	<i>Last address in a range of dynamically assigned IP addresses.</i>	192 . 168 . 32 . 127	
Low IP Address for range pool (Address pool start address) ³	<i>First address in a range of dynamically assigned IP addresses.</i>	192 . 168 . 32 . 65	
Domain name ³	<i>The name for a manageable group of computers.</i>	xyzcorp.com	

1. Obtained from SDSL provider

2. Obtained from ISP

3. Obtained from customer/LAN VAR

Required Information	Notes	Sample values	Enter values for current installation
Static Binding IP address ³	<i>Links a host to an address using MAC number.</i>	192.168.32.33 00:c0:d5:d4:da:2c	See worksheet (if necessary)
NAT ³	<i>Allows multiple LAN hosts to access the Internet behind one public IP address.</i>	E (to enable); D (to disable)	
7. Packet filtering needs			
Actions to be permitted or denied ³	<i>Enter rules via the IP Filtering Configuration menu.</i>	Permit HTTP, Deny PING	See worksheet (if necessary)
IP-based servers supported by customer ³	<i>Obtain IP addresses for all servers that require external access.</i>	Email 198.168.34.53 Web 198.168.121.13	
8. Routing requirements			
Activate RIP ³	<i>Optional; Only for more complex networks.</i>	Version 1 Broadcast; Version 2 Broadcast; Version 2 Multicast	
Static routing table entries ³	<i>Only used if other routers exist on the network.</i>		See worksheet (if necessary)
9. Bridging settings			
	<i>Bridging is a rare configuration that allows the 1600 DSL to support older, in-place LAN protocols, such as AppleTalk. Bridging directs information by hardware MAC address rather than IP address.</i>		
Bridge Aging Timer ³			
Spanning Tree: Enabled ³			
Spanning Tree: Port Priority ³			
Spanning Tree: Hello Time ³			

1. Obtained from SDSL provider

2. Obtained from ISP

3. Obtained from customer/LAN VAR

Required Information	Notes	Sample values	Enter values for current installation
Spanning Tree: Max Age ³			
Spanning Tree: Forward Delay ³			
Spanning Tree: Path Cost ³			

1. Obtained from SDSL provider
2. Obtained from ISP
3. Obtained from customer/LAN VAR

Appendix A: Security Notification and Checklist

SECURITY NOTIFICATION DOCUMENT AVAYA Inc.

And

I. Introduction

The PARTNER ACS 1600 DSL module adds the ability to make Internet connections to your business. Internet connections pose inherent risks. This notification, and the associated checklist, are intended to help business owners recognize and minimize those risks.

There are three separate areas of concern to be considered: the ability of an unknown internet user to access your data, the need to control access to router configuration tables, and the need to store router configuration values for recovery from a catastrophic failure. Those three areas of concern are addressed in the checklist.

II. Roles and Responsibilities

The purchase of a converged communications system is a complicated process involving many phases including vendor selection, equipment selection, design, ordering, implementation, and systems assurance testing. Throughout each of these phases, customers, manufacturers, and service providers each have specific roles and responsibilities.

As a manufacturer, Avaya Inc. acknowledges the following responsibilities:

- Develop a system that can provide robust barriers against fraudulent entry.
- Provide information to customers and service providers about the default state of various points of entry. When appropriate, these entry points will be defaulted to a secure state.
- Provide clear warnings in product documentation, and address security issues in training classes and training materials.

The service provider must accept the following responsibilities:

- Educate the customer/purchaser on security risks in specific products and applications.
- Educate the customer/purchaser on available methods for minimizing risks, and costs associated with implementing those solutions when appropriate.

- Implement customer applications in a manner that is as secure as possible, or with appropriate warnings to customers who choose to accept less than recommended security.
- Avoid introducing any new risks when providing maintenance or other support.

The customer must accept the following responsibilities:

- Provide the overall data network design. This might be done via expertise on the customer payroll, or might be contracted.
- Decide on the degree of security to be implemented in every application. This includes filtering and other barriers associated with data networking.
- Verify that the system being installed is consistent with your requirements.
- Monitor various components of your data network for abnormal or suspicious operations.

Customer Information:

Company Name: _____

Customer Contact's Name: _____

Customer Contact Signature-Date: _____

Service Provider (Installation) Information:

Company Name: _____

Consultant/Installer Name: _____

Consultant/Installer Signature-Date: _____

PARTNER® ACS 1600 DSL Module – Security Checklist

System Administration	Y/N	N/A	Notes
Router Password changed from default.			
Confirm switch password is secure (covered on another check list).			Provides double security when pass-thru used.

Data Network Access Security	Y/N	N/A	Notes
Need for filters has been reviewed and appropriate work contracted/performed.			The 1600 DSL module, or the Internet Service Provider, might provide filtering.
Need for a firewall application such as "ChoiceNet" has been reviewed and appropriate work contracted/performed.			

Router Configuration Storage	Y/N	N/A	Notes
Router configuration tables have been stored outside the router (a "backup") for recovery from a catastrophic failure. Note location of stored tables in "Notes" at right.			

