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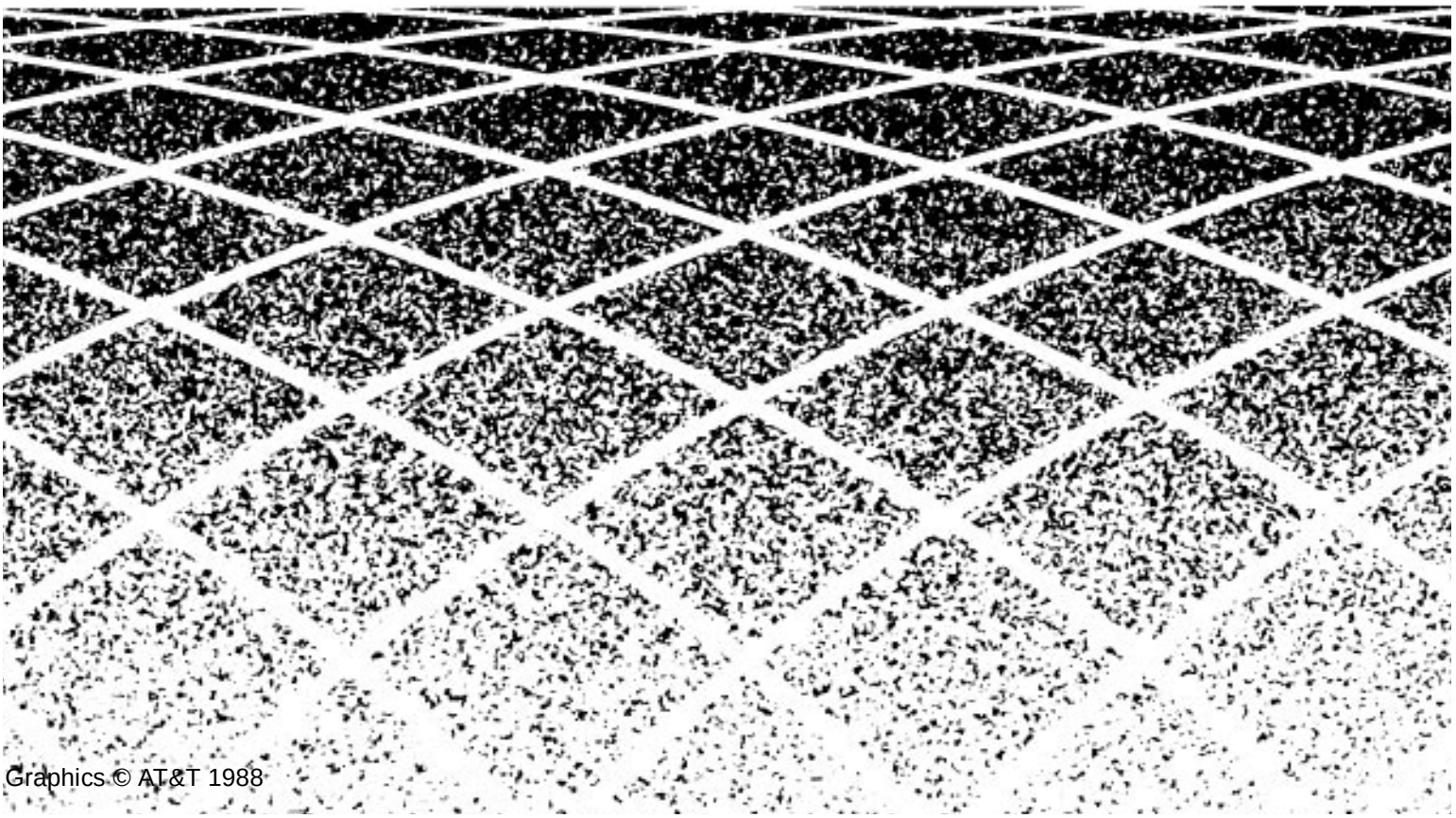
DEFINITY Enterprise Communications Server Generic2 to Release 5 Transistion Reference



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About This Document

Overview

This document is a summary of information needed by Lucent Technologies personnel and customers involved in planning upgrades or migrations from DEFINITY Communications System Generic 2 (G2) to DEFINITY Enterprise Communications Server (ECS) Release 5.

This document focuses primarily on feature differences between G2 and DEFINITY ECS. When a feature that was present in G2 is missing in DEFINITY ECS or is dramatically different, it is addressed. However, there are many feature improvements in DEFINITY ECS and they are not addressed. Refer to DEFINITY ECS documentation for a complete description of features. This document provides information for G2 customers who want to implement DEFINITY ECS in a way that will minimize or take advantage of feature differences.

DEFINITY ECS represents feature/functionality common to both R5r and R5si systems. R5r is a closer match to the capability of G2 and it is used kprimarily as the basis for comparison. Although R5vs is also used in DEFINITY ECS, it is not referred to in this book because of its smaller capability. The specific terms R5r and R5si are still used in Chapter 3 to outline specific system capacities. Any references to DEFINITY ECS, other than capacities, are universally applicable to R5r and R5si.

Organization

This book is divided into the following chapters:

- Chapter 1, "G2 to DEFINITY ECS Transition" — introduces the enhanced features.
- Chapter 2, "G2 to DEFINITY ECS Feature Differences" — provides detailed information on differences between these two systems.
- Chapter 3, "Capacity Comparisons" — provides a table comparison of capacities for G2.1, G2.2, R5r, and R5si.
- Appendix A, "References" — provides a complete list of DEFINITY ECS documentation.
- Index — provides both G2 and DEFINITY ECS keywords, to help you find what you need.

Trademarks

This document contains references to the following Lucent Technologies trademarked products:

- ACCUNET®
- AUDIX®
- Callmaster™
- CallVisor™
- CONVERSANT®
- DEFINITY®
- Forum™
- MEGACOM®
- SYSTIMAX®
- TELESEER®
- TRANSTALK™

The following products are trademarked by their appropriate vendor:

- Audichron® is a registered trademark of Audichron Company
- Music Mate® is a registered trademark of Harris Corporation
- PagePac® is a registered trademark of Harris Corporation, Dracon Division
- Zone Mate® is a registered trademark of Harris Corporation

References

DEFINITY Enterprise Communications Server G2 to Release 5 Transition Reference is meant to be used in conjunction with a number of other documents. Please refer to them for detailed information about DEFINITY ECS features and implementation requirements. These references include:

- *DEFINITY Enterprise Communications Server Release 5 Feature Description,* Issue 1, 555-230-301
- *DEFINITY Enterprise Communications Server Release 5 Implementation,* Issue 1, 555-230-302
- *DEFINITY Enterprise Communications Server Release 5 for R5r Upgrades and Additions,* Issue 1, 555-230-121
- *DEFINITY Enterprise Communications Server Release 5 for R5vs/si Upgrades and Additions,* Issue 1, 555-230-120

The first two documents are essential to understanding the DEFINITY ECS features themselves and how to implement them for your company. The last two documents are needed by Lucent Technologies personnel as they plan the upgrade/migration and do the physical upgrade on site.A complete listing of DEFINITY ECS documentation is found in Appendix A.

How to Comment on This Book

We are interested in your suggestions for improving this book. Please complete and return the reader comment card that is located behind the title page.

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You may also fax your comments to the attention of the writing team at (303) 538-1741.

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G2 to DEFINITY ECS Transition

1

Enhanced Features

The following pages list DEFINITY ECS enhancements to features that existed with G2.

Abbreviated Dialing

- Programming of group lists by designated users
- Increased length for personal, group and system lists
- Alternative list numbering option for Group Number and System Number lists
- Automatic Dialing buttons with direct access to designated number that is not stored on an Abbreviated Dialing list

Abbreviated Dialing (Enhanced)

- Option of three or four digit list entry numbers
- Increased capacities

Agent Call Handling

- Forced Multiple Call Handling

Attendant Display

- Administration of Call Type button to display type of active call

Attendant Priority Queue

- Assignment of priority by call type within priority queue categories

Automatic Alternate Routing

- Increased AAR/ARS dialed digit string maximum length to 28

Automatic Call Distribution

- Forced Multiple Call Handling is available
- Increased capacities
- After Call Work buttons

Automatic Route Selection

- Increased digits deleted for AAR/ARS to 28
- Increased digits inserted for AAR/ARS to 36

Bridged Call Appearance

- Abbreviated and Delayed Ringing
- Station can be administered with only bridged appearances.
- Message lamp and certain feature buttons can be administered to apply to a specified extension rather than the extension of the terminal they reside on.
- Option that prohibits bridged terminals from bridging on to a call when the call has Data Privacy or Data Restriction enabled
- Call can appear at a terminal as both a bridged and a redirected call
- Analog terminal can have a single bridged appearance of a multi-appearance voice terminal primary call appearance
- New interactions with Conference, Facility Busy Indication, and Transfer

Call Coverage

- Increased number of coverage paths
- Increased number of coverage points in a path
- Time of day call coverage

Call Detail Recording

- Call duration can be reported in hours/minutes/seconds with no truncation to tenths of minutes
- Feat-flag bit can be administered to reflect whether an outgoing ISDN call was reported as interworked by the network
- Adds incoming ring interval duration field

Call Forwarding All Calls

- Call Forwarding override
- List Call Forwarding command
- Call Forwarding Busy/Don't Answer

Call Management System (CMS)

- See the CentreVu™ Call Management System (CMS) documentation.

Call Vectoring

- Ability to add and delete vector steps on the switch
- Route-to number with coverage
- Addition of the i-silent keyword to the *wait-time* command
- Vector initiated Service Observing
- Call prompting and passing prompting digits to CMS
- Passing ANI to CMS for inclusion in the CMS call record
- Specifying a priority level with the oldest-call-wait conditional
- Enhanced comparators (<>, >=, and <=) with the *goto* and *route-to* commands as well as use of "none" as an entry for digits checking, and "active" or "latest" VDN thresholds for indirect VDN references
- Use of wildcards in digit strings for matching on collected digits and ANI or II-digits
- Vector Routing Tables
- Multiple Audio/Music Sources for use with the *wait-time* command
- Rolling Average Speed of Answer (ASA), Expected Wait Time (EWT), VDN Calls, ANI, and II-Digits Routing
- Sending DTMF tones to a Voice Response Unit

CallVisor Adjunct/Switch Application Interface (ASAI)

- Retrieve Internally Measured Data used to provide VuStats information to terminals
- Send DTMF Signals
- Flexible Billing
- Redirect Call
- ASAI-Associated Integrated Directory Database Service
- Enhanced Event Reports
- New transport option, ASAI-Ethernet

Expert Agent Selection

- Skill levels for agents - up to 20 skills/agent
- Logical agent
- Direct agent calling
- Message Waiting Lamp by default tracks messages waiting for EAS agent LoginID but can be administered to track messages for physical terminal.
- When talking to an agent, inspect button can be used to display name of the physical terminal where the EAS agent is logged in

Facility Test Calls

- Logoff Notification to notify system administrator that Facility Test Calls is still enabled

Hunt Groups

- Increased number of hunt groups and number of group members per system

Move Agent from CMS

- Can change agents' split or skill assignments while agents are logged in
- Can add, delete or move one skill simultaneously (with EAS) for a group of up to 32 agents

Multiple Call Handling

- Forced Multiple Call Handling, which forces an agent to be interrupted with an additional ACD call from a split or skill

QSIG Global Networking

- Establishes QSIG Basic Call and QSIG Basic Supplementary Services
- Adds Name and Number Identification, Call Forwarding (Diversion), and Call Transfer supplementary services

Recent Change History

- Recent Change History Report lists each time a user logs in or off the system

Recorded Announcement

- Multiple Integrated Announcement boards can be installed.
- External lineside T1 (DS1) connected announcements can be installed.
- Additional commands to reflect time used., etc.

Remote Access

- Logoff Notification to alert system administrator that Remote Access is still enabled
- Status remote-access command displays status of feature and of remote access barrier codes

Service Observing

- Vector initiated service observing
- Remote service observing of multiple calls

G2 to DEFINITY ECS Feature Differences

2

Introduction

This chapter contains detailed information on feature differences between DEFINITY Communications System Generic 2 (G2) and DEFINITY Enterprise Communications Server (ECS) Release 5, what can be done to minimize any feature differences, and the implications for telephone end-users.

This chapter is divided into several separate sections:

- The first side-by-side table lists some of the general differences that are seen by *end-users* that are somewhat universal and may not fit into individual features.
- The second side-by-side table lists some of the general differences that are seen by *system administrators* that are system-wide and not oriented to specific features.
- Feature-by-feature pages detail G2/DEFINITY ECS operational and administrative differences, administrative workarounds to minimize feature differences, and end-user implications. Some features have been grouped together, such as attendant features and security features. This section contains cross references and is based on the alphabetical features described in the *Definity Communications System G2 Features Description,* but the description, where appropriate, is of the corresponding DEFINITY ECS feature. Check the Index if you cannot find the information you need.

Remember that you must have a complete set of DEFINITY ECS documentation on hand. Refer to specific documents from the standard DEFINITY ECS set for more information on precisely how DEFINITY ECS works. The complete DEFINITY ECS documentation set is listed in Appendix A, ‘‘References’’.

General End-User Feature Differences

The following general operation differences pertain to end-users who have moved from Generic 2 to DEFINITY ECS:

G2	DEFINITY ECS
Checking Your Own Line Can dial your own telephone internally or by going outside and back in on an outside line.	Cannot dial your own telephone internally to check operation; call gets routed immediately to coverage if you have coverage. If you don't have coverage, you get a busy tone.
G2 Automatic-Drop Vs. DEFINITY ECS Automatic-Hold G2 automatically drops previous call appearances as you move to the next call, unless you deliberately place the call on hold. For example, if you place a call after activating a call appearance and a second call appearance rings, you can press it, automatically dropping the call you were making on the first line appearance. To avoid Automatic-Drop, use the HOLD button to place the first call on hold before moving to the second call appearance.	The DEFINITY ECS default works the same as G2 for stations (and for attendants) — calls are automatically dropped when moving between call appearances.
Redirection Notification When calls are redirected due to the activation of Call Forwarding, there is always a redirection notification (ring-ping) to indicate a call has come in and is being redirected; redirection notification is optional per Class of Service for calls redirected via Call Coverage and Send All Calls.	DEFINITY ECS default works the same as G2. When calls are redirected via Call Coverage, Send All Calls, or Call Forwarding, redirection notification (ring-ping) can be administered (on a per station basis) to indicate that a call has come in and is being sent to coverage. The default is to enable the ring-ping for redirected calls. If this is not administered to match G2 functionality, you will notice a difference.

Continued on next page

G2	DEFINITY ECS
When User Busy When a user is busy on another line, incoming calls ring until they go to coverage.	DEFINITY ECS can be optioned to work the same as G2 for DCP stations. This is administrable on a per station basis. When a user is busy on another line, an incoming call rings only once and then the line appearance flashes until the call goes to coverage. The incoming call can be answered when ringing or flashing. This is optional, based on Active Station Ringing settings. Alerting options have been added.
Automatic Incoming Call Display When a display set user is busy on another line and another call comes in, the called party must press the Inspect button to see who is calling.	When a display set user is busy on another line and another call comes in, the calling party is automatically displayed for 30 seconds before redisplaying the information associated with the currently active call.
Inspecting the Contents of a Button While a G2 user is on-hook, the user can inspect the contents of an Abbreviated Dial button or a Last Number Dialed Button by pressing the button.	The Stored Number button is used to view the contents of an Abbreviated Dial button or Last Number Dialed button.
Breaking Dial Tone Dial tone is broken as soon as user begins dialing the first digit.	There may be a delay in breaking the dial tone when user begins dialing a number.
Automatic Callback Automatic Callback works only when the called party is busy.	Automatic Callback works both when the called party is busy or doesn't answer.

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G2	DEFINITY ECS
Call Appearances/Primary Extensions	
Can have two multi-appearance voice terminals with the same extension (and only this extension).	This can be accomplished using bridging. Administer the second station with Zero Call Appearances of another extension (that will never be listed or used) and bridge the first station's extension onto the second station.
Can have many primary extensions assigned to one station. Often executives will have one published number and one private number for use by family, both primary extensions.	Cannot have two primary extensions assigned to one station. Administration without Hardware can be used to workaround this difference. Assign a dummy station with an X in the equipment location field as the private extension and bridge that extension onto the executive's station.
Called Party Display	
If a G2 switch prior to G2.2 is in a DCS network, the called party identification is not displayed. However, when the call is from or to a G2.2 switch or the DCS DCIU link tandems through a G2.2 or R5r switch endpoint, the called party identification is displayed. No called party is displayed if the endpoint is a System 85 or G2.1.	If there are only R5r switches in a DCS network, the called party is always displayed.
Manual Signaling	
A single manual signaling button may signal a preselected station OR a group of stations.	Each manual signaling button may signal only one other station.
Data Hot Line/Default Dialing	
The Data Hot Line and Default Dialing features are implemented using the Automatic Dialing feature.	These options use numbers in the Abbreviated Dialing lists; there is a potential impact because of the lower capacity for Abbreviated Dial list entries in DEFINITY ECS. For most customers, however, this will not be a problem and the G2 functionality can be matched in DEFINITY ECS.

Continued on next page

G2	DEFINITY ECS
Terminal Alarming	
Supports Terminal Alarming.	There is no equivalent to this feature.
Accessing Individual Attendants	
Users access individual attendants using a FAC followed by the individual attendant number.	Users access individual attendants using an extension number.

General System-Wide Differences

The following is a list of general operation-approaches or architectural differences that may or may not be seen by end-users, but should be identified for administrators.

G2	DEFINITY ECS
Stations/Extensions/Equipment Locations G2 sees stations as equipment locations. Once you have an equipment location with a station definition, extensions can be assigned at will — multiple extensions can be "home" on that station and each extension can be assigned to any 2-lamp button on that station.	DEFINITY ECS sees stations as extensions. An appearance of the primary extension is usually assigned to the first 2-lamp button on that station and the station is then identified by that extension. In DEFINITY ECS, each phone must have its own unique extension. However, a phone does not need to have any appearances of its own extension (i.e., “Call-Appr” button), and instead can be administered only to have bridged appearances of a different extension
Soft Extensions G2 creates soft extensions by creating the extension and then assigning the extension button to an existing station. In G2, these soft extensions, when administered, come off the internal line number count but not off the station count for your system.	DEFINITY ECS creates the equivalent of soft extensions by assigning the soft extension without hardware then bridging that extension to whatever station(s) will be using this second extension. This use of the Administration without Hardware feature provides the necessary primary location for this "soft" extension. In DEFINITY ECS, all stations/extensions, including those administered without hardware, come off the station/extension count for your system. This need to create nonexistent multifunction stations, using Administration without Hardware, will impact the total count of multifunction stations.

Continued on next page

G2	DEFINITY ECS
Associated Extensions G2 creates Associated Extensions by associating a number with an existing extension number. You do not need to create an actual extension for the number.	DEFINITY ECS does not support Associated Extensions.
One-Touch Operation G2 does not provide One-Touch operation.	DEFINITY ECS provides One-Touch operation of appropriate voice features. DEFINITY ECS is designed to allow speaker-phone users to activate certain features and turn on the speaker phone with a single button push. For example, when a speaker-phone user presses the Abbreviated Dialing button, DEFINITY ECS will automatically turn on the speaker phone and place the call. When an on-hook speaker-phone user presses a call appearance button, DEFINITY ECS automatically turns on the speaker-phone and connects the user to the selected appearance to originate, answer, or connect to a call on that appearance. This One-Touch operation also applies to pressing a feature button assigned to a feature such as Call Pickup, Automatic Callback, Leave Word Calling, Last Number Dialed, Return Call, PCOL, ICOM, Coverage Answer Group, and Terminating Extension Group.

Continued on next page

G2	DEFINITY ECS
PCOL/ICOM/Bridged Appearances In G2, Personal CO Line (PCOL), and Intercom (ICOM) are assigned their own dedicated line appearances on the user's multifunction set. This allows the user to use these features without using up a call appearance on their own extension. In G2, these dedicated feature buttons require buttons with both the red In-Use and green feature status lamps.	In DEFINITY ECS, these features are assigned a feature button. When the user uses these features, they activate the feature using the feature button, but utilize a call appearance of their own extension to place or receive the PCOL or ICOM. In DEFINITY ECS, these feature buttons require only the green status lamp.
World Class Routing S85 and G2.1 utilize networking features called Automatic Alternate Routing (AAR) and Automatic Route Selection (ARS). G2.2 introduces a new feature called World Class Routing (WCR) that *replaces* AAR and ARS.	DEFINITY ECS has added an umbrella capability called World Class Routing under which are grouped a number of features: AAR, ARS, Generalized Route Selection, Toll Analysis, and others. As a result, DEFINITY ECS utilizes separate AAR and ARS features, each with its own independent feature interaction. In this *Feature Difference* section, we have discussed the differences under the entry for World Class Routing.

Continued on next page

G2	DEFINITY ECS
A/Mu-Law Selection G2 uses the Mu-law method of voice companding, which is the voice reproduction technique used throughout North America and Japan. Mu-law is a type of logarithmic companding algorithm that provides an optimum number of quantizing levels for the preservation and reproduction of low-volume voice signals. As a result, fewer sampling slots are left over to provide high-volume fidelity.	As an international system, DEFINITY ECS offers Mu-law as well as A-law companding. A-law — found outside Japan and North America — is another type of logarithmic companding algorithm that alternately has an optimum number of quantizing levels for the preservation and reproduction of high-volume voice signals. As a result, fewer sampling slots are left over to provide low-volume fidelity. In DEFINITY ECS, Mu-law is the default and therefore does not need to be administered. If you wish to select A-law, however, it is administrable through the System Parameter Country options form or through the DS1 trunk form.
7407D Dip Switches The DIP switches on the 7407D and the CallMaster voice terminals are set to the "2" or "G2" setting. (Newer CallMaster sets may not have dip switches.)	The DIP switches on the 7407D and the CallMaster voice terminals are set to the "1" or "G1" setting. Upon upgrading to DEFINITY ECS, make sure to set the switch (beneath the front cover lid — in the same location as the volume control) to either "1" or "G1." (Newer CallMaster sets may not have dip switches; in this case ignore this instruction.) The ability to customize certain display buttons is not allowed on DEFINITY ECS.

Alphabetical Feature Differences

This detailed feature difference information is based on the list of features found in the *System 85 and Generic 2 Features Description* for G2.2 and the *DEFINITY Enterprise Communications Server Release 5 Feature Description, 555-230-301.* If both systems have similar features or if the feature is a DEFINITY ECS feature not found in G2, refer to the *DEFINITY Enterprise Communications Server Release 5 Feature Description, 555-230-301*. G2 features without matching DEFINITY ECS features are described from a G2 perspective.

When you are in doubt about where specific information is covered, check the index. It includes both S85/G2 key words and DEFINITY ECS key words.

AAR/ARS Partitioning

Feature Definition

Provides for the Automatic Alternate Routing (AAR) and Automatic Route Selection (ARS) services to be partitioned among as many as eight different groups of users within a single DEFINITY ECS. This provides individual routing treatment for the different groups of users.

A partitioned user group consists of those users who are grouped together and share the same Partition Group Number (PGN). All partitioned user groups share the same pool of Routing Patterns. (See the Automatic Alternate Routing (AAR) and Automatic Route Selection (ARS) features for further explanations on routing.) The translation tables that specify the Routing Pattern number are unique for each partitioned user group. Routing Patterns may be shared among the user groups or may be dedicated to a particular user group. Once a user activates the ARS or AAR feature and dials enough digits for the system to search for the Routing Pattern, the PGN of the originator's COR is used to select the table to look up the Routing Pattern.

Feature Differences

This is a feature in DEFINITY ECS; G2 provides similar functionality. Related G2 features are Tenant Services and World Class Routing. See also DEFINITY ECS Tenant Partitioning.

Abbreviated Dialing

Feature Definition

Abbreviated Dialing (AD) provides lists of stored numbers that can be accessed to place local, long-distance, and international calls; to activate features; or to access remote computer equipment. Stored numbers can be accessed by voice terminal users and data terminal users. Certain stored numbers can also be accessed by attendants.

Summary Table for Abbreviated Dialing

Table 2-1. Summary Table for Abbreviated Dialing

	System 85					DEFINITY			
Abbreviated Dialing	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Abbreviated Dialing	X	X	X	X	X	X	X	X	
Automatic dialing	X	X	X	X	X	X	X	X	
Dial access code (speed calling)									
From touch-tone stations	X	X	X	X	X	X	X	X	
From rotary stations			Iss 1.2	X	X	X	X	X	
Last extension/number dialed									
Last number dialed				Iss 1.2	X	X	X	X	
Access to button-stored numbers (i.e., Auto-Dial)	X	X	X	X	X	X	X	X	See Facility Busy Indication
Maximum Auto-Dial button entries/system	*	24,063	65,535	65,535	262,143	262,143	262,143	†	See Facility Busy Indication
Button entries									
Can point to list-stored numbers	X	X	X	X	X	X	X	X	
Can be independent of AD list (i.e., Auto-Dial)	X	X	X	X	X	X	X	X	
Associated busy indication									
For stations (terminals)								X	
For trunk groups								X	
Access to list-stored numbers	X	X	X	X	X	X	X	X	
List access assignment (per extension or per station)	Ext	Ext	Ext	Ext	Sta	Sta	Sta	Sta	
Maximum (all type) lists per extension/station		**	**	**	**	**	**	3	
Maximum group lists per extension/ station	2	2	2	2	2	2	2	3	

Continued on next page

Table 2-1. Summary Table for Abbreviated Dialing — *Continued*

Abbreviated Dialing	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Maximum personal lists extension/station	1	1	1	2	2	2	2	3	
System lists									
Basic system list (one/system)	X	X	X	X	X	X	X	X	
Maximum entries/basic system list	99	99	99	9999	9999	9999	9999	100	
7103A list (one/system)	X	X	X	X	X	X	X	X	
Max entries/7103A list	8	8	8	8	8	8	8	ϕ ‡	
Group lists maximum/system	100	500	1,000	9,999	9,999	9,999	9,999	1,000	
Maximum entries/group list	30	30	30	95	95	95	95	100	
Personal lists maximum/system	##	##	##	##	##	##	##	5,000	
Maximum entries/personal list	30	30	30	95	95	95	95	100	
Maximum lists & list entries/system									
Maximum (all type) lists/system	819	2,048	5,119	13,108	52,224	52,224	52,224	ϕ‡	
Maximum List entries/system	4,005	24,000	65,535	65,535	262,144	262,144	262,144	100,000	
List entry characteristics									
Max characters/entry	20	20	20	20	20	20	20	24	
Characters/digit (0-9)	1	1	1	1	1	1	1	1	
Characters/special functions									
(Pause, wait, mark, suppress)	2	2	2	2	2	2	2	2	
Manual digit insertion	3	3	3	3	3	3	3		
Programming function	X	X	X	X	X	X	X	X	
Suppressed digit outpulsing				X	X	X	X	X	
AD assigned per ELL					X	X	X		

ϕ Enhanced abbreviated dialing provides increased capacities in DEFINITY ECS.

* Limited only by the number of feature buttons available. Up to 4 digits stored.

† Limited only by the number of feature buttons available. Up to 16 digits stored. Facility Busy Indication buttons can also be used to dial that station.

** Each S85/G2 extension (<=R2V3) or station (>R2V4 can access the system list in addition to 2 other (personal and/or group) lists.

‡ Up to 10 entries can be stored in the DEFINITY ECS 7103A list, but the 7103A telephone can only access 8 of them.

Limited only by the number of lists and/or list entries per system.

Feature Differences

G2	DEFINITY ECS
Group Lists	
Group lists have an owner who can program them.	DEFINITY ECS allows one designated voice terminal user or designated attendant (for example, a department secretary) to program entries in a group list. This designated extension is identified in the Program Extension field of the Abbreviated Dial Group List form. The system administrator can also program group lists.
Inspecting AD Buttons	
Users with displays can press an Abbreviated Dial button while on-hook to display the number associated with that button, enabling users with speaker phones to inspect AD numbers without dialing the number.	Users display Abbreviated Dial numbers by pressing an assigned Stored Number button while either on-hook or off-hook. It follows that a user with a speaker phone must have a Stored Number button to inspect a number without dialing the number.
Special Functions	
G2 allows the following special functions (called characters in DEFINITY ECS): Pause, Wait, Mark, Stop or wait for dial tone, Manual digit entry, Suppress, End of Dialing (EOD).	DEFINITY ECS allows the following special characters (called functions in G2): Pause, Wait, Indefinite Wait, Mark, and Suppress, and End of Dialing. The G2 Stop or wait for dial tone, and Manual digit-entry special functions are not allowed in DEFINITY ECS.
G2 accepts manual digit entry at any point in dialing the AD number.	DEFINITY ECS does not accept manual digit entry when using AD unless those manual digits are at the end of the string (for example, AD dials the prefix digits of a number), or unless the manual digits are between two AD buttons.

Continued on next page

G2	DEFINITY ECS
AD Entry Numbers	
Group and system list entries can have single-digit numbers.	Group and system list entries must have double-digit numbers. Enhanced list entries must have 3-digit or 4-digit entries.
Data Hot Line and Default Dialing	
In G2, the Data Hot Line and Default Dialing features are implemented using the Automatic Dialing feature.	In DEFINITY ECS, these options use numbers in the Abbreviated Dialing Lists; there is a potential impact because of the lower capacity for abbreviated dial list entries in DEFINITY ECS. For most customers, however, this will not be a problem.
Programming Feedback	
G2 users get audible feedback throughout the programming sequence.	DEFINITY ECS users get no feedback until programming is completed.
When programming Abbreviated Dialing numbers the digits are displayed.	When programming Abbreviated Dialing numbers the digits are not displayed, but the stored number button can be used to display them after entry is completed.
Actual AD Assignment	
Abbreviated Dialing is assigned to an extension (R2V3 and earlier).	Abbreviated Dialing is assigned to a station.

Generic 2 Feature Characteristics Not Available in DEFINITY ECS

The major differences between Generic 2 and DEFINITY ECS abbreviated dial are capacity differences as noted in the above table. See *Chapter 3, "Capacity Comparisons".*

Minimizing the Impact of Abbreviated Dialing Differences

- Display stored number — For G2 users that display a stored AD number by simply pressing the AD button in G2, assign a Stored Number button in DEFINITY ECS.
- Programming Group Lists — For G2 users that program group lists for which they are the owner, assign an additional DEFINITY ECS personal list, if available, or make them the assigned programming extension for the group list.
- Special Characters — Abbreviated dial entries containing G2 special characters may have to be redone to work around the special characters that DEFINITY ECS does not support: "Stop or wait for dial Tone," "Manual digit entry," and "End of dialing."

  In working around G2 special characters, DEFINITY ECS is capable of ignoring unexpected pause characters, allowing a call to proceed.
- G2 7103 Buttons — Button assignments should be able to be entered in DEFINITY ECS without any change.
- G2 System List — If the G2 system list-entry size is set to one (the list has a maximum of 10 entries), or 2 (100 entries), the G2 system list can be entered completely as the DEFINITY ECS list. However, the DEFINITY ECS list requires 2-digit entries. All G2 system lists with G2 system size set to 3-, or 4-digit size can be moved to DEFINITY ECS enhanced system list, system capacity permitting.

  A system option, “A/D Grp/Sys List Dialing: Start at 01?” set to “y(es)” will make these lists numbered like G2, i.e., 01-99, 00.

Abbreviated Dialing End-User Differences

Note that each company’s implementation of this feature may be different, and each voice terminal may utilize a slightly different procedure. Telephone users moving from Generic 2 to DEFINITY ECS will notice the following differences in procedures:

Displaying a Stored Number

Use the new DEFINITY ECS Stored Number button assigned to your telephone to display your stored AD numbers. Pressing the AD button dials the number.

Programming Buttons with a 48-Button Telephone

Auto-dial buttons in DEFINITY ECS can only store 16 digits vs. G2 can store 20 digits.

Programming an Abbreviated Dial Personal List

Each user can have up to 3 personal lists with up to 100 entries per list.

Accessing the Personal List

DEFINITY ECS personal lists can have a maximum of 100 entries.

See ‘‘Accessing List Entries That Used G2 Special Functions’’ if any of your personal list entries used special characters.

Accessing the System List

- If you used a single digit to access the system list entries, entry 1 = 01, 2 = 02, ... 9 = 09, 0 = 10.
- If you used two, three, or four digits to access the system list entries, your entries should be unchanged.

  See ‘‘Accessing List Entries That Used G2 Special Functions’’, below if any of your system list entries used special characters.

Accessing List Entries That Used G2 Special Functions

Two AD special functions available in Generic 2 are not available in DEFINITY ECS — "Stop or wait for dial tone," and "Manual digit entry." List-entries using these special functions will either not be available, will not work as expected, or will have been changed by your system administrator. These special functions usually are used for making data connections. If you suspect a problem, call your system administrator.

ACCUNET

Feature Definition

The ACCUNET feature has been replaced by the Bearer Capacity feature.

Adjunct-Switch Application Interface

See ASAI Gateway, G2 and CallVisor Adjunct/Switch Applications Interface (ASAI), DEFINITY ECS.

Administered Connections

Feature Definition

Administered Connections automatically establishes an end-to-end connection between two access/data endpoints. The Administered Connections feature provides the following enhanced capabilities.

- Support of both permanent and scheduled connections
- Auto Restoration (preserving the active session) for connections routed over Software Defined Data Network (SDDN) trunks
- Administrable retry interval (from 1 to 60 minutes) per Administered Connection
- Administrable alarm strategy per Administered Connection
- Establishment/retry/auto restoration order based on administered priority

Feature Differences

This is a DEFINITY ECS feature; the related G2 feature is Dedicated Switch Connections. See Dedicated Switch Connections in this chapter for more information on the differences between Administered Connections, Permanent Switched Calls, and Dedicated Switch Connections.

Alphanumeric Dialing

Feature Definition

Alphanumeric Dialing enhances Data Terminal Dialing by allowing data terminal users to place a data call by entering an alphanumeric name, rather than dialing a string of numbers.

Feature Differences

Both G2 and DEFINITY ECS support this feature, known as Mnemonic Dialing in G2 and Alphanumeric Dialing in DEFINITY ECS. See Mnemonic Dialing.

G2	DEFINITY ECS
Maximum Entries	
G2 has a storage capacity for a maximum of 1,000 mnemonics.	DEFINITY ECS can hold a maximum of 1,250 alphanumeric dialing entries.
Mapped String Length	
A mapped string in G2 can be up to 20 digits.	In DEFINITY ECS a mapped string can be up to 24 digits.
Alpha Name Length	
The alpha-name length in G2 can be up to 10 characters,	In DEFINITY ECS the maximum alpha-name is 8 characters.
Special Code Restrictions	
G2 has restrictions on the special codes: a 13 must precede the codes 14-18.	DEFINITY ECS has no such restriction.
Mapped String in Dialed String	
G2 does not allow similar functionality.	A Mapped-String can contain a Mapped-String as part of the dialing string, just as long as it does not reference itself.

Attendant Features

Feature Definition

DEFINITY ECS provides several attendant features:

- Attendant Administration
- Attendant Auto-Manual Splitting
- Attendant Call Waiting
- Attendant Control of Trunk Group Access
- Attendant Direct Extension Selection With Busy Lamp Field
- Attendant Direct Trunk Group Selection
- Attendant Display
- Attendant Intrusion (Call Offer)
- Attendant Override of Diversion Features
- Attendant Priority Queue
- Attendant Recall
- Attendant Release Loop Operation
- Attendant Room Status
- Attendant Serial Calling

Table 2-2. Summary Table for Attendant Features

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Attendant Console									
ZAGJ-09AF Console with DXS/BLF	X	X	X	X	X	X	X		
ZAAG-09AF Console without DXS/BLF	X	X	X	X	X	X	X		
Attendant Console Operation									
Attendant Release Loop Operation	X	X	X	X	X	X	X	X	
Attendant Switched Loop	X	X	X	X	X	X	X		
Max Number of Consoles in Attendant Group	28	28	40	40	40	40	40	28	
Centralized Attendant Service (CAS)									
Main	X	X	X	X	X	X	X	X	
RLT calls can route to Attendant Console Group	X	X	X	X	X	X	X	X	
RLT calls can route to ACD Group						Iss 3	X	X	
RLT calls can route to VDN						Iss 3	X	X	

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Table 2-2. Summary Table for Attendant Features — *Continued*

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Branch	X	X	X	X	X	X	X	X	
Attendant Features									
Administrable Console Group Name								X	
Alternate FRL	X	X	X	X	X	X	X	X	
Attendant Alphanumeric Display	X	X	X	X	X	X	X	X	
Number of Display characters	8	8	8	8	8	8	8	40	
Calling Number Display to Attendant Instead of name	X	X	X	X	X	X	X	X	
COS/COR DIsplay	X	X	X	X	X	X	X	X	
Incoming Call Identification	X	X	X	X	X	X	X	X	
Trunk Identification	X	X	X	X	X	X	X	X	
Attendant One-Way Automanual Splitting	X	X	X	X	X	X	X	X	
Attendant Call Waiting (ACW)	X	X	X	X	X	X	X	X	
Option per called station	X	X	X		X	X	X	X	
Call waiting ringback delayed until attendant release	X	X	X	X	X	X	X		
Unanswered Call waiting call returned	X	X	X	X	X	X	X	X	
to the same console	X	X	X	X	X	X	X	X→	With Return Call option
to any console in group								X→	With Release Loop option
Attendant Conference									
Attendant and maximum 5 conferees						X→	X→		G2 systems without traditional modules only
Attendant and maximum 6 conferees	X→	X→	X→	X→	X→	X→	X→		Requires SN254 on traditional modules
Maximum simultaneous conferences	13	13	13	13	13	13	13	→	Unlimited in DEFINITY ECS
Attendant Control of Trunk Group Access	X	X	X	X	X	X	X	X	
Attendant Direct Extension Selection (DXS)									
with busy lamp field (BLF)									
With 3- or 4-digit Extensions &/0r 5- or	X	X	X	X	X	X	X	X	
6-digit Prefix Dialing									
Hundreds Group Selection									
Maximum 100's group select buttons	18	18	18	18	18	18	18	20†	
Extended DXS feature (maximum hundreds groups)	32	100	100	100	100	100	100		
Attendant Direct Trunk Group Selection	X	X	X	X	X	X	X	X	
Maximum number of DTGS buttons	24	24	24	24	24	24	24	12/24#	
With 3 (busy, Warning, and Control) lamps	12	12	12	12	12	12	12	6/12#	
With 1 (busy) lamp only	12	12	12	12	12	12	12	6/12#	

Continued on next page

Table 2-2. Summary Table for Attendant Features — *Continued*

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Attendant Interposition Calling and Transfer	X	X	X	X	X	X	X	X	
Attendant Lockout	X	X	X	X	X	X	X	X	
Attendant Recall	X	X	X	X	X	X	X	X	
Attendant Start (dialing)									
Manual Start (button)	X	X	X	X	X	X	X	X	
Attendant Transfer	X	X	X	X	X	X	X	X	
Automatic Circuit Assurance (ACA)	X	X	X	X	X	X	X	X	
With Referral Call:									
To attendant	X	X	X	X	X	X	X	X	
With Audit Trail to SM/CSM					X	X	X	X	
Number of Characters in Display	4	4	4	4	4	4	4	40	
Called Timed Reminder	X	X	X	X	X	X	X	X	
On held calls:	X	X	X	X	X	X	X	X	
Individual Attendant Access	X	X	X	X	X	X	X	X	
Via Feature Access Codes	X	X	X	X	X	X	X		
Multiple Listed Directory Numbers (MLDN)									
MLDNs via CO trunks	255	255	255	255	982	982	982	666	
MLDNs via DID (maximum number)	4	4	4	9	999	999	999	20	
Night Console	X	X	X	X	X	X	X	X	
With Auto-Drop default	X	X	X	X	X	X	X	X	
Serial Calling	X	X	X	X	X	X	X	X	
Straightforward Outward Completion	X	X	X	X	X	X	X	X	
Through Dialing	X	X	X	X	X	X	X	X	
Timed Recall on Outgoing Calls	X	X	X	X	X	X	X		
Trunk Group Busy/Working Indicators	X	X	X	X	X	X	X	X	
Trunk to Trunk Connections	X	X	X	X	X	X	X	X	
Two-Party hold on console	X	X	X	X	X	X	X	X	
Visually Impaired Attendant Service	X	X	X	X	X	X	X	X	

† There are 8 Hundreds Group Select buttons on the 301A DXS Console and 20 on the 302A1 DXS Console, but DEFINITY ECS allows up to 12 feature/function buttons to be administered as Hundreds Group Select Buttons *(with the 301A DXS console only)* so that up to 20 hundreds groups can be selected with either console.

→ Entries marked with an arrow direct the reader to the Comment entries.

The lower numbers of DTGS buttons apply to original S75/G1 attendant consoles (301A) in all release/versions of S75/G1; the higher numbers apply in G1.1 Issue 5 and later only and DEFINITY ECS with the Enhanced G1 attendant console (302A1).

Feature Differences

G2	DEFINITY ECS
Switched/Release Loop Operation	
Attendant Switched Loop Operation is the default with Attendant Release Loop available as an alternative option. The Attendant Release Loop feature allows calls ringing or waiting on a called station to be released from the console, returned to the attendant queue, and recall ANY attendant if not answered before the timed reminder feature timeout interval. The difference is that the G2 Attendant Release Loop operation is an option. If not optioned, Attendant Switched Loop Operation applies. Ringing calls always remain on the same console until the called station answers. Timed reminder alerts the same attendant.	Only Attendant Release Loop Operation is provided, there is no provision for Switched Loop Operation. After timeout with the default operation, ringing/waiting calls are returned to the attendant queue for distribution to the first available console in the group. However, after timeout with the optional Attendant Return Call feature provided, a ringing/waiting call will attempt to return to the same console that had originally extended it, and will queue for any console only if the original console is not available.
Waiting Calls	
With Attendant Call Waiting and the default Attendant Switched Loop Operation, the waiting calls remain on the console. With the optional Attendant Release Loop Operation, the waiting calls leave the console. If the waiting call leaves the console, and a Timed Reminder later occurs, it goes to any attendant. If the call remains on the console, then a Timed Reminder will always alert the same console.	With Attendant Call Waiting the waiting calls leave the console.
Extended Direct Extension Selection	
Extended Direct Extension Selection is supported.	Extended Direct Extension Selection is not available.
Serial Calling	
Supports serial calling.	Supports similar serial calling but also an administrable option: Attendant Incoming Serial Calling.

G2 Feature Characteristics Not Available in DEFINITY ECS

- Extended Extension Station Selection
- Switched Loop Operation

Minimizing the Impact of Attendant Feature Differences

DEFINITY ECS supports 20 hundreds groups for DXS from the attendant console. For companies desiring a greater capacity, administer a hundreds group button to be 00 (or use the enhanced DXS feature); then the attendant can dial any extension (any 4-digit extension) by choosing one, then another, DXS button. For example, for an attendant to dial X4321, the attendant would press the 43 button, then the 21 button. This workaround, however, does not display the status of the stations in a particular hundreds group via the busy lamp field.

Attendant Console Differences

DEFINITY ECS supports the Visually Impaired Attendant Service (VIAS) feature. This hardware feature is designed for consoles and display-equipped stations and uses up to six assignable buttons and a choice of two display languagesin the attendant consoles themselves.

Attendant Features End-User Differences

Calling Individual Attendants

Users call individual attendants by calling the attendant extensions, rather than a separate feature access code plus some digits as in G2.

Accessing the Attendant

If a different access code is administered, the users will need to be notified of the new procedure.

Recalling the Attendant

G2 users who use the Recall button to recall the attendant will use transfer/conference procedures to add the attendant back onto the call.

AUDIX

Feature Definition

Audio Information Exchange (AUDIX) Interface is a message-handling system for recording and distributing spoken messages or voice mail. The system contains stored voice prompts that guide users when creating, sending, retrieving, answering, saving, and forwarding spoken messages.

NOTE:
Your administrator is urged to consult the *GBCS Products Security Handbook,* 555-025-600, for information on measures to help secure this feature from possible toll fraud. Also see the DEFINITY ECS Security Violation Notification (SVN) feature.

The following is a non-inclusive list of AUDIX applications. This list depends on the type of AUDIX system you are using:

- Voice Mail — allows users to send and receive messages to and from their voice mail
- Call Answer — provides switch extensions answer coverage via AUDIX
- Automated Attendant — presents callers with a voice menu of options, then routes calls according to the keys the caller presses
- Bulletin Board — (sometimes called Information Service) plays a recorded message to callers
- Broadcast Message — enables an AUDIX administrator to send broadcast messages to all AUDIX users on the system
- Directory Service — provides a directory of subscribers to the caller

The following activities are available for use by AUDIX subscribers:

- Create Message — Record or modify a new message, address it, schedule it for delivery, and save a copy (optional).
- Scan Incoming Mail— Review new messages and reply or redirect them with an added comment, and review or delete old saved messages.
- Personal Greeting Administration — Record or modify one or more personal greetings to be played for callers who reach AUDIX through the Call Answer feature, or select the standard AUDIX greeting.
- Scan Outgoing Mail— Review, modify, or redirect messages scheduled for delivery; check the status of delivered messages; and review, modify, redirect, or delete messages saved in the file cabinet.

- Password and List Administration — Change user's personal AUDIX password and create, modify, review, or delete mailing lists.
- AUDIX Networking — Send and receive network messages, status information, and administrative update information to and from other members of the AUDIX product family.

Two types of networking are available: Audio Message Interchange Specification (AMIS) analog networking and digital networking. AMIS networking is available with all AUDIX configurations; digital networking is available when AUDIX is configured as a system external to the DEFINITY switch.

Feature Differences

G2	DEFINITY ECS
Networking AUDIX *Machines* Regarding DCP connectivity between AUDIX and the switch for AUDIX networking, G2 supports the transmission of data on both DCP information ("I") channels. G2 supports a maximum of four DCP connections with AUDIX (two DCP links with two I-channels each) for networking.	Supports data on one I-channel per DCP link. DEFINITY ECS supports a maximum of two DCP connections (two DCP links with one I-channel each). If your company is networking AUDIX machines, the network may have to be re-engineered to handle the traffic with the reduced number of ports available with DEFINITY ECSDEFINITY ECS.
AUDIX and Leave Word Calling G2 gives intercept tone to callers when Leave Word Calling (LWC) is pressed after AUDIX answers a covered call. G2 leaves the call to AUDIX up but does *not* leave a LWC message.	DEFINITY ECS gives a confirmation tone to a caller when LWC is pressed after AUDIX answers. DEFINITY ECS leaves the call up, and *does* leave a LWC message.

Authorization Codes

Feature Definition

The Authorization Codes feature provides the means for extending control of system users' calling privileges and security for remote access callers.

The Authorization Codes feature is optional, is closely linked to the FRL feature, and can be used with the ARS, AAR, and Remote Access features, as well as with incoming trunk calls.

Authorization codes may be used for any or all of the following reasons:

- To allow a calling user to override the FRL assigned to the originating station or trunk
- To restrict individual incoming tie trunks and remote access trunks from accessing an outgoing trunk
- To identify certain calls on CDR records for cost-allocation purposes
- To provide additional security control for the system

Summary Table for Authorization Codes

Table 2-3. Summary Table for Authorization Codes

	System 85					DEFINITY			
Authorization Codes	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Authorization Codes (Max Number of Codes, 4-7 digits)	9,000	9,000	9,000	90,000	90,000	90,000	90,000	90,000	
Use for Incoming Trunks									
Tie and Remote Access	X	X	X	X	X	X	X	X	
Provisioning/Administration									
Algorithm Selection & Validation	X	X	X	X	X	X	X	X	
Random Selection									

Feature Differences

Although the details of the G2 and the DEFINITY ECS Authorization Codes features differ, both switches use this feature to improve switch security for Remote Access calls and to change calling permissions on a per-call basis. From the perspective of changing calling permissions, DEFINITY ECS provides increased flexibility by correlating each user's Authorization Code with a specific class of restriction. From the perspective of external routing, DEFINITY ECS is more likely to lower calling permissions during a call.

G2	DEFINITY ECS
Barrier Codes and Authorization Codes	
After having entered either a barrier code or an authorization code to access the switch, a Remote Access user can then dial a WCR access code. Then, given a low FRL assigned to the incoming Remote Access trunk group, G2 can prompt the user for an Authorization Code (if not already entered) to potentially raise the default FRL for outside routing. However, for placing local station calls or accessing switch features, G2 always applies Class of Service 31 to Remote Access calls. (The G2 does not prompt for an authorization code to potentially improve Remote Access feature permissions by correlating the dialed code with a different class of service).	DEFINITY ECS can request that a Remote Access user dial a barrier code *and* an authorization code during access to improve switch security. Then, DEFINITY ECS can correlate the dialed authorization code with a specific class of restriction for access to an assortment of station calling and switch features.
Facility Restriction Levels (FRLs)	
Prior to G2.2, the AAR/ARS features substitute the authorization code FRL for the call's current FRL without comparing the value of the authorization code FRL to the call's current FRL. Beginning with G2.2, the WCR software compares the value of the authorization code FRL with the call's current FRL (to be sure the call's FRL would be raised) before making a substitution.	In DEFINITY ECS, the routing software substitutes the authorization code FRL for the call's current FRL without comparing the value of the authorization code FRL to the call's current FRL.

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G2	DEFINITY ECS
Network Access Flag For G2, a network-access flag is assigned to each authorization code that can either allow or deny off-net (usually Remote Access) users of the Authorization Code to access the switch.	DEFINITY ECS provides no corresponding capability.
Retrying Preference Selections Prior to G2.2, the AAR/ARS features automatically allowed users to retry preference selection (by dialing "1" after recall dial tone). Beginning with G2.2, the WCR feature automatically allows users to retry preference selection (by dialing "1" or "#" after recall dial tone). If retry fails, call may queue, go to an attendant, get reorder tone (fast busy), or intercept treatment.	The DEFINITY ECS users' ability to retry preference selection with the same FRL is an administrable option called "CACR (Cancellation of Authorization Code Request)." For calls where the retry fails to find a route, the CACR function of the DEFINITY ECS Authorization Codes feature, can be assigned to "time-out" to the attendant group after the user dials "1," "#," or allows the interdigit timing interval to elapse.

G2 Feature Characteristics Not Available in DEFINITY ECS

Network Access flags are available per Authorization Code.

Minimizing the Impact of Authorization Codes Differences

Appropriate choice of options can produce identical results in both switches with the exception of the network access flag.

Authorization Codes End-User Differences

If DEFINITY ECS is administered to require both Barrier and Authorization Codes for Remote Access, the dialing sequence will vary in G2:

In G2.1:

[Remote Access Number] +
[Barrier Code] +
[AAR/ARS] [Destination Number] +
[Authorization Code]

In DEFINITY ECS and G2.2:

[Remote Access Number] +
[Barrier Code] +
[Authorization Code] +
[AAR/ARS] [Destination Number]

Please note that DEFINITY ECS *can* be administered to require the same dialing sequence as G2.2.

Automatic Alternate Routing

Automatic Alternate Routing (AAR) is discussed with World Class Routing later in this chapter.

Automatic Call Distribution

Feature Definition

Automatic Call Distribution provides automatic connection of incoming calls to specific splits (hunt groups). Calls to a specific split are automatically distributed among the agents (hunt group members) assigned to that split. ACD data, transmitted from the switch to the CMS or BCMS, is used to generate various reports on the status of ACD agents, splits, and trunks.

Summary Table for Automatic Call Distribution

Table 2-4. Summary Table for Automatic Call Distribution

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Call Distribution Algorithm:									
Terminal (Linear, Direct) Hunting	X	X	X	X	X	X	X	X	
Circular Hunting	X	X	X	X	X	X	X		
Most Idle Agent (MIA) Hunting				X	X	X	X	X	
Moves MIA agent to bottom of queue after an outgoing call				X	X	X	X		
MIA Across Skills							X	X	
Optional MIA for ACW							X	X	
Agents in AUX on MIA Queue						X	X		
Queuing	X	X	X	X	X	X	X	X	
w/Priority Queue			X	X	X	X	X	X	
w/Queue Size Limiter					X*	X*	X*	X	
w/Queue Status									
Status Warning via Beehive†			X	X	X	X	X	X	
Number of Queued Calls (NQC) and Oldest Queued Time (OQT) via Display#					X	X	X	X	
Call Prompting								X	
Call Vectoring					X	X	X	X	
Abandoned Call Search	X	X	X	X	X	X	X	X	
Announcements to Incoming Callers				X	X	X	X	X	
Announcement w/Forced Disconnect					X*	X*	X*	X	
1st Announcement			X	X	X	X	X	X	
Forced 1st Announcement					X*	X*	X*	X	
Non-Recurring 2nd Announcement			X	X	X	X	X	X	
Recurring Announcement	X	X			X*	X*	X*	X	

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Table 2-4. Summary Table for Automatic Call Distribution — *Continued*

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
ACD Night Service									
For new calls					X *	X *	X *	X	
For calls already in queue					X	X	X	X *	
RLT calls can route to ACD Group						Iss 3	X	X	
Dialed Number Identification Service (DNIS):									
Switch Support			X	X	X	X	X	X	
CMS Support					X	X *	X *	X	*
DNIS info passed to host/adjunct					X	X	X	X	
Malicious Call Trace (MCT)					Iss 1.1	X	X	X	
BCMS (Basic CMS Report Functions Integrated in Switch)								X	
Interface to CMS Adjunct				X	X	X	X	X	
CMS Adjunct Hardware									
3B2				X	X	X	X	X	
386					X	X	X	X	
486					X	X	X	X	
3332					X	X	X	X	
Sun Sparc 5					X	X	X	X	
Sun Sparc 10								X	
CMS Software Releases Supported									
R2				X	X	X	X	X	
R3.0					X	X	X	X	
R3V2						X	X	X	
R3V4						X	X	X	
R3V5						X	X	X	
CMS Adjunct Functions							X	X	
Status (Reports)				X	X	X	X	X	
Agent Login/Logout				X	X	X	X	X	
Administration				X	X	X	X	X	
Audio Difficulty; Reporting				X	X	X	X	X	
Event Counts				X	X	X	X	X	
Single button Stroke Count				X	X	X	X	X	
With Forced Entry Split Option				X	X	X	X	X	
With Status Lamp Indication							X◊	X◊	
Call Work Codes							X	X	
With Forced Entry Split Option							X	X	

Continued on next page

Table 2-4. Summary Table for Automatic Call Distribution — *Continued*

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
With Status Lamp Indication							X	X	
Transferred ACD Calls Tracking							X	X	
Separate Internal/External & Dialed Number							X	X	
Passing Inbound ISDN SID/ANI							X	X	
or Internal Call Extension to CMS									
Enhanced Tracking for Lookahead Interflow							X	X	
Individual Split Assignment							X	X	
for Measurement									
OCM Tracking							X	X	
Agent Features & Work Modes									
After Call Work			X	X	X	X	X	X	
Agent Call Work Codes							X	X	
Agent Hold w/Multiple Call Handling									
ACD Agent Hold					X	X	X	X	
MCS Agent Hold					X	X	X		via MCS Screen
Agent Log In/Out				X	X	X	X	X	
Agent Position Staffed/Unstaffed			X	X	X	X	X	X	
Assist (Agent to Supv)			X	X	X	X	X	X[ϕ]	
Manual Answer			X	X	X	X	X	X	
Auto Answer w/Zip Tone			X	X	X	X	X	X	
On ACD Calls			X	X	X	X	X	X	
Auto-In			X	X	X	X	X	X	
Automatic Available Split				Iss 1.4	X	X	X	X	
Aux_Work/Make_Busy	X	X	X	X	X	X	X	X	
City/Queue of Origin ID									
Via Display	X	X	X	X	X	X	X	X	Nonvectoring
VOA Announcement and Repeat	X	X	X	X	X	X	X	X	
Manual-In	X	X	X	X	X	X	X	X	
Agent Console									602A2/602A3
CallMaster ACD Agent Terminal			X	X	X	X	X	X	602A1 (DCP)
Change Split Parameter:									
From CMS				X	X	X	X		
From Switch	X	X	X	X	X	X	X	X	
Lamp Monitoring of Agents			X	X	X	X	X		106B Display Unit
Move Agents & Trk Grps:									

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Table 2-4. Summary Table for Automatic Call Distribution — *Continued*

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Via CMS:				X	X	X	X	X	
Move Agents				X	X	X	X	X	
Move Trunks				X	X	X	X		
Via MAAP/SAT	X	X	X	X	X	X	X	X	
Via Supervisor's Terminal			X	X	X	X	X	X	Agents only
Service Observing									
Agent Override			X	X	X	X	X		
Service Observing				X	X	X	X	X	
Intraflow: (non-vectoring)††									
Time in Queue	X**	X**						X	
Number of Calls			X	X	X	X	X		
All Calls	X	X	X	X	X	X	X	X	
Interflow: (non-vectoring)††									
Time in Queue									
Number of Calls			X	X	X	X	X		
All Calls			X	X	X	X	X	X	
Split Supervisor			X	X	X	X	X	X	
System Reload Indicator	X	X	X	X	X	X	X	X	
Indicator Extinguished by									
PBX Attendant	X	X	X	X	X	X	X	X	
Agent Supervisor			Iss 1.4	Iss 1.2	X	X	X	X	
Outbound Call Management (OCM)					X◊◊	X◊◊	X◊◊	Xϕϕ	
OCM/Switch Interface									
Via ASAI using PRI link					◊◊	◊◊	◊◊	X	
Dialing Features									
View First (preview) Dialing					◊◊	◊◊	◊◊	X	

* Only with Call Vectoring in System 85 and G2.

† Available on demand via a button in DEFINITY ECS; only available with incoming ACD calls on S85/G2.

Different interfaces are required. See additional information under Telemarketing Indicator Equipment in *Chapter 2, ''G2 to DEFINITY ECS Feature Differences''.*

◊ With G2, the status lamp indicates that Call Work Code has been sent only if CMS link is up. DEFINITY ECS status works whether or not CMS is up or not.

ϕ In DEFINITY ECS, you don't have to be a supervisor to assist with ASAI.

** S85 R1 & R2V1 UCD allows Intraflow after a fixed (7 seconds) timeout.

†† Call vectoring allows intraflow and interflow based on time in queue, calls in queue, number of agents available, number of staffed agents, or time of day/day of week.

◊◊ ASAI Gateway (AG)

φφ ASAI

Feature Differences

Refer to the *DEFINITY Enterprise Communications Server Release 5 Call Vectoring/EAS Guide,* 555-230-521, for further information.

The following table provides ACD feature differences seen in a standard ACD, non-vectoring environment. In a vectoring environment, feature differences are likely to change. See the Call Vectoring entry in this chapter.

G2	DEFINITY ECS
ACD Splits	
G2 supports ACD splits that are separate from station hunting groups.	In DEFINITY ECS, an ACD split is a special type of hunt group. See Hunting for more information.
After Call Work	
G2 does not support an ACW button, therefore it requires an agent to be in Manual-In mode in order to change to After Call Work (ACW) mode after an ACD call releases.	DEFINITY ECS also allows an agent to change to ACW without going to the Manual-In mode, via use of an ACW button.
Call Work Codes	
G2 does not require the use of display terminals to use call work codes.	DEFINITY ECS requires the use of display terminals to use call work codes.
With G2, the status lamp indicates that Call Work Code has been sent only if CMS link is up.	DEFINITY ECS status lamp lights up whether or not CMS is up.
Queue Status	
Queue status display is given automatically only during incoming ACD calls.	DEFINITY ECS VuStats can be administered to provide queue status updates when calls arrive. DEFINITY ECS provides queue-status updates, via display, on demand, using a button. In addition, button lamp provides continuous queue-status threshold feedback. Buttons can be assigned for Oldest Queue Time and/or Number of Calls in Queue. These buttons can be administered on any terminal that has an available button.

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G2	DEFINITY ECS
Service Observing When you service observe, you hear a ring before being connected to the call you are observing. See Service Observing section in this chapter for information on Service Observing feature differences.	When you service observe, you don't hear a ring before you are connected to the call you are observing. If activation of Service Observing is successful, the system returns confirmation tone. If it was not successful, the system returns intercept, reorder, or busy tone depending upon the reason for denial.
Announcements In a non-vectoring environment, G2 supports a unique first announcement and a common second announcement.	DEFINITY ECS can be administered to work as G2 does. In addition to a unique first announcement and a common second announcement, DEFINITY ECS supports a forced first announcement, a unique second announcement, recurring announcements, and a forced disconnect after announcement (in a non-vectoring environment).
City-/VDN-/Queue-of-Origin G2 supports city-/VDN-/queue-of-origin announcements and displays to agents in a non-vectoring environment.	DEFINITY ECS supports the city-/queue-of-origin displays but not the announcements in a non-vectoring environment. DEFINITY ECS does support the VDN-of-origin announcement and display in a vectoring environment.
Announcement Devices Announcement devices are connected with G2 using auxiliary-trunk circuits.If you elect to change from an AUX trunk interface to an analog-line interface, the Cook Electric requires a new option board	DEFINITY ECS supports the G2 options. Announcement devices can be connected with DEFINITY ECS using auxiliary-trunk, analog-line, or lineside T1 circuits. DEFINITY ECS also supports multiple integrated announcement boards not supported in G2.

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G2	DEFINITY ECS
System Reload Indicator G2 supports a system reload indicator via contact interface.	DEFINITY ECS supports a System Reload Indicator that uses the ICI button administered on any voice terminal to indicate that agents should log in because the system has restarted.
Logging In A G2 agent logs in by dialing the login access code and 4-digit ID twice.	Using the Agents in Multiple Splits feature, a DEFINITY ECS agent without EAS must dial the login access code, the split number, and the 1- to 9-digit ID (once). With EAS, the agent dials the access code, loginn ID, and optional 1-9 digit password.
Multiple ACD *Extensions* G2 allows multiple independent ACD extensions on a single voice terminal. G2 also allows one extension for non-ACD calls and one for ACD calls.	DEFINITY ECS does not allow multiple ACD extensions but provides an enhancement to this capability by allowing agents to be assigned and logged into multiple splits. DEFINITY ECS supports Forced MCH, allowing an ACD call to be delivered if active on a non-ACD call.

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G2	DEFINITY ECS
Direct Agent G2 supports the Direct ACD feature for calls originating from the G2 CallVisor ASAI Gateway feature for connectivity to the host and provides zip tone answer and minimal ACD tracking.	DEFINITY ECS supports Direct Agent Calling from a host application via an ASAI link to an Automatic Call Distribution (ACD) agent on the switch. DEFINITY ECS Direct Agent Calling allows zip tone, calls to queue to the agent, expanded ACD tracking, and After Call Work. Direct Agent is also available via EAS (without ASAI).
Assist Button The Assist button is on an Abbreviated Dial button that dials the Split Supervisor. Agents must put the current ACD call on hold.	The Assist button is a priority call to the supervisor. The current ACD call is automatically put on hold.
Non-ACD *Calls* Non-ACD calls ring until answered, covered, or abandoned.	Non-ACD calls with automatic answer can be optioned to automatic answer with zip-tone, ring once, ring continuously, or not ring along with lamp flashing.
Administration without Hardware G2 allows bridging of an agent's call appearance button to an agent terminal Administered without Hardware to accomplish multiple split login. Agent is tracked as separate people in CMS.	DEFINITY ECS does not allow an ACD agent to be associated with an Administration without Hardware extension.
Calls in Queue Calls always queue to a split when No Agents Available. G2 allows a call to queue to only one split at a time.	Calls only queue when at least one agent is logged in. Calls will not queue if all agents are in AUX Work mode (non-vector controlled split) or if there is no available queue slot. DEFINITY ECS allows a call to queue in up to 3 splits.

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G2	DEFINITY ECS
Music Sources G2 provides a music source per module.	DEFINITY ECS supports a single music source for each Tenant Services Partition. DEFINITY ECS Call Vectoring supports multiple music sources for vector delay.
Adding and Moving an Agent G2 supports the adding and moving of an agent via Add Agent and Delete Agent dial access codes put on Abbreviated Dial buttons. G2 also allows administration or CMS moves.	DEFINITY ECS does not support moving non-EAS agents via a button. Agents are moved via CMS or an administrative terminal. Can add or remove skills using dial access codes.
Call Forwarding a Split A supervisor can activate redirection of split calls.	Console permission is required for any station to activate redirection of split calls.
Supervisors Supervisors are required to be split members.	DEFINITY ECS can be administered to work as G2 does. Supervisors are not required to be split members.
Agents Advancing in Queue Agents advance in MIA queue while in Aux Work, but not while in After Call Work mode. Optionally, when outgoing calls are considered work-related, agents are not advanced while on an outgoing call and in Aux Work. Agents in multiple skills are removed from all MIA lists when an ACD call arrives.	Agents do not advance in queue while in Aux Work. The system can be administered either to advance or not advance agents in ACW mode. DEFINITY ECS does not support an option for treatment of outgoing calls.
Agent Override G2 provides agent override that can provide remote access and OPX observation of agents.	DEFINITY ECS provides these agent functions with Service Observing.

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G2	DEFINITY ECS
Intraflow/Interflow G2 bases intraflow on the number of calls in queue. Also, G2 provides interflow threshold (based on calls in queue) and interflow at all times. (Note again that this table of differences is for a standard ACD, non-vectoring environment.)	DEFINITY ECS bases intraflow on a call's time in queue. DEFINITY ECS provides interflow at all times and does not provide interflow threshold. (Note again that this table of differences is for a standard ACD, non-vectoring environment.)
Automatic Answering Automatic answering applies only to ACD calls. Personal calls will ring the first idle appearance.	DEFINITY ECS can be optioned to work as G2 does. Automatic answering can apply to both ACD calls and personal calls and these calls can be distinguished via distinctive tones and alerting options. An agent using automatic answering in the Aux Work or After Call Work mode, will still receive personal calls via automatic answering. Agents should be notified of this difference. Automatic Answering can be administered for ACD only, if desired.
Zip Tones ACD calls have distinctive zip tones to identify their source — direct to split, interflow, or intraflow.	There are no differences in zip tones to distinguish interflow and intraflow calls.
Staffed Button There is a Staffed button.	A Staffed button is not required, since the agents must always log in.
Entering Aux-Work Mode Agents can enter Aux-Work mode at any time.	The last agent in a non-vector controlled split cannot enter the Aux-Work mode while calls still remain in queue; however, the agent can log out at any time.

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G2	DEFINITY ECS
106B Status Display G2 supports the use of 106B Status Display.	DEFINITY ECS does not support the use of the 106B Status display. In DEFINITY ECS, VuStats, BCMS and R3 CMS can provide a comparable service with real-time agent/split reports.
Split-Overflow Indication Split-overflow indication is automatic and can be tied to an audible warning device. Both systems provide the same queue warning indication using different interfaces.	On a DEFINITY ECS, split-overflow is accomplished with a 21C-49 beehive lamp or audible warning device such as a bell. Also a VuStats lamp can flash when a call is in queue, or the time in queue threshold is met.
Terminal Dialing If the customer has an application that allows terminal dialing, G2 automatically sets up a connection on a line appearance. The user does not need to press the call appearance button. Since these calls are on a call appearance, these terminal-dialed calls are recorded as Aux-Out calls in CMS.	With a terminal dialing application, DEFINITY ECS sets up a connection on a bridged line appearance and the user must press the call appearance button. Since these calls are treated as if they were bridging onto an existing call, these terminal-dialed calls are pegged as Aux-In calls in BCMS/CMS.
Contact Interface G2 supports contact interface.	DEFINITY ECS does not support this specific capability.
Queuing for Splits and Hunt Groups In G2, you don't have to administer queuing for splits and hunt groups. There isn't a capacity constraint on the number of calls waiting for a particular split.	In DEFINITY ECS, you do have to administer queuing for splits and hunt groups.

G2 Feature Characteristics Not Available in DEFINITY ECS

- Circular hunting
- City/Queue-of-origin announcements (replaced by VDN of Origin Announcements)
- Staffed button
- Support for 106B Status Display

Minimizing the Impact of Automatic Call Distribution Differences

Personal Calls

Administer AutoAnswer for ACD calls only. Administer continuous ring for non-ACD calls.

Depending upon what happened to personal calls to an agent's ACD extension in G2 when the agent left his/her position (but didn't log out), similar treatment can be provided in DEFINITY ECS. For instance, if the agent in G2 had AUDIX coverage, the agent in DEFINITY ECS could have a Send All Calls button and activate it before leaving his/her position. In this example, personal calls would be routed to AUDIX coverage.

If personal calls in G2 were left ringing only, in DEFINITY ECS the agent could forward personal calls to a VDN where the associated vector has one step "wait 998 seconds hearing ringback." If the agent logs out, the call continues to ring at the agent's set.

MIA

Administer MIA across splits/skills to "y" and MIS for agents in ACW to "n."

Train Agents

Create a "How DEFINITY ECS Features Work" instruction card for all agents based on your implementation of ACD on DEFINITY ECS.

Automatic Call Distribution — Auto-Available Split

Feature Definition

Automatic Call Distribution (ACD) — Auto-Available Split (AAS) provides a way for members of an ACD *split* (Automatic Call Distribution group members: usually found in call centers) to be in a continuously AUTO-IN work mode. Although not restricted to such, this feature is intended to be used for splits containing only nonhuman members (for example, recorders or Voice Response ports). Its principal value is in bringing ACD members back into AUTO-IN work mode after a system restart.

Feature Differences

This is a separate feature in DEFINITY ECS; in G2, this feature is only provided with the Automatic Call Distribution feature.

G2	DEFINITY ECS
Moving Auto-Available Agents	
G2 allows the moving of Auto-Available Split agents while staffed, by the supervisor, using the dial code procedure, via switch administration, and via R3 CMS.	DEFINITY ECS allows CMS to move these agents (VRU ports) while staffed.

Automatic Circuit Assurance

Feature Definition

Automatic Circuit Assurance helps users identify possible trunk malfunctions. The system maintains a record of the performance of individual trunks relative to short and long holding time calls. The system automatically initiates a referral call to an attendant or display-equipped voice terminal user when a possible failure is detected.

Summary Table for Automatic Circuit Assurance (ACA)

Table 2-5. Summary Table for Automatic Circuit Assurance (ACA)

Automatic Circuit Assurance (ACA)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
w/Referral Call:									
To Attendant	X	X	X	X	X	X	X	X	
w/Audit Trail to SM/CSM					X	X	X		
w/Audit Trail available with Mgr1-G3MT-SAT								X	
Number of Characters in Display	4	4	4	4	4	4	4	40	

Feature Differences

G2	DEFINITY ECS
ACA Referral Destinations	
ACA referrals are sometimes sent to an attendant; they can also be sent to a central referral point (such as Trouble Tracker) where the audit trail of the switch generating the referral can be consulted for more information.	ACA referrals go to a designated attendant or station, group of attendants, or Centralized Attendant Service.

Automatic Identification of Outward Dialing

Feature Definition

Automatic Identification of Outward Dialing (AIOD) is a G2 feature.

Feature Differences

This feature is not available in DEFINITY ECS. This is a feature associated with G2 traditional modules; traditional modules are not supported in DEFINITY ECS.

Automatic Route Selection

Automatic Route Selection (ARS) is discussed later in this chapter with the World Class Routing feature.

Automatic Transmission Measurement System

Feature Definition

Automatic Transmission and Measurement System (ATMS) is an integrated hardware- and software-based facility monitoring system that allows you to verify automatically that facilities (such as Tie, CO, FX, and WATS trunks) are providing satisfactory performance. ATMS allows for several measurements of noise and attenuation on trunk lines to help identify trunks that would otherwise have to be investigated manually. These tests can be initiated as either Demand and/or Scheduled tests.

Feature Differences

G2	DEFINITY ECS
Reports	
ATMS requires an ATMS adjunct to print reports.	Provides reports on the switch, either on the screen of the G3 Management Terminal (G3-MT), on the screen of the G3 Management Applications (G3-MA), or on a system printer. This difference may mean that your company's G2 ATMS adjunct is no longer required in DEFINITY ECS; historical reporting, however, would still require polling by a user-supplied application. This DEFINITY ECS feature requires the TN771C or later circuit pack.
Trunk Groups on Test Schedule	
Allows up to 192 trunk groups on a test schedule and does not allow the testing of member ranges within a trunk group.	Allows up to 80 trunk groups on a test schedule and supports the testing of member ranges.

Bearer Capability

Feature Definition

DEFINITY ECS Bearer Capability feature allows the switch to match the calling requirements of a specific call with the most appropriate resources to support that call. Bearer Capability has evolved from, and supports, the *interworking* function of ISDN. The Bearer Capability feature uses information that will normally be available in an ISDN environment (and provides equivalent information for non-ISDN situations) to effectively apply available resources for the best support arrangements to meet the service needs of each call.

In DEFINITY ECS Generalized Route Selection, there are five Bearer Capability Classes (BCCs). Customers may specify routing for each BCC according to their particular transmission needs.

Feature Differences

G2	DEFINITY ECS
Classes of Service/Capability Classes	
G2 provides 256 flexible bearer capability classes of service. Nine of these are predetermined for a variety of transmission needs. Switch administrators can use the remainder to specify transmission characteristics such as: The transmission modes that can be transmitted over a preference from a set of ten possible bearer capabilities: including voice, Mode 0 data, Mode 1 data, Mode 2 data, Mode 3 data, voice-grade data, unknown digital, unknown analog, Mode 3/2, and X.25. Whether a modem should be inserted for a call using the preference. Whether the information within a transmission should be treated as clear-channel or restricted.	The Bearer Capability feature is not provided by DEFINITY ECS unless the ISDN-PRI feature is enabled. Also, the DEFINITY ECS feature does not support user-defined bearer capability classes of service. Instead, for example, DEFINITY ECS uses five fixed bearer capability classes: Voice or voice-grade data Mode 1 data (suitable for ACCUNET service transmissions) Mode 2 data (low speed, usually asynchronous, data transmission from 300 to 19,200 bps) Mode 3 data (circuit-switched packet data, with undefined bit rates and packet specifications) Mode 0 (64 Kbps clear-channel or restricted voice/data transmission)

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G2	DEFINITY ECS
Inserting Conversion Resources	
The G2 always uses bearer capabilities to insert conversion resources for calls, block calls, or circuit-switch calls. It does not require the ISDN-PRI feature, the use of an ISDN-PRI facility, nor the use of AAR/ARS/WCR for routing.	DEFINITY ECS uses Bearer Capability to insert conversion resources (modem pools) according to the following rules: If the ISDN-PRI feature is not enabled, DEFINITY ECS always inserts modems using the AVD (Alternate Voice/Data) algorithm. If a user dials a trunk-group access code to place a call, the DEFINITY ECS always inserts modems using the AVD algorithm. If ISDN-PRI is enabled and a user places an AAR/ARS call, then the AAR or ARS feature only uses bearer capabilities (to decide when to insert a conversion resource) when an ISDN preference is selected. If a non-ISDN preference is selected, DEFINITY ECS inserts conversion resources according to the AVD algorithm.

Bridged Calls

Feature Definition

DEFINITY ECS provides two features for bridged calls:

- Bridged Call Appearance — Multi-Appearance Voice Terminal

  The Bridged Call Appearance — Multi-Appearance Voice Terminal allows users to have an appearance of another user's primary extension number. The bridged call appearance can be used to originate, answer, and bridge onto calls to or from the other user's primary extension number.

- Bridged Call Appearance — Single-Line Voice Terminal

  The Bridged Call Appearance — Single-Line Voice Terminal allows a multi-appearance voice terminal to have an appearance of a single-line extension number. The appearance of the single-line terminal's extension number at a multi-appearance terminal is called an analog bridged call appearance.

Summary Table for Bridging

Table 2-6. Summary Table for Bridged Calls

	System 85					DEFINITY			
Feature	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	Comments
Multifunction to Multifunction Set									
Max Bridged Stations (partners)	16	16	16	16	16	16	16	15†	
Shared Extension									
Max Bridged Stations (partners)			16	16	16	16	16	15†	
Analog Single Line to Multifunction			Iss. 1.2	X	X	X	X	X	
Multifunction to Analog Single Line			Iss. 1.2	X	X	X	X	X	
Terminating Extension Group (TEG)									
Max Bridged Stations (partners)	*	*	*	*	*	*	*	4	
Bridged Call (Max Bridged Parties									
Off-hook on Same Call)	2	2	2	2	2	2	2	5	
Bridged PCOL									
Max Bridged Stations (partners)	16	16	16	16	16	16	16	4	
Bridged Manual ICOM	X	X	X	X	X	X	X		
Total bridged appearances		15,000	19,145	32,703	32,703	32,703	32,703	10,000	

* S85/G2 Bridging features (MFT/MFT and/or SLS/MFT bridging) provide functional equivalent of S75/G1/DEFINITY ECS TEG feature.

† DEFINITY ECS's 15 partners plus the extension's primary station are equivalent to G2's 16 images, except that on DEFINITY ECS all Call Appearances of an extension must have a button on the extension's primary station. G2 has no such restriction - all images may be assigned to any station.

Overview of Feature Differences

Within the two systems, Call Bridging interacts differently with the following features and capabilities: ACD/DDC/UCD, analog station soft-hold, Automatic Callback, Busy Verification, Call Coverage, calling party display, conferencing, data calls on BRI sets, Data Protection, Intercom, Line Lockout with warning, Multi-appearance Preference, ring-ping, Personal CO Line, and Send All Calls.

The following table shows the major feature differences between DEFINITY Generic 2 and DEFINITY ECS:

G2	DEFINITY ECS
General Features	
Bridging provides relatively the same feature set for users active on bridged extensions as it does for users on their own primary extensions, considering bridging users as peers to principals.	DEFINITY ECS does not provide this kind of bridging functionality. In DEFINITY ECS, the primary user is in charge; the bridged images have less functionality. For example, in DEFINITY ECS bridged appearance users cannot answer ACD calls, cannot activate Automatic Callback, and the display is in the "calling to principal" format (the same format used at covering user's stations).

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G2	DEFINITY ECS
Call Appearance Images Each image of a Call Appearance (whether on a principal user's or other bridged user's station) is a 2-lamp button (with a red In-Use and a green Status lamp) that is dedicated to calls to or from the bridged extension. Separate dedicated 2-lamp buttons are used for calls associated with ICOMs, PCOLs, groups, and different extensions.	The principal user's image of each Call Appearance differs from other bridged user's images of that same Call Appearance, as follows: The principal user's image of each Call Appearance is a generalized Call Appearance (with a red In-Use and a green Status lamp) that is nominally associated with and used for calls to or from the bridged extension. However, it will also be used for calls associated with ICOMs, PCOLs, ACD/DDC/UCD groups, TEGs, and Coverage Answer Groups (CAGs) if any of these other features are assigned to the principal user's station. Each other bridged user's image of a principal user's Call Appearance is dedicated to calls to/from that bridged extension only. It cannot be used to answer, originate, or bridge onto calls associated with ICOMs, PCOLs, ACD/DDC/UCD groups, TEGs, and CAGs that appear on the principal user's image of that Call Appearance.
Call Forwarding The Call Forwarding button lamp shows the feature status for the extension that is currently selected. One Call Forwarding button serves all extensions on that station.	There are individual Call Forwarding buttons assigned for each extension to be tracked. The lamp shows the feature status for its associated extension. An individual Call Forwarding button may, however, be used to activate the feature for any extension assigned to the station.

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G2	DEFINITY ECS
Assigning Extensions Most stations are assigned a unique extension, but G2 does not require that each station have its own unique primary extension. Frequently, DTDMs, TDMs, PDMs, Data Lines do not get unique extensions. A common practice is to assign a separate appearance of one extension to reach a "data module." So, for example, 12 users with separate extensions could — with each user having its own data module — share the same data module extension. This reduces the number of extensions needed for data modules.	Each voice terminal has its own unique primary extension number. That extension number can be bridged onto other voice terminals, but it must be a primary extension on one voice terminal in order to be bridged. New extension numbers will have to be created for data modules, if G2 customers have followed the scenario suggested to the left.
Soft Extensions G2 supports the use of soft extension numbers that can be bridged onto multibutton terminals. Soft extensions in the G2 are extensions that are not programmed onto a specific equipment line location (ELL).	The Administration Without Hardware feature or Coverage Answer Groups allow DEFINITY ECS to provide functionality similar to G2 soft extensions.
Terminating Extension Groups Terminating Extension Groups (TEGs) cannot be defined in G2; instead, soft extensions, that is, ones that do not have equipment associated with them, are often used. An example is department numbers that can be bridged onto multibutton terminals. Soft extension numbers can be bridged onto 16 stations.	DEFINITY ECS uses TEGs to route calls to a group (maximum of four) of stations. When a TEG extension is dialed, the associated TEG group extensions on voice terminals ring. A maximum of four primary extensions can be assigned to a TEG.
Number of Station Groupings The maximum number of 16 station groupings is limited only by the maximum number of line records (32,703 in G2.2).	There is a system limit of 32 TEGs and 10,000 bridged appearances.

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G2	DEFINITY ECS
Multibutton Terminals	
A multibutton terminal can have up to 12 call appearances of a given extension.	A multibutton terminal can have up to 10 call appearances of a given extension.
G2 allows for a given call appearance to be accessed from a maximum of 16 multibutton terminals.	DEFINITY ECS allows for a given call appearance to be accessed from a maximum of 16 multibutton terminals, one being the primary terminal for that extension.
Bridging and ACD *Agents*	
With G2, a bridged extension is sometimes placed on the supervisors terminal to make training of new agents more convenient.	DEFINITY ECS allows an agent extension to appear on another terminal; however, ACD calls cannot be received.
G2 allows one phone to be set up with bridged appearances to allow two different agents to login to different bridged extensions from the one phone. For example, this is used where the true appearance of the lines logged into is used for TTD conversations with hearing-impaired people.	In this scenario, two phones can be used, each with a bridged appearance of the other phone. However, the status lamp will not light to indicate that the bridged appearance is logged in.
Bridging and PC/PBX	
Bridging allows PC/PBX to receive display information that customers can use to develop customer ACD reports and applications using the PC/PBX developer kit.	The capability exists in DEFINITY ECS but works differently from G2 because the display information is different. For example, on incoming calls the DEFINITY ECS bridged appearance display is in "a=caller-to-called" format (G2 display is in "a=caller" format). The PC application has to be designed with all such display differences taken into consideration. On an upgrade from G2 to DEFINITY ECS, the old PC application program may not work right and may have to be replaced by one written for use with an upgraded system.

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G2	DEFINITY ECS
Two Primary Extensions In G2 you can have two or more primary extensions assigned to one station. Often executives will have one published number and one private number for use by family — both primary extensions. Only one prime line can be administered.	In DEFINITY ECS, you cannot have two primary extensions assigned to one station.
Two Phones with Same Extension In G2, you can have two phones with the same extension (and only that extension).	In DEFINITY ECS, each phone must have its own unique extension. However, a phone does not need to have any appearances of its own extension and instead can be administered only to have bridged appearances of a different extension.
Data Modules In G2, each data module can have a feature control button on multiple sets and DCP sets can have control buttons for multiple data modules.	In DEFINITY ECS, there may be only one data extension button for each data module but each set can have multiple data extension buttons.
BRI Sets G2 BRI sets (unlike DCP sets) can be assigned the same extension for both voice and data calls. However, only voice calls can be accessed via the Bridged Call feature, data calls cannot. Voice-only images of a BRI voice/data extension's appearances can be provided on other (BRI,DCP, Hybrid, and/or analog) telephone sets so long as at least one of the maximum 16 images is on a voice/data BRI set and no more than one image is analog.	With DEFINITY ECS BRI sets, different extensions are used for voice and data. Voice calls to an extension assigned to a WCBRI Data Module are offered to the station anyway because the WCBRI Data Terminal may also have voice capabilities.

G2 Feature Characteristics Not Available in DEFINITY ECS

Bridging and Manual Intercom

Manual Intercom is not a feature in DEFINITY ECS, therefore, bridged manual intercom is not available.

Minimizing the Impact of Feature Differences

- In G2 you can have two or more primary extensions assigned to one station, a capability not allowed in DEFINITY ECS.
- In DEFINITY ECS, each phone must have its own unique extension. However, a phone does not need to have any appearances of its own extension (i.e., “Call-Appr” button), and instead can be administered only to have bridged appearances of a different extension.
- G2 supports soft extensions that can be bridged onto multibutton terminals. Use the DEFINITY ECS Administration Without Hardware feature or Coverage Answer Groups to provide similar functionality.
- G2 allows one phone to be set up with bridged appearances to allow two different agents to login to different bridged extensions from the one phone. For example, this is used where the true appearance of the lines logged into is used for TTD conversations with hearing-impaired people. In this DEFINITY ECS scenario, two phones can be used, each with a bridged appearance of the other phone. However, the status lamp will not light to indicate that the bridged appearance is logged in.

Busy Verification of Lines

Feature Definition

This feature is called Busy Verification of Terminals and Trunks in DEFINITY ECS. It allows attendants and specified multi-appearance voice terminal users to make test calls to trunks, voice terminals, and hunt DDC and UCD groups. These test calls check the status of an apparently busy resource.

Busy verification of voice terminal extensions, hunt group extensions, and trunks can be done by either multi-appearance voice terminal users or attendants or station user. Feature activation is via a Busy Verify button.

Summary Table for Busy Verification

Table 2-7. Summary Table for Busy Verification

	System 85					DEFINITY			
Busy Verification	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Verification of Lines									
by Attendant	X	X	X	X	X	X	X	X	
by Station	*	*	*	*	*	*	*	X	
Verification of Trunks									
by Attendant	X	X	X	X	X	X	X	X	
by Station	X	X	X	X	XX	X	X	X	
w/Busy Out of Trunks									
for One-Way Trunks	X	X	X	X	X	X	X		
for Two-Way Trunks				X	X	X	X		

* Verification function is provided by the S85 Override feature.

Feature Differences

Both systems provide similar capabilities for verifying trunks and lines; however there is one difference and the features have different names.

G2 Override is similar to DEFINITY ECS Busy Verification of Terminals by station users. G2 Busy Verification of Terminals is similar to DEFINITY ECS Busy Verification of Lines by attendant. G2 Trunk Verification is similar to DEFINITY ECS Busy Verification of Trunks (by station users or attendants).

Override and Trunk Verification are related features.

G2	DEFINITY ECS
Busying Out a Trunk	
Allows users to busy-out a trunk.	DEFINITY ECS does not allow users to busy-out trunks. In DEFINITY ECS busy-out functionality is only provided via a maintenance procedure.

G2 Feature Characteristics Not Available in DEFINITY ECS

G2 allows users to busy-out a trunk. In DEFINITY ECS busy-out, functionality is only provided via a maintenance procedure.

Busy Verification End-User Differences

Busy-Out Trunks

Users who are used to busying out trunks will have to be notified of the change.

Call-By-Call Service Selection

Feature Definition

This is a feature in DEFINITY ECS; G2 provides similar functionality as a function of ISDN-PRI. See ‘‘Integrated Services Digital Network — Primary Rate Interface’’ in this chapter for feature differences.

Call Coverage

Feature Definition

Call Coverage provides automatic redirection of certain calls to alternate answering positions in a Call Coverage path.

A Call Coverage path is a list of up to six alternate answering positions (covering users) that are accessed, in sequence, when the called individual or group (principal) is not available to answer the call. Any of the following can be assigned a call coverage path and are thus eligible to have their calls redirected to coverage.

Summary Table for Call Coverage

Table 2-8. Summary Table for Call Coverage

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Principal user's extension									
Individual or bridged analog extension	X	X	X	X	X	X	X	X	
Individual or Bridged Multifunction Voice extension	X	X	X	X	X	X	X	X	
Coverage Point									
Individual or bridged extension	X	X	X	X	X	X	X	X	
ACD/DDC/EUCD/UCD group	X	X	X	X	X	X	X	X	
Any point in path								X	
Last point in path	X	X	X	X	X	X	X	X	
Announcement	X	X	X	X	X	X	X	X	
Vector Directory Number (VDN)					X	X	X	X	
Call coverage features for the calling party									
Coverage redirect feedback	X	X	X	X	X	X	X	X	
Caller response interval (CRI)	X	X	X	X	X	X	X	X	
Can activate LWC during CRI	X	X	X	X	X	X	X	X	
Go to cover								X	
Call coverage features for called principal									
Coverage Criteria									
Cover on Active	X	X	X	X	X	X	X	X	
Meaning of "Active":									
Ext Active (that is, has at least 1 call)	X	X	X	X	X	X	X		
Principal Sta User Off-Hook								X	

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Table 2-8. Summary Table for Call Coverage — *Continued*

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Cover All	X	X	X	X	X	X	X	X	
Cover on Busy	X	X	X	X	X	X	X	X	
Cover on don't answer	X	X	X	X	X	X	X	X	
Separate Criteria for Internal vs. External Calls	X	X	X	X	X	X	X	X	
Non-DCS Tie Trunks Are:									
Always External	X	X	X	X	X	X	X		
Optionally External or Internal								X	
Coverage Paths									
Maximum coverage paths per principal	1	1	2	2	2	2	2	4	
Maximum coverage points per path	3	3	3	3	3	3	3	3	
Multiple covering users per point									
Via Bridged Covering Ext	X	X	X	X	X	X	X	X	
Via Cover Answer Group	NA	NA	NA	NA	NA	NA	NA	X	
Optional ring-ping on immediate redirection					X	X	X	X	
Send all calls	X	X	X	X	X	X	X	X	
Temporary bridged appearance	X	X	X	X	X	X	X	X	
Call coverage features for the covering user									
Principal ID									
Via alphanumeric display	X	X	X	X	X	X	X	X	
Via dedicated covering answer group per principal								X	
Via dedicated "soft extension number" per principal	X	X	X	X	X	X	X		
Via DCIU/SCI/PI link to covering messaging service									
AUDIX			X	X	X	X	X	X	
Messaging Center Service	X	X	X	X	X	X	X	X	
Reason for redirection	X	X	X	X	X	X	X	X	
Features with implied principal addressing	X	X	X	X	X	X	X	X	
Consult/return	X	X	X	X	X	X	X	X	
Coverage callback (message = call calling party)	X	X	X	X	X	X	X	X	
Leave word calling (message = call covering user)	X	X	X	X	X	X	X	X	
Send all calls	X	X	X	X	X	X	X	X	
Interaction w/Call Forwarding #									

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Table 2-8. Summary Table for Call Coverage — *Continued*

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
If Called Principal Activated CF									
Calls *Normally* Redirect to Forward-to-Sta	X	X	X	X	X	X	X	X	
If Principal's Redirect Criteria is Met⟶									at forward to-station
Calls Redirect to Principal's Call Cov Path								X	
Calls Don't Redirect At All	X	X	X	X	X	X	X		
If Covering User Activated CF									
Calls Redirect to Next Point in Principal's Cov Path	X	X	X	X*	X*	X*	X*	X	
Calls Redirect to Forwarded-to-Ext				ACD*	ACD*	ACD*	ACD*		
Send All Calls (SAC)	X	X	X	X	X	X	X	X	
If Coverage Point **not** Administered									
SAC Allowed but Calls Ring Called Principal					Iss 2	X	X		
SAC Allowed but Calls Route to Busy Tone		X	X	X	Iss 2				

* In S85 R2V3 and later, if CF-All is activated for an ACD Group extension in a Principal's Coverage Path and the Principal's Coverage Criteria is met, calls will redirect to the Forwarded-to-extension. However, if CF-All is activated for a non-ACD extension in a Principal's Coverage Path and the Principal's Coverage Criteria is met, calls will bypass the coverage point and attempt to redirect to the next point in the Principal's Coverage Path.

Call Forwarding/Busy-Don't Answer operation is same as Call Forwarding-All after Call-Forwarding Don't Answer interval has expired.

Feature Differences

G2	DEFINITY ECS
Wait for Principal	
Wait for principal is provided via 3B2 Messaging Server.	Not provided.

NOTE:
There are additional differences in the way Call Coverage interacts with Attendant Console, ACD/DDC/UCD groups, Automatic Callback, Bridged Extensions, Call Detail Recording, Call Forwarding, Conference, Distinctive Ringing, Exclusion, Hold, Incoming Call Identification, Intercom, Intraflow, Line Lockout, Multiple Appearance of an Extension, Night Service, Personal CO Line, Priority Calling, and Transfer. See the DEFINITY ECS standard documentation set to determine how these features interact with Call Coverage.

G2 Feature Characteristics Not Available in DEFINITY ECS

Wait for Principal

Wait for Principal is provided via the 3B2 Messaging Server and G2.

Minimizing the Impact of Call Coverage Feature Differences

- Dual coverage paths may be replaced by the multiple coverage paths available with DEFINITY ECS.
- By simply NOT taking advantage of any of the features that are different in DEFINITY ECS, such as Go to Cover, moving from a maximum of 2 coverage paths to 4 coverage paths, being able to administer non-DCS trunks to appear as internal, etc., you can minimize the feature difference between the two switches.

Call Coverage Administration Differences

Dual Call Coverage paths can be duplicated (and exceeded in functionality) in DEFINITY ECS. Read the above document carefully and see the Call Coverage Path form for more information.

Call Coverage End-User Differences

Ringing When Busy

When users are busy on an appearance, subsequent calls ring once and then flash until they go to coverage by default. Stations may be optioned to not ring, ring once, or ring continuously (like G2).

Call Coverage Paths Enhancements

G2 Call Coverage paths can be duplicated in DEFINITY ECS, but there are enhancements. If you take advantage of any of these enhancements and additional capabilities you must notify the users of any impact to their call coverage scenarios.

Trunk Administration

The administrator needs to be careful to match the G2 criteria for non-DCS trunks as they can be administered in DEFINITY ECS to appear as either internal or external calls. If this is not matched, a user's calls could route to a different Call Coverage path. If you chose to utilize this enhancement, you need to notify your users of the differences they may encounter.

Private network calls are treated as internal or external as follows: G2 always treats incoming DCS calls as internal and all other incoming private network (tie) trunk calls as external. DEFINITY ECS always treats incoming DCS calls as internal, and provides an option per non-DCS incoming private network (tie) trunk group to allow trunks to be treated as either internal or external. This option is shared by the Call Coverage and Distinctive Ringing feature.

Go to Cover

If your company chooses to administer the Go to Cover button on DEFINITY ECS, this will need to be explained to users as this is a feature they will not be accustomed to. Not administering this new button will eliminate the feature difference.

Automatic Callback Activation During Call

In DEFINITY ECS local and DCS users can activate Automatic Callback and the call will not redirect to coverage. In G2, you cannot activate Automatic Callback while the call is in progress. This should be mentioned to users, although it is an enhancement.

Wait for User

If your company uses Message Center, users may be used to the agent using the "wait for user" feature. This is not available in DEFINITY ECS.

Temporary Bridged Appearance

Temporary Bridged Appearances are not dropped until the second press of Transfer/Conference button by the covering user. In G2, the first press of the Transfer/Conference button drops the call.

A principal can't bridge on via Temporary Bridged Appearance when the maximum allowed bridged parties would be exceeded. Principals can, however, bridge on after one of the bridge parties disconnects.

DCS Attendant Originated Calls

Attendant originated calls on DCS are treated as external calls. This may change the Call Coverage path that some calls are routed to.

Call Detail Recording

Feature Definition

Call Detail Recording (CDR) maintains detailed call records for all incoming and outgoing calls on specified trunk groups and extensions administered for intraswitch recording. The System Manager can use this information to compute call costs, allocate charges, analyze calling patterns, detect unauthorized calls, and keep track of unnecessary calls.

Call detail information is provided on trunk groups, loudspeaker paging, and code calling access administered for CDR.

Feature Differences

You can duplicate most G2 record formats using DEFINITY ECS customized formats, however, the date stamps (at midnight) are different.

G2	DEFINITY ECS
Collection Device Support	
G2 supports SMDR cabinets, both direct output unit and 9-track unit.	DEFINITY ECS supports only ASCII CDR output. CDR data collection devices that use BCD formats must be replaced. (These include the SMDR direct output and 9-track, and the LSU (94A).)
Opcode Formats	
Supports opcode formats.	Opcode formats are not supported in DEFINITY ECS; any G2 format with opcodes can be simulated with a DEFINITY ECS customized format.
Digits Sent/Dialed Number	
G2 can record the digits sent and the dialed number.	DEFINITY ECS can record the digits sent or the dialed number.
Dating Records	
G2 can be customized to put the date right in the CDR record.	DEFINITY ECS can be customized to put a date-stamp on all records. DEFINITY ECS also generates a date-stamp at midnight.

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G2	DEFINITY ECS
Recording Redirected Calls	
Incoming calls on a G2 that are either covered, transferred, or forwarded will record the covering, forwarded-to, or transferred to number.	Incoming calls on a DEFINITY ECS that are either covered, transferred, or forwarded will record the dialed number; DEFINITY ECS doesn't follow the coverage or transfer.

Call Forwarding

Feature Definition

This feature is called Call Forwarding All Calls in DEFINITY ECS. It allows all calls to an extension number to be forwarded to a selected internal extension number, external (off-premises) number, the attendant group, or a specific attendant. This feature is activated or deactivated by dial access code or by a Call Forwarding button.

Call Forwarding All Calls can be activated or deactivated by voice terminal users and data terminal users. Also, an attendant or voice terminal user with console permission can activate or deactivate the feature for a particular extension number, TEG, DDC, UCD group, or ACD split (but not vector-controlled splits; see Call Vectoring for more information).

Additional functionality is also offered by the DEFINITY ECS Call Forwarding Busy/Don't Answer feature.

Summary Table for Call Forwarding

Table 2-9. Summary Table for Call Forwarding

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Call Forwarding — Busy/Don't Answer	x	x	x	x	x	x	x	x	
Call Forwarding — Don't Answer	x	x	x	x	x	x	x		Call Coverage provides for these calls to be answered.
Call Forwarding — All Calls (Follow Me)	x	x	x	x	x	x	x	x	
Activated by									
Principal Station	x	x	x	x	x	x	x	x	
Attendant	x	x	x	x	x	x	x	x	
Call Forwarding — All Calls on-net	x	x	x	x	x	x	x	x	
Call Forwarding — All Calls off-net (max digits)	7*	7*	7*	7*	7*	7*	31	16	
Call Forwarding — All Calls for Hunt Groups	x	x	x	x	x	x	x	x	

* Non-toll 7-digit numbers only.

Feature Differences

G2	DEFINITY ECS
General Features	
G2 has three call forwarding features: Call Forwarding — Follow Me; Call Forwarding — Busy/Don't Answer; and Call Forwarding — Don't Answer.	DEFINITY ECS has two call forwarding features: Call Forwarding All Calls, which is similar to G2's Call Forwarding — Follow Me, and Call Forward Busy/Don't Answer. The closest equivalent to the other call forwarding feature might be call coverage, which can redirect calls to another voice terminal for answering.
Ring Ping	
Ring ping at forwarding voice terminal is always provided.	Ring ping at forwarding voice terminal is optional per forwarding station.
Forwarding Data Terminal	
There is always a text message at a forwarding data terminal.	This is optional per forwarding station.
Feature Button and Lamp	
Call Forwarding feature button and lamp applies to the extension associated with the currently-selected line appearance.	Call Forwarding feature button (for feature deactivation) and lamp applies to the button's associated extension. The feature button activates the feature for the currently-selected line appearance.
Forwarded-to Number Maximums	
G2.2 allows forwarding calls to numbers up to 31 digits including the trunk or AAR/ARS access code. G2.1 allows a maximum of 7-digit private or non-toll public network numbers excluding the trunk or AAR/ARS access code.	DEFINITY ECS allows forwarding calls to numbers up to 16 digits including the trunk or AAR/ARS access code.

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G2	DEFINITY ECS
Call Forwarding and Bridging	
A bridged user can activate and deactivate call Forwarding for a principal's appearance. When the call forwarded bridged appearance is selected the call forward button lights.	A bridged user can activate Call Forwarding, but only the principal or a user with console privileges can deactivate Call Forwarding. When the call forwarded bridged appearance is active, the call forward button does not light.

Minimizing the Impact of Call Forwarding Feature Differences

- Call Coverage may be able to be used to make up for the lack of Call Forwarding — Don't Answer.
- Administer ring ping for stations with Call Forwarding and users will not notice the difference. (An exception is that if you administer ring-ping for stations with Call Forwarding that didn't have ring-ping on Call Coverage on the G2, they'll notice a difference for Call Coverage but not for Call Forwarding, because ring-ping is a *per-station* option in DEFINITY ECS.)
- Administer a text message for every data terminal with Call Forwarding and users will not notice the difference.

Call Management System

Feature Definition

Call Management System (CMS) provides real-time and historical reports for monitoring ACD facilities and personnel. Unlike BCMS, the CMS software resides in a computer (usually referred to as an adjunct) that connects to the switch via a data link.

Summary Table for Call Management Capacities

Table 2-10. Summary Table for Call Management Capacities

Call Management Capacities	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Max Agents/Split									
Supported by switch	40	40	512*	1024*	1024*	1024*	1024	999	
Measured by CMS	NA	NA	NA	1024	1024	1024	1024	999	
Measured by BCMS	NA	NA	NA	NA	NA	NA	NA	200	
Max Agents/System									
Supported by switch	1120	1120	512	1024	1024	1024	2048	3000	
Measured by CMS	NA	NA	NA	1023	1023	1023	1023	1023	
Measured by BCMS	NA	NA	NA	NA	NA	NA	NA	200	
Max Queue Slots									
Per System	†	†	†	†	†	†	†	6000	
Per Split		981	981	981	981	981	981	999	
Max Splits per System									
Supported by switch	28	28	30	30	60	60	60	255	
Measured by CMS R3 (max 99)		NA	NA	30	60	60	60	99	
Measured by BCMS		NA	NA	NA	NA	NA	NA	99	
Max Split Supervisors per System			30	30	60	60	60	255	
Max **Measured** Trunk Groups per System									
Measured by CMS		NA	NA	237	255	255	255	255	
Measured by BCMS		NA	NA	NA	NA	NA	NA	32	

* In S85 R2V2 through G2.1, the number of agents per split must be a multiple of 16. This limitation is removed in G2.2.

† Unlimited in S85/G2.

Feature Differences

Moving from G2 to DEFINITY ECS may require updating your Call Management System software.

G2	DEFINITY ECS
Moving Trunk Groups	
Can move trunk groups using CMS.	DEFINITY ECS cannot move trunk groups using CMS.
Split Parameters and Intraflow Thresholds	
Split parameters allows you to administer intraflow thresholds for splits in a non-vectoring environment from CMS for G2.	Split parameters does not allow you to administer intraflow thresholds for splits in a non-vectoring environment from CMS.
Reports on Split References	
Reports on split references in vectors can be requested from a CMS connected to a G2.	Such reports cannot be requested when CMS is connected to a DEFINITY ECS.
Moving Agents	
Can move up to 1,023 agents (at one time) between splits via CMS.	Can move up to 32 agents (at one time) between splits via CMS.
Split 0	
Agents can be placed in measured Split "0" for training and service observing purposes.	Agents cannot be moved into split "0;" however, users do not need to be agents to be service observed.

Call Pickup

Feature Definition

Call Pickup allows voice terminal users to answer calls to other extension numbers within the user's specified Call Pickup group.

Call Pickup groups are established so that when one member of a group is away, other members of the group can answer that member's calls. A Call Pickup group usually consists of users who are located in the same area or have similar functions.

Summary Table for Call Pickup

Table 2-11. Summary Table for Call Pickup

	System 85					DEFINITY			
Call Pickup	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Maximum Number of Groups	255	999	999	999	999	999	999	5,000	
Call Pickup Members/System	800	7,000	8,000	32,000	32,000	32,000	32,000	25,000	
Call Pickup Members/Group	800	7,000	8,000	32,000	32,000	32,000	32,000	50	

Feature Differences

G2	DEFINITY ECS
Size of Pickup Groups	
G2 allows very large pickup groups — up to 32,000 members.	DEFINITY ECS limits the pickup groups to 50 members.

Call Vectoring

Feature Definition

The Call Vectoring feature provides processing of incoming and internal calls according to a programmed set of commands. The commands, called Vector commands, determine the type of processing that specific calls receive.
Summary Table for Call Vectoring

Table 2-12. Summary Table for Call Vectoring

	System 85					DEFINITY			
Call Vectoring	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Call Vectoring									
Call Vectoring Capacities									
Max VDNs per Switch		NA	NA	NA	→	→	→	20,000	Unlimited in S85/G2
Max Vectors per Switch		NA	NA	NA	128	128	511	512	
Max Steps per Vector		NA	NA	NA	15	15	15	32	Includes "go to vector" command
Max Announcements		NA	NA	NA	84*	84*	255*	256*	
Route-to-Destinations									
Max Destinations		NA	NA	NA	95	95	475	→	Unlimited inDEFINITY ECS
Max Address Digits per Destination		NA	NA	NA	20	20	20	16	
VDN can route to Remote Access ext.		NA	NA	NA				X	
VDN in coverage path		NA	NA	NA	X→	X→	X	X	Final Coverage Point only
w/Delay Announcements		NA	NA	NA	X	X	X	X	
w/Delay of Vector Processing (Wait Step)		NA	NA	NA	X	X	X	X	
Silence on Delay		NA	NA	NA	X	X	X	X	
Music on Delay		NA	NA	NA	X	X	X	X	
Per System MOH Access **Must** be Assigned		NA	NA	NA				X	
Separate Music Option for Vectoring		NA	NA	NA	X	X	X	X	
Multiple Music Sources								X	
Ringback on Delay		NA	NA	NA	X	X	X	X	
Max Skills Queued to in Vector		NA	NA	NA	NA	NA	3	3	
Look-Ahead Interflow (requires									
Lookahead Interflow[##]					Iss 1.3	X	X	X	
Via Premises-Based Private Network					Iss 1.3	X	X	X	
Via AT&T SDN Switched Network (ASN)					Iss 2.2	Iss 3.1	X	X	
ISDN/PRI)		NA	NA	NA	Iss 2	Iss 2	X	X	
Via private network		NA	NA	NA	Iss 2	Iss 2	X	X	

Continued on next page

Table 2-12. Summary Table for Call Vectoring — *Continued*

Call Vectoring	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Via public (ASN/SDN) network		NA	NA	NA	Iss 2.2	Iss 3.1	X	X	
w/Multiple Split Queuing		NA	NA	NA				X	
Max Splits per Call		NA	NA	NA	NA	NA	NA	3	
w/Priority Queuing		NA	NA	NA	X	X	X	X	
Priority Levels		NA	NA	NA	4	4	4	4	
w/Route-to-VDN Name overrides Called VDN Name Display		NA	NA	NA	Iss 2	Iss 2	X	X	Administrable
w/Vector Chaining via									
"Go-to-Vector" step		NA	NA	NA			X	X	
w/Vector Error Log	NA	NA	NA		X	X	X	X	Logs vector errors

* The maximum announcements per system shown for DEFINITY ECS and S85/G2 cannot be directly compared. DEFINITY ECS announcement limits apply to all announcement applications including but not limited to ACD; the S85/G2 announcement limits apply to the indicated ACD application only and additional announcements can be provided for other ACD applications as well as for non-ACD applications (for example, Intercept).

→ Entries marked with an arrow direct the reader to the Comment entries.

Lookahead Interflow requires Call Vectoring & ISDN/PRI.

Feature Differences

Refer to *DEFINITY Enterprise Communications Server Release 5 Call Vectoring/EAS Guide,* 555-230-521, for more information.

G2	DEFINITY ECS
Routing a Call by Adjunct	
G2 uses the "route to" command to have a call routed by the adjunct. Call leaves vector processing.	DEFINITY ECS uses the "adjunct routing" command to have a call routed by the adjunct. Call remains in vector processing.
Queuing a Call	
G2 queues a call to one split a time. A subsequent "queue to main split" command within a vector removes the call from the current queue and requeues the call to the split designated by the command.	DEFINITY ECS can simultaneously queue a call to a maximum of three different splits. Once queued to three splits, DEFINITY ECS skips any subsequent "queue" commands.
Queuing to ACD *Splits*	
When Call Vectoring is enabled on a G2, only the Call Vectoring feature can queue calls to ACD splits.	Calls can also be directly queued to ACD splits (via hunt-group/split extensions).
Limits on Number of Calls Waiting in Queue	
Like ACD, the G2 Call Vectoring feature does not impose either a system-wide or per-split capacity constraint on the number of calls waiting in queue. A constraint can optionally be added.	In DEFINITY ECS, there is a system-wide maximum of queued calls that must be assigned to and allocated over all ACD splits and hunt groups. When a call queues to three splits, that call uses three queue slots.

Continued on next page

G2	DEFINITY ECS
"Route To" Command If a "route to" command is the final effective step in a vector and the destination is busy, the G2 switch retries the step every two seconds.	DEFINITY ECS does not automatically retry final effective "route to" steps. However, DEFINITY ECS vectors can be programmed to emulate this operation by looping back to the "route to" step.
"Messaging Split" Command G2 can deliver calls to a messaging split using a "route to" a VDN/vector that then queues calls to an AUDIX or Message Center split. The "called" VDN (as modified by VDN override) is used as the AUDIX mailbox. The G2 does not provide a "messaging split" command.	DEFINITY ECS provides a "messaging split" command that can connect the calling party with a specific AUDIX mailbox or Message Center extension. If an extension is not specified, then the Messaging Split command uses the called VDN as modified by the VDN override, not the messaging split's VDN.
VFCDR Feature The Variable Format Call Detail Recording (VFCDR) feature can record both the originally-dialed VDN and the final answering destination of a VDN call (by recording the VDN in the Calling Party field).	The customized CDR feature can record either the originally-dialed VDN or the answering destination, but not both.
Terminating Incoming Trunk Groups to VDN*s* Either switch administration or Call Management System (CMS) administration can be used to terminate incoming trunk groups to VDNs.	Switch administration can be used for these assignments.

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G2	DEFINITY ECS
Check Backup	
In G2, execution (that is, the condition is met) of the Check Backup split step causes the call to be removed from the main split's queue and requeued to the backup split.	In DEFINITY ECS, execution (that is, the condition is met) of the Check Backup split causes the call to be queued to that split because of multiple split queuing, and to remain in queue for other splits as well, as long as the call is queued to fewer than three splits. If the call is already queued to 3 splits, subsequent Check Backup steps are ignored.
The G2 Check Backup split step causes the split to be checked every 2 seconds until the condition is met or the call has been answered by another split.	The DEFINITY ECS check backup split step is processed only once. Operation similar to that of G2 can be achieved by following a check backup split step with a "wait-time (2 secs)" step and "goto" step back to the check backup step. However, 2-second checking cannot be accomplished while music or announcements are being provided.
In G2, all Check Backup split steps will be processed as long as the call has not been answered.	In DEFINITY ECS, if a call is already queued to three splits, the check backup split step will not be processed.
Message Waiting Lamps	
G2 does not support Message Waiting Lamps for VDNs.	DEFINITY ECS does support Message Waiting Lamps for VDNs.
'Route To" Command	
The "route to" destinations are set up in an Abbreviated Dial list. The "route to" destinations are assigned to the "route to" step by assigning the Abbreviated Dial list member number as part of the "route to" command (that is, "route to X" where X is a list member number).	The "route-to" command routes the call directly to: internal (local) extensions, VDN extensions, attendants, remote extensions, or external numbers such as trunk access codes. These are not set up in an Abbreviated Dial list, but explicitly in the DEFINITY ECS "route-to" step.

Continued on next page

G2	DEFINITY ECS
"Busy" Command	
The busy command causes termination of vector processing and gives the caller a busy signal. Non-CO trunks will be dropped approximately 25 seconds after busy tone is applied.	The busy command operates in the same fashion, but non-CO trunks will be dropped approximately 45 seconds after busy tone is applied.

CallVisor ASAI Applications

Feature Definition

This feature is called CallVisor Adjunct/Switch Applications Interface (ASAI) in DEFINITY ECS. It provides one or more links between the DEFINITY switch and one or more adjuncts. CallVisor ASAI improves the call handling efficiency of ACD agents and other system users by allowing an adjunct to monitor, initiate, control, and terminate calls on the switch. The CallVisor ASAI interface may be used for Inbound Call Management (ICM), Outbound Call Management (OCM), and office automation/messaging applications.

CallVisor ASAI services are provided using either Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) transport (CallVisor ASAI-BRI), or LAN Gateway Transmission Control Protocol/Internet Protocol transport (CallVisor ASAI-LAN Gateway). In DEFINITY ECS, this is called DEFINITY LAN Gateway (DLG).

Feature Differences

Both G2 and DEFINITY ECS support ASAI connections; however, the interfaces are different.

G2	DEFINITY ECS
CallVisor ASAI *Gateway*	
Supports AT&T's CallVisor ASAI Gateway (previously called ASAI Gateway or Integrated Telemarketing Gateway) using a PRI link with D-channel messaging to the gateway processor.	Does not support CallVisor ASAI Gateway.
Connecting to the Host	
A gateway processor and ASAI over X.25 is used to connect the ASAI gateway processor to the host computer.	A BRI link is used to connect directly to the host or via the LAN using the DLG. Software applications on your ASAI adjunct may have to be rewritten, depending on the host interface software being used.

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G2	DEFINITY ECS
Direct Agent	
Supports the Direct ACD feature for calls originating from the G2 CallVisor ASAI Gateway feature for connectivity to the host and provides zip-tone answer and minimal ACD tracking.	Supports Direct Agent Calling from a host application via an ASAI link to an Automatic Call Distribution (ACD) agent on the switch. DEFINITY ECS Direct Agent Calling allows zip-tone answer, calls to queue to the agent, expanded ACD tracking, and After Call Work. Using DEFINITY ECS Direct Agent Calling for ASAI, the host must handle the transfer negotiation with the switch.
CallVisor ISDN *Gateway*	
G2 can support a CallVisor ISDN Gateway and ASAI Gateway on the same installation.	DEFINITY ECS does not support ISDN Gateway.

Call Work Codes

Feature Definition

DEFINITY ECS provides ACD agents with the various capabilities required to answer and process ACD calls. When the Forced Entry option is enabled for a split, agents are required to complete a Stroke Count or Call Work Code entry for every call answered in the Manual-In mode.

Feature Differences

In G2, Call Work Codes is available with DCP display and non-display stations; in DEFINITY ECS they are only available with DCP and BRI display stations. In G2, the Call Work Codes lamp will indicate that the CWC was not sent to CMS if the link is down. On DEFINITY ECS, the lamp will indicate that the CWC code was successfully sent even if the CMS link is down.

Centralized Attendant Service

Feature Definition

Centralized Attendant Service (CAS) allows services performed by attendants in a private network of switching systems to be concentrated at a central, or main, location. Each branch in a CAS has its own LDN or other type of access from the public network. Incoming trunk calls to the branch, as well as attendant-seeking voice terminal calls, are routed to the centralized attendants over RLT.

The CAS attendants are located at the main location. The main location can be a DEFINITY system Generic 1 or 3, a DEFINITY system Generic 2.1, System 85, a DIMENSION PBX, or a System 75 (V3).

The CAS main PBX operates independently of the CAS branch PBXs. The operation for CAS main PBX traffic is identical to a stand-alone PBX.

Each branch in a network with CAS is connected to the main by way of RLTs. These trunks serve three basic functions:

- Paths for sending incoming attendant seeking trunk calls at the branch to the centralized attendant to be processed and extended back to their destinations at the branch (both parts of a call use the same trunk)
- Paths for returning timed-out waiting and held calls from the branch to the main
- Paths for routing calls from voice terminals in the branch to the centralized attendant at the main

Summary Table for Centralized Attendant Service (CAS)

Table 2-13. Summary Table for Centralized Attendant Service (CAS)

Centralized Attendant Service (CAS)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Main	X	X	X	X	X	X	X	X	
RLT calls can route to:									
Attendant console group	X	X	X	X	X	X	X	X	
ACD group						Iss 3	X	X	

Continued on next page

Table 2-13. Summary Table for Centralized Attendant Service (CAS) — *Continued*

Centralized Attendant Service (CAS)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Vector Directory Number (VDN)						Iss 3	X	X	
4A-CD System						X→	X→		Traditional module only
Branch	X	X	X	X	X	X	X	X	

→ Entries marked with an arrow direct the reader to the Comment entries.

Feature Differences

See Inter-PBX Attendant Calls.

G2	DEFINITY ECS
4A Call Director G2 traditional modules support the 4A Call Director (4A-CD).	DEFINITY ECS does not support traditional modules or 4A-CD.
Alternatives to CAS *[HELP?]* G2 allows RLT trunk groups to terminate to main location attendant consoles or to ACD splits or VDNs to enable ACD agents to function as CAS attendants.	DEFINITY ECS supports termination to attendant groups and night service to extensions or hunt groups.
Contact Interface G2 supports contact interface (on traditional modules only, using the SN241). This interface is used for CAS and ACD split status thresholds to light external lamps for status displays. Some customers use these contacts to close the Tip-Ring path on an analog line with Terminal Busy Indication to display these occurrences on specific terminals.	DEFINITY ECS does not support the contact interface, however, an analog line with auxiliary equipment can provide equivalent capability. See Automatic Call Distribution and Centralized Attendant Service in this chapter for more information.

Code Calling Access—Traditional/Universal

Feature Definition

These feature is called Code Calling Access in DEFINITY ECS. It is called Code Calling Universal in G2. It allows attendants, voice terminal users, and tie trunk users to page zones with coded chime signals. A zone is the location of the loudspeakers, for example, conference rooms, warehouses, etc.

A paging party dials the Code Calling Access code and the extension number assigned to the person to be paged. The paging party is automatically parked (through the Call Park feature) on the paged party's extension number. The system translates the number to a chime code and then plays the code over loudspeakers. The paged party, recognizing the chime code, can answer the call from any voice terminal within the system by dialing the Call Park Answer Back access code and his or her own extension number.

Summary Table for Code Calling Access

Table 2-14. Summary Table for Code Calling Access

Code Calling Access (Chime Paging)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Code Calling Access (Chime Paging)	X	X	X	X	X	X	X	X	
Max Paging Zones	1	1	1	1	1	18*	18*	9	
Number Dialed to Identify Paged Party: 2-or-3-Digit Code Call Identifier	X	X	X	X	X	Trad'l *	Trad'l *		
Extension Number						Univ'l *	Univ'l *	X	
Administrable Number of Cycles	→	→	→	→	→	→	→	X	Always 3 cycles in S85/G2
All Cycles Played if caller releases/transfers/conf	X	X	X	X	X	X	X	X	

* G2 supports 2 Code Call features: The original single-zone feature requires at least 1 Traditional Module, the multi-zone (max 18 zones) feature requires at least 1 Universal Module. Either or both features can be used in a G2 with both Traditional and Universal Modules.

→ Entries marked with an arrow direct the reader to the Comment entries.

Conferencing

Feature Definition

DEFINITY ECS provides two features for conferencing:

- Conference—Attendant

  Allows the attendant to set up a conference call for as many as six conferees, including the attendant. Conferees from inside and outside the system can be added to a conference call. To set up a conference, the attendant dials a number and uses the split key to add each party to the rest of the conference.

- Conference—Terminal

  Allows multi-appearance voice terminal users to set up six-party conference calls without attendant assistance.

Summary Table for Conference

Table 2-15. Summary Table for Conference

Conference	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Attendant Conference								X	
Attendant plus maximum of 5 conferees						X→	X→	X	Universal Module only in G2
Attendant plus maximum of 6 conferees	X	X	X	X	X	X→	X→		Traditional Module only in G2
Conference — station (maximum conferees)	3	3	3	3	3	3	3	6	
Can conference be established before called party answers?									
With a multifunction set controlling	X	X	X	X	X	X	X	X	
Option to deny analog station recall dial-tone and Conference/Transfer features	X	X	X	X	X	X	X	X	

→ Entries marked with an arrow direct the reader to the Comment entries.

Overview of Feature Differences

G2	DEFINITY ECS
Conference — Attendant Six Party	
The G2 feature known as Conference — Attendant Six Party allows the attendant to initiate and control a conference with the attendant and six conferees.	This feature is not available in DEFINITY ECS. On an attendant initiated and controlled conference call, DEFINITY ECS allows the attendant and a maximum of five conferees. However, users can set up their own 6-party conferences, if the system maximum is not administered to be lower than six.
Conference — Attendant Five Party	
There is a G2 feature known as Conference — Attendant Five Party. In G2 any analog or multifunction station conferee presses the RECALL button (analog stations can flash the switchhook) to recall attendant to the conference call.	This feature is very similar to DEFINITY ECS Conference Attendant except to recall the attendant, DEFINITY ECS conferees must use the station conference procedure to add the attendant back on to the conference call.

Minimizing the Impact of Conference Feature Differences

- If you wish to preserve the 3-party limit on user originated conference calls, administer the system limit to be three.
- If you chose to allow users to set up 6-party calls, attendants can let users know of this expanded capability when they call to make conferencing arrangements.

Conference End-User Differences

Recalling the Attendant

Conferees will have to use the station conference procedure to add the attendant back on to the conference call, rather than flashing the switchhook or pressing the Recall button as they could in G2.

Where the Conference Call is Built

DEFINITY ECS builds the Conference Call on the call appearance used for the consultation call, as opposed to the call appearance of the original call held for Conference (the G2 operation). Users familiar with the G2 operation may interpret this difference as losing the call held for conference. This difference should be reviewed with all users.

Data Hot Line

Feature Definition

Data Hot Line provides for automatic nondial placement of a data call to an endpoint when the originator goes off-hook. It may be used for security purposes.

Feature Differences

G2	DEFINITY ECS
Displaying Hotline Information	
Both systems display call progress information. G2 displays hotline information on the data screen as the connection is made.	Both systems display call progress information. DEFINITY ECS does not display hotline information specifically.
Automatic Dialing	
G2 Data Hot Line and Default Dialing numbers are programmed by System Administrators (in much the same way as Automatic Dialing abuttons). Users may program the number for Default Dialing from the data terminal.	These button entries must be added to Abbreviated Dial lists.

Data Protection — Temporary

Feature Definition

This G2 feature is basically the same as DEFINITY ECS Data Privacy. DEFINITY ECS Data Privacy protects analog or digital endpoints involved in a data connection from unwanted intrusion of tones, music, or voice that may be miscronstrued as data. Data Privacy, when activated by a user, denies the system the ability to gain access to, or to superimpose tones, mucic, or voice onto, the protected call.

With both G2 Data Protection – Temporary and DEFINITY ECS Data Privacy, service is provided on a per-call basis by dialing a feature access code.

Feature Differences

G2	DEFINITY ECS
Bridging onto a Protected Call	
In G2, others are not allowed to bridge onto a protected call.	In DEFINITY ECS, the system option "Prohibit Bridging Onto Calls With Data Privacy?" controls this operation. Beginning with DEFINITY ECS, an administrable bridging and conferencing tone is possible within the countries for which it was intended: Italy, Australia, United Kingdom, and Belgium. Outside of these countries, a tone must be customized by system administration. Refer to *Definity Enterprise Communications Server Release 5 Implementation* document for the procedure.

Data Protection — Permanent

Data Protection – Permanent is basically the same as DEFINITY ECS Data Restriction.

DEFINITY ECS Data restriction protects analog data calls from being disturbed by any of the system's overriding or ringing features. Data Restriction, when administered to an extension number or trunk group, denies the system the ability to gain access to, or to superimpose tones onto, the protected call.

Feature Differences

G2	DEFINITY ECS
Bridging onto a Protected Call	
In G2, others are not allowed to bridge onto a protected call.	In DEFINITY ECS, the system option "Prohibit Bridging Onto Calls With Data Privacy?" controls this operation.

Dedicated Switch Connections

Feature Definition

This is a G2 feature. A G2 and R2V4 (beginning with Issue 1.1) Dedicated Switch Connection acts like a hard-wired link between two ports on the switch. In effect, this feature provides a full-time open line between the assigned end points. These connections include intraswitch line connections or trunk connections terminating to a point on a distant switch.

A feature by this name is not offered in DEFINITY ECS. However, the DEFINITY ECS Administered Connections feature combines the G2 Dedicated Switched Connections feature and the S75/G1.1 Permanent Switched Calls features.

Summary Table for Dedicated Switch Connections and Administered Connections

Table 2-16. Summary Table for Dedicated Switch and Administered Connections

Data Connection (ACs & DSC)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Administered Connection (AC)*				→	→	→	→	X	See DSC
AC Capacities:									
Max ACs per switch		NA	NA	NA	NA	NA	NA	128	
Max Access Endpoints per switch		NA	NA	NA	NA	NA	NA	5000	
Access Endpoints on Controlling Switch:									
Non-Signaling Analog Tie trunk†		NA	NA	NA	NA	NA	NA	X	
Non-Signaling DS1 or PRI Trunk†		NA	NA	NA	NA	NA	NA	X	Includes SDDN trks to 4ESS
Data Endpoints on Controlling Switch:									
Any Signaled Trunk†		NA	NA	NA	NA	NA	NA	X→	*Destination* Endpoint only
BRI Data Module		NA	NA	NA	NA	NA	NA	X	
DCP Data Module		NA	NA	NA	NA	NA	NA	X	
EIA port & ADU		NA	NA	NA	NA	NA	NA	X	
PC/PBX Connection (DCP)		NA	NA	NA	NA	NA	NA	X	
PC/ISDN Connection (BRI)		NA	NA	NA	NA	NA	NA	X	
AC Data-Speeds:									
56K (DS1 Access Endpoints only)		NA	NA	NA	NA	NA	NA	X	
64K (DS1 Access Endpoints only)		NA	NA	NA	NA	NA	NA	X	
Voice-Band (Non-SDDN ACs only)		NA	NA	NA	NA	NA	NA	X	
Administered Connection (AC)*				→	→	→	→	X	See DSC

Continued on next page

Table 2-16. Summary Table for Dedicated Switch and Administered Connections — *Continued*

Data Connection (ACs & DSC)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
AC Duration:									
Permanent		NA	NA	NA	NA	NA	NA	X	
Scheduled		NA	NA	NA	NA	NA	NA	X	
AC-Related Features:									
Alarm Notification		NA	NA	NA	NA	NA	NA	X	
Auto Restoration & Redial		NA	NA	NA	NA	NA	NA	X	
for ACs routed via SDDN trks to 4ESS									
Fast Retry for non-SDDN ACs		NA	NA	NA	NA	NA	NA	X	
Dedicated Switch Connection (DSC)#			X	X	X	X	X	→	ACs provide most DSC functions
Max DSCs per switch		NA	NA	1023	1023	1023	1023	NA	
"Nailed-up" Connection Supported by DSC									
Any** DCP DM to Any** DCP DM	NA	NA	NA		Iss 1.1	X	X	AC	DM = Data Module
Any** DCP DM to DMI/BOS Trk	NA	NA	NA		Iss 1.1	X	X	AC	DM = Data Module
Any** DCP DM to DS1/AVD Trk	NA	NA	NA		Iss 1.1	X	X	AC	DM = Data Module
Any** DCP DM to DS1/RB Trk	NA	NA	NA		Iss 1.1‡	X‡	X‡	AC	RB = Robbed Bit
DS1/AVD Trk to DS1/AVD Trk	NA	NA	NA	X	X	X	X	AC	
DMI/BOS Trk to DS1/AVD Trk	NA	NA	NA	X	X	X	X	AC	
DMI/BOS Trk to DMI/BOS Trk	NA	NA	NA	X	X	X	X	AC	
Analog L/T## to Analog L/T##	NA	NA	NA	X	X	X	X	AC	Analog Voice Grade Only
Analog L/T## to DS1/AVD Trk	NA	NA	NA	X	X	X	X	AC	Analog Voice Grade Only
DS1/Non-AVD to DS1/AVD Trk	NA	NA	NA	X	X	X	X	AC	Analog Voice Grade Only
BRI DM to BRI DM	NA	NA	NA			X	X	AC	DM = Data Module
BRI DM to Any** DCP DM	NA	NA	NA			X	X	AC	DM = Data Module
BRI DM to DS1/RB Trk	NA	NA	NA			X‡	X‡	AC	RB = Robbed Bit
BRI DM to DMI/BOS Trk	NA	NA	NA			X	X	AC	DM = Data Module
BRI DM to DS1/AVD Trk	NA	NA	NA			X	X	AC	DM = Data Module
BRI DM to Analog L/T##	NA	NA	NA					AC	DM = Data Module
Any Other Combination of Ports	NA	NA	NA					→	See AC bullet-item above

* ACs and DSCs differ in several respects, but the principal difference is that the DSC is a (port-to-port) intraswitch connection, while ACs are end-to-end connections.

† The AC feature establishes and maintains an end-to-end connection between 2 access/data endpoints based on administered AC attributes. The originating endpoint in an AC must be administered on the switch controlling the AC; the destination endpoint can terminate on the same switch, on another switch in the same private network, or on another switch accessed via the public network, with the connection to the destination endpoint routed according to the destination address.

→ Entries marked with an arrow direct the reader to the Comment entries.

i.e., any Mode 1 (56-Kbps) or Mode 2 (<= 19.2-Kbps) DCP Data Module (DM), or any EIA Port. DSC can be used with Mode 0 (64-Kbps) DCP Data Modules if both endpoints involved terminate on the same traditional module, but not with any inter-module DSC or any DSC between endpoints on a Universal Module.

‡ DSCs can be used with Robbed Bit DS1 trunks only if the signaling is disabled.

** i.e., any Mode 1 (56-Kbps) or Mode 2 (<= 19.2-Kbps) DCP Data Module (DM), or any EIA Port. DSC cannot be used with Mode 0 (64-Kbps) DCP Data Modules.

Analog L/T refers to an Analog Line or Trunk connected to an analog modem suitable for leased-line operation. If the modems are dependent upon the switch for initiation of communications, data connectivity cannot be established with DSC.

Feature Differences

DEFINITY ECS does not offer a feature by this name. However, the DEFINITY ECS Administered Connections feature combines the G2 Dedicated Switched Connections feature and the S75/G1.1 Permanent Switched Calls features.

In addition there is a general difference in the way G2 and DEFINITY ECS handle data. See Host Computer Access in this chapter for more information on these differences.

See also Alphanumeric Dialing (Mnemonic Dialing) and Data Hot Line in this chapter.

G2	DEFINITY ECS
Port-to-Port/End-to-End	
G2 Dedicated Switch Connections (DSC) are port-to-port intraswitch connections.	DEFINITY ECS Administered Connections (ACs) are end-to-end switch connections.
Trunk/Line-side Data Access	
G2 supports trunk-side host access via data modules.	DEFINITY ECS doesn't have trunk-side host access via data modules; you must administer all host ports line-side via data modules.

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G2	DEFINITY ECS
Support for Voice Calls	
G2 Dedicated Switch Connections support voice calls.	DEFINITY ECS Administered Connections do not support voice calls on analog end points; DEFINITY ECS requires sets that auto-answer. A DEFINITY ECS administered connection can terminate on any dialable address, trunk-side or line-side.

Digital Services Interface

Feature Definition

This feature is called DS1 Trunk Service in DEFINITY ECS. It provides a digital interface for the following:

- Voice-Grade DS1 Tie Trunks
- AVD DS1 Tie Trunks
- Robbed-Bit Alternate Voice/Data (RBAVD) DS1 Tie Trunks
- DMI Tie Trunks
- ISDN-PRI Trunks
- CO Trunks
- FX Trunks
- Remote Access Trunks
- WATS Trunks
- DID Trunks
- Off-Premises Stations
- Access Endpoints (R5si)

Feature Differences

Both G2 and DEFINITY ECS support this feature. Companies connecting a switch in the U.S. with a switch in another country use the TN464 to provide 32 channels on the international G1 or DEFINITY ECS switch. TN767 supports Mu-law, TN464B supports A-law. TN464C/D supports both Mu-law and A-law and conversion between Mu-law and A-law.

DEFINITY ECS supports High Density Bi-Polar 3-Bit Substitution (HDB3) digital line coding. DEFINITY ECS also supports idle code and country protocol administration, Interconnect, and Signaling Conversion for A bit parameters.

G2 and DEFINITY ECS normally provide DS1 over a standard T1 carrier, but may use alternative carriers such as fiber links or microwave transmitters.

DEFINITY ECS supports Automatic Fiber Bandwidth Allocation Service (AFBA), which automatically allocates fiber-link bandwidth for PBX customers with one or more EPNs.

Direct Department Calling

This feature is covered by the Direct Department Calling (DDC) and Uniform Call Distribution (UCD feature in DEFINITY ECS. It allows direct inward access to an answering group other than the attendant even if the system does not have the DID feature. A DDC answering group can consist of voice terminals and individual attendants.

See Automatic Call Distribution in this chapter.

Distributed Communication System

Feature Definition

Distributed Communication System (DCS) allows a configuration (cluster) of two or more switches (nodes) to provide certain attendant and voice terminal features as if the cluster is a single large System. This simplifies dialing procedures between locations, and also allows transparent use of some of the System's features between locations.

These switches can be either a DEFINITY Generic 1, DEFINITY Generic 2, G3i, G3r, System 75, System 85, or DIMENSION PBX. If all nodes are System 75s, G3s, or G3sV2, the DCS can have as many as 64 nodes. An attribute of a DCS configuration that distinguishes it from other networks is that it appears as a single switch with respect to certain features. This provides the convenience of using some of the system's features between locations.

Summary Table for DCS

Table 2-17. Summary Table for DCS

	System 85					DEFINITY			
DCS	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	Comments
DCS Cluster Function									
Endpoint (terminal) Node		X	X	X	X	X	X	X	
Tandem Node		X	X	X	X	X	X	X	
DCS Signaling Link									
BX.25		X	X	X	X	X	X	X	DCIU/SCI/PI

Feature Differences

Both G2 and DEFINITY ECS support the same list of transparent voice features, but many of these voice features are different thus affecting DCS feature transparency. If you have been in a DCS network of all S85/G2 systems, you will notice a change in the way DCS works. If your network has had a mix of S85/G2 and S75/G1 systems in it, the differences will already be familiar. In addition, there are display differences between the two systems and there are connectivity and administration differences. The DCS feature interacts with Main/Satellite and other related features and is affected because these features operate differently on the two systems.

G2	DEFINITY ECS
An Example: Automatic Callback	
As one example of a user feature difference, if the target switch is a S85/G2, Automatic Callback works when the called party is busy.	If the target switch is a DEFINITY ECS, Automatic Callback works if the called party is busy or doesn't answer.
Alternate Routing	
G2 supports Alternate Routing of DCS messages.	DEFINITY ECS does not support Alternate Routing of DCS messages.
Routing Calls	
With G2.2 WCR, DCS calls attempt to route first with trunks that are equipped for DCS messaging, then try other trunks. DCS trunks can be intermixed with non-DCS trunks in the WCR pattern.	In DEFINITY ECS, if you want calls to overflow to non-DCS trunks, the non-DCS trunks must be later in the pattern than the DCS trunks.
Tones for Failure Cases	
G2 gives reorder tone in most failure cases.	DEFINITY ECS gives intercept tone in failure cases and reorder in out-of-resource cases.
Called Party Name	
Prior to G2.2, G2 did not send or process a called party name. (See *DCS End User Differences* for examples of what this means to a user.)	DEFINITY ECS sends and processes called party name. See Voice Terminal Display in this chapter for more information on displays.

Continued on next page

G2	DEFINITY ECS
BX.25 and DCS *over* ISDN PRI *D-Channel*	
G2 supports BX.25.	DEFINITY ECS supports BX.25 and DCS over ISDN PRI D-channel.
DCIU Alternate Routing	
G2 provides alternate routing for DCS messages if a DCIU link becomes inoperative.	DEFINITY ECS does not provide DCIU message alternate routing.
Non-DCS *Trunks in Routing Patterns*	
In G2.2, non-DCS trunks can be included in WCR routing patterns and the DCS trunks will be given preferential routing, only using non-DCS trunks if DCS trunks are not available. (In G2.1 and earlier, this works the same as with DEFINITY ECS.)	In DEFINITY ECS, any non-DCS trunks in AAR/ARS routing patterns must follow DCS trunks to achieve the same effect.

G2 Feature Characteristics Not Available in DEFINITY ECS

In a CAS arrangement, the originator's extension number (or trunk group ICI) and class of service number is available to the CAS attendant.

EIA Interface

Feature Definition

EIA Interface provides an alternative to Digital Terminal Data Modules (DTDM) and Modular Processor Data Modules (MPDM) within the system hardware for interconnection between EIA 232 compatible Digital Terminal Equipment (DTE) and the System. The EIA Interface consists of a Data Line circuit pack port and an Asynchronous Data Unit (ADU).

Feature Differences

G2	DEFINITY ECS
Traditional Modules	
In G2 traditional modules, EIA is provided via the SN238.	DEFINITY ECS does not support traditional modules.
TN726 Support	
This feature is supported in G2 universal modules using the TN726 data line board.	DEFINITY ECS also supports this feature using the TN726B. With the TN726B, users can have control of the line and change the options dynamically.
Setting Options	
On the SN238, options are set via two dip switches. There are 4 ports on the SN238.	On the TN726B, options are set using the SAT. There are 8 ports on the TN726B.
Administering Digital Lines	
G2 has the ability to administer digital lines as trunks or stations.	DEFINITY ECS administers digital lines as stations.

Enhanced Uniform Call Distribution

This feature is called Direct Department Calling (DDC) and Uniform Call Distribution (UCD) in DEFINITY ECS. It allows direct inward access to an answering group other than the attendant even if the system does not have the DID feature.

A DDC or UCD answering group can consist of voice terminals and individual attendants (described in the Individual Attendant Access feature elsewhere in this document). In addition, a UCD group can consist of data modules, data line circuit ports, or modems.

One extension number is assigned to all voice terminals, individual attendants, data modules, data line circuit ports, or modems in a group or department, that is, to a set that serves the same function and requires call distribution among the members of the group. Incoming calls to a DDC group or UCD group can be internal or external.

The hunting algorithm used by the system to select an idle terminal or console is the only difference between DDC and UCD.

Extended Trunk Access

Feature Definition

Extended Trunk Access (ETA) is a software feature that provides a mechanism for routing calls that are not defined either in the first or second digit tables or the feature/trunk access code tables. This feature makes use of an ETA routing pattern and/or an ETA node number for determining how to route an unidentified call. Using ETA allows the user to fully use the capabilities inherent in the Automatic Alternate Routing (AAR) and Uniform Dial Plan (UDP) features.

Historically, ETA has been used by satellite switches to access stations, trunks, and features at the main switch. ETA frees the satellite switch administrator from having to enumerate the entire dial plan for the main/satellite complex.

Feature Differences

This is a DEFINITY ECS feature and part of the G2 Main/Satellite feature.

See Uniform Dial Plan.

G2	DEFINITY ECS
General Feature Information	
A G2 satellite correlates *any* dialed number that is not defined in the satellite's dial plan with the DAC (dial access code) of the ETA trunk group and extends the call to the main for subsequent digit analysis.	DEFINITY ECS must have a more complete dial plan for the satellite. Therefore, it must identify the dialed number in its own dial plan as a non-local - Extension Feature access code - Trunk-group access code. If the satellite does not identify the dialed number, then the satellite (not the main) returns Intercept Treatment to the calling party.
Routing Patterns	
G2 does not use routing patterns with Extended Trunk Access.	DEFINITY ECS uses one routing pattern with Extended Trunk Access.

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G2	DEFINITY ECS
Routing Attendant Calls ETA can be used to route attendant calls from the satellite to an attendant at the main.	Inter-PBX Attendant Access is used for this purpose.
Applying ETA Extended Trunk Access is only applicable on a satellite switch when using Main/Satellite trunk groups.	Extended Trunk Access is applicable to any trunk group.

Facility Restriction Levels

Feature Definition

This feature is called Facility Restriction Levels (FRLs) and Traveling Class Marks (TCMs) in DEFINITY ECS. It provides up to eight levels of restriction for users of the AAR and/or ARS features.

FRLs and TCMs provide a method of allowing certain calls to specific users, while denying the same calls to other users. For example, certain users may be allowed to use Central Office trunks to other corporate locations while other users may be restricted to the less expensive private network lines.

FRLs and TCMs are transparent to the user. Appropriate values are predetermined and programmed into the system. Dialing procedures are unaffected.

Feature Differences

Both G2 and DEFINITY ECS support this feature.

Generic 2	DEFINITY ECS
Checking the Forwarding Station's FRL	
G2.1 and earlier checks the forwarding station's FRL but will not prompt for an authorization code if the FRL is not high enough to route. G2.2 checks the higher of the forwarding station's or calling station/trunk's FRLs. It still does not prompt for an authorization code.	DEFINITY ECS checks the forwarding station's FRL and does not prompt for an authorization code.
Traveling Class Marks	
G2 supports two Traveling Class Marks, the first being the origination's FRL and the second being a Conditional Routing Count.	DEFINITY ECS supports one Traveling Class Mark.

Facility Test Calls

Feature Definition

The Facility Test Calls (with Security Measures) feature in DEFINITY ECS provides a voice terminal user with the capability of making test calls to access specific trunks, DTMF receivers, time slots, and system tones. The test call is used to make sure the facility is operating properly. A local voice terminal user can make a test call by dialing an access code. Lucent Technologies remote maintenance personnel may also use this feature to make test calls.

Four types of Facility Test Calls can be made:

- Trunk test call
- DTMF receiver test call
- Time slot test call
- System tone test call

Feature Differences

There are Automatic Transmission Measurement System (ATMS) differences on the two systems, but making test calls is a similar operation on both systems. See Automatic Transmission Measurement System.

G2	DEFINITY ECS
Facility Test Access	
G2 can only access trunks, not touch-tone receivers, time slots, or tones.	DEFINITY ECS can access trunks, touch-tone receivers, time slots, and tones.
Assigning Facility Test	
G2 can only assign Facility Test to designated test extensions. (See Trunk Verification by Station.)	DEFINITY ECS can assign this capability to any station user.

Force Administration Data System

Feature Definition

The G2 Force Administration Data System (FADS) feature collects and stores traffic-related information for Centralized Attendant Service (CAS) and for Uniform Call Distribution (UCD) groups. This information allows the customer to intelligently adjust the make-up of the CAS attendants and/or UCD groups to suit the call-load requirements.

NOTE:
The UCD feature is not available in switches after R2V1. The S85/G2 call distribution services provided by UCD have been replaced and enhanced by the EUCD feature and subsequently by the ACD feature.

Summary Table for Force Administration Data System (FADS)

Table 2-18. Summary Table for Force Administration Data System (FADS)

Force Administration Data Systems (FADS)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
CAS Attendant	X	X	X	X	X	X	X		
UCD	X	X	*	*	*	*	*		

* FADS for UCD removed in S85 R2V2 and replaced by CMS (MIS) in S85 R2V3.

Feature Differences

This G2 feature for measuring CAS attendants is not available in DEFINITY ECS. The Basic Call Management System (BCMS) feature includes FADS capabilities in DEFINITY ECS, and is the successor to the Force Administration Data System feature that was provided in G2.

Forced Entry of Account Codes

Feature Definition

DEFINITY ECS Forced Entry of Account Codes requires users to dial an account code when making certain types of outgoing calls. System administration determines the conditions under which dialing of account codes is required.

Summary Table for Forced Entry of Account Codes

Table 2-19. Summary Table for Forced Entry of Account Codes

Account Codes	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Account Codes	X	X	X	X	X	X	X	X	
Forced Entry of Account Codes				X	X	X	X	X	

Feature Differences

This is a feature in DEFINITY ECS; G2 provides the same functionality. Related features are Call Detail Recording and World Class Routing. .

G2	DEFINITY ECS
CDR Requirement CDR is required for Forced Entry of Account Codes.	CDR is not required.
Defining Toll Calls In G2.1 and earlier, toll is a 0 or 1 in the first or second digit. In G2.2 for non-ARS/WCR, toll is a 0 or 1 in the first digit . For ARS/WCR, toll is defined by the toll table.	In DEFINITY ECS, toll is defined by the toll table.

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G2	DEFINITY ECS
Account Code Entry Requirements	
In G2.1 and earlier, system level administration requires dialing the Account Code prior to entering ARS. G2.2 requires dialing the Account Code on a per network basis. In G2.2, the Account Code can be dialed before or after the Network Dial Access Code.	Administration requires dialing the Account Code before dialing the destination number or entering ARS.
Marking Strings	
Individual strings cannot be marked for Forced Entry of Account Codes.	Strings in the toll table can be marked for Forced Entry of Account Codes.
No Account Code	
AAR/ARS/WCR preferences with trunk groups that require account codes are skipped if one was not dialed.	DEFINITY ECS denies calls for no Account Code if the originator is required to enter one or if the trunk requires Forced Entry of Account Code and the call is not AAR or ARS or UDP.

Generalized Route Selection

Feature Definition

Generalized Route Selection (GRS) provides the customer voice and data call routing capabilities to select not only least cost routing, but also optimal routing over the appropriate facilities.

GRS is a capability built on the current Automatic Alternate Routing (AAR) and Automatic Route Selection (ARS) features. In AAR or ARS, routing is based on the dialed number, the Facility Restriction Level (FRL) of the call originator, the partitioning group number, and the time-of-day. By providing additional parameters in the routing decision, GRS enhances AAR and ARS and maximizes the chance of using the right facility to route the call. Also, if an endpoint incompatibility exists, it provides a conversion resource (such as Modem Pools) to attempt to match the right facility with the right endpoint.

Feature Differences

Both the concept and the content of Generalized Route Selection (GRS) differ between G2 and DEFINITY ECS.

G2	DEFINITY ECS
General Feature Information	
In G2, GRS is one of the basic modules of the World Class Routing feature that can apply the following routing functions to select preferences for calls in a general manner: — Facility Restriction Levels — Bearer Capability COS — Extension Partitioning — Time-of-Day Routing	In DEFINITY ECS, the concept of GRS is often framed in the narrower concept of bearer-capability routing.
— Conditional Routing — Attendant Control of Trunk Group — ISDN Required/Preferred — DCS Required/Preferred — Account Code required — Symmetrical Routing — Trunk Reservation Limit	DEFINITY ECS does not support Conditional Routing.
Toll Restriction	Instead of a preference basis, DEFINITY ECS bases toll restriction on user-dialed digits.

Host Computer Access

Feature Definition

The G2 Host Computer Access feature provides a Digital Communications Protocol(DCP) interface between a System 85 or G2 switch and a local Host Computer. This permits switched digital access between data endpoints on the local switch and the host computer.

With the G2 Host Computer Access feature, the host is connected to a DCP port on the switch through a Data Module, or the connection can be to an EIA or Digital Line port circuit via a Multiple Asynchronous Data Unit (MADU). The data modules or MADU convert the EIA RS-232 signals from the host computer to the DCP format of the switch and vice versa. Both formats are digital, but the communications and signaling arrangements differ. Another digital host access arrangement is provided by the Digital Multiplexed Interface (DMI) feature.

Summary Table for Computer Access

Table 2-20. Summary Table for Host Computer Access

	System 85					DEFINITY			
Host Computer Access	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Data Communications Access (DCA) Feature									
via Analog Data Port	X	X	X	X	X	X	X		
via Analog Line Port								X	
Host Computer Access (HCA) Feature									
via BRI Port									
via DCP Port	X	X	X	X	X	X	X	X	
via EIA Port			X	X	X	X	X	X	
Digital Multiplexed Interface (DMI)									
w/Bit Oriented Signaling (BOS) Feature									
via DS1 Port				X	X	X	X	X	
Other Features Applying to DMI/BOS									
CDR Recording				X	X	X	X	X	
Hunting				X	X	X	X	X	
Modem Pooling				X	X	X	X	X	
Off-hook Queuing				X	X	X	X	X	

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Table 2-20. Summary Table for Host Computer Access — *Continued*

Host Computer Access	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Other Features Applying to DCA and/or HCA									
CDR Recording	X	X	X	X	X	X	X	X	
Hunting	X	X	X	X	X	X	X	X	
Modem Pooling	X*	X	X	X	X	X	X	X	
Off-hook Queuing		X	X	X	X	X	X	X	
w/Position Feedback		X	X	X	X	X	X	X	

* With S85 R1, the calling user must use 2-stage dialing to first dial a code to access a pooled modem, then another code to access the computer.

Feature Differences

Both G2 and DEFINITY ECS support access to host computers, but there is a general difference in the way G2 and DEFINITY ECS handle data.

G2	DEFINITY ECS
Trunk/Line-Side Data Access	
G2 supports trunk-side host access via data modules.	DEFINITY ECS doesn't have trunk-side host access via data modules; you must administer all host ports line-side via data modules, or EIA port cards.
Incoming Outside Data Calls	
For incoming outside data calls requiring a modem pool member, G2 can modify or select bearer capability based on AAR/ARS digit analysis; DEFINITY ECS cannot because Bearer Capability Class of Service is not supported.	In DEFINITY ECS, you must assign incoming data trunk groups specifically for each baud rate. This effectively limits trunk groups to serving one group of data users. For example, a user with a 1200 baud modem must call a certain number to let the switch know that a 1200 baud modem is required.

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G2	DEFINITY ECS
Setting up Pools of Data Modules By using the Route Advance feature of G2 it is possible to construct a pool of data modules that have been set up to operate at any speed. If a modem pool resource is required, the data rate required is specified by the attributes of the trunk group that was dialed.	In DEFINITY ECS, the desired data rate must be set on the data module, thus the pool of host ports must be broken up into smaller pools, each pool serving a particular speed or groups of speeds.
Station Number Steering, etc. G2 does station number steering and supports trunk groups of data modules.	DEFINITY ECS doesn't do station number steering, and doesn't support trunk groups of data modules, except for trunk groups of DMI (BOS/MOS) data modules. However, DEFINITY ECS does support hunt groups of data modules and companies can arrange to have CDR report on these hunt groups.
Module Preference G2's Host Computer Access selection algorithm provides module preference.	The DEFINITY ECS hunt group hunting algorithm does not provide same module preference.

Hunting

Feature Definition

Hunting checks for the active or idle status of extension numbers in one or more ordered groups. If all members of a group are active, the call can route to another group through Call Coverage or can wait in a queue for an available group member, if a queue is provided.

Hunting is accomplished through the ACD, Call Coverage, DDC, and UCD features. The order of hunting is defined under each individual feature.

Summary Table for Hunting

Table 2-21. Summary Table for Hunting

	System 85					DEFINITY			
Hunting	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Hunting Algorithm									
Terminal (Linear, Direct)	Linear	Linear	Linear	Linear, ACD	Linear, ACD	Linear, ACD	Linear, ACD	DDC, ACD	
Circular	Circ	Circ	Circ	Circ	Circ	Circ	Circ		
Most Idle Agent (MIA)				ACD	ACD	ACD	ACD	UCD, ACD	
Hunting without Queuing	Linear Circ	Linear Circ	Linear Circ	Linear Circ	Linear Circ	Linear Circ	Linear Circ	DDC, UCD, ACD	
Hunting with Queuing	DDC UCD	DDC UCD	EUCD	ACD	ACD	ACD	ACD	DDC, UCD, ACD	
Queue Size Limiter					ACD*	ACD*	ACD*	DDC, UCD, ACD	
Queue Status			EUCD	ACD	ACD	ACD	ACD	DDC, UCD, ACD	
Status Warning via Beehive			X	X	X	X	X	X	Contact interface
Threshold via Station Lamp			X	X	X	X	X	X	
Calls Waiting-OCW via Display					X	X	X	X†	Oldest Call Waiting
Hunting w/Abandoned#	DDC	DDC	EUCD	ACD	ACD	ACD	ACD	DDC,	

Continued on next page

Table 2-21. Summary Table for Hunting

Hunting	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Call Search	UCD	UCD						UCD, ACD	
Hunting w/Agent Work Modes#			EUCD	ACD	ACD	ACD	ACD	ACD	
Hunting w/Delay#	DDC	DDC	EUCD	ACD	ACD	ACD	ACD	DDC,	
Announcements	UCD	UCD						UCD, ACD	
Misc Features for Hunt Groups									
Call Forwarding-On-Net	X	X	X	X	X	X	X	X	
Call Forwarding-Off-Net	X	X	X	X	X	X	X	X	
Night Service					X**	X**	X**	X	

* Queue Size Limiter is available only with Call Vectoring in System 85/G2, See C-6 (Call Management).

† Requires button.

The various functions related to Hunting are listed with the hunting feature name (for example, Linear,Circular,DDC,UCD,EUCD,ACD) of each S85/DEFINITY Release/Version that include that function identified in the appropriate columns.

** Requires Call Vectoring.

Feature Differences

G2 provides hunt chains (linear or circular), while DEFINITY ECS provides hunt groups (DDC or UCD).

G2	DEFINITY ECS
G2 hunting description	*DEFINITY ECS hunting description*
In G2, hunting takes place when the extension called is busy and there is an assigned "hunt-to" extension. If the "hunt-to" extension is busy, its "hunt-to" extension will also be checked. This sequence forms a hunt chain. Linear hunting (also called rotary or terminal hunting) is accomplished by not having a "hunt-to" extension assigned to the last extension in the chain. A call to a member of the linear hunt chain only hunts to the remaining members of the chain. For example, if a hunt chain is administered with E to B to C to D and a call is placed to extension B and if B is busy, the call hunts to C. If C is busy, the call hunts to D. The call will not hunt to E because it appears before B in the sequence. There is a definite order defined for G2 hunting and the portion of the linear hunt chain before the called extension will be excluded. There is no equivalent to the G2 linear hunting operation in DEFINITY ECS. G2 circular hunting is accomplished by assigning the first extension in the hunt sequence as the "hunt-to" extension for the last extension in the hunt chain. The hunt sequence will then continue checking the beginning portion of the hunt group after checking the end portion.	DEFINITY ECS provides hunting via Call Coverage and hunt groups. Hunting takes place when Call Coverage is administered to go to the hunt group or when the hunt group extension number is called. DEFINITY ECS hunt group operation and features correspond more closely to G2 ACD splits. A hunt group can be assigned as Direct Department Calling (DDC) or Uniform Call Distribution (UCD) type. DDC hunting delivers the call to the first available extension in the administered sequence. UCD hunting delivers the call to the most idle extension in the hunt group. As an example, given a hunt group with E to B to C to D, the DDC operation would always test in order from E to B to C to D, regardless of which extension covers to the hunt group. If the call is placed to extension B, extension E will be tested even though it comes before B in the sequence (in contrast to the G2 linear hunt operation which would not check extension E). With UCD operation, the call is always connected to the most idle extension of the group regardless of the administered sequence.

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G2	DEFINITY ECS
Other differences — G2:	*Other differences — DEFINITY ECS:*
Queuing for Hunt Groups	
G2 does not provide queuing for hunt chains. However, it does provide queuing for ACD.	Queuing can be assigned to DEFINITY ECS hunt groups so that if all extensions in the group are busy, calls can wait for an available extension. Other features are available for hunt groups such as delay announcements, warning indicator lamps, make busy DAC or AUX Work button.
*Redirect on No Answer (*RONA*)*	
G2 does not support RONA.	In DEFINITY ECS RONA is an ACD hunt group optional feature that redirects an unanswered ACD call to the split after an administered number of rings. RONA only redirects the call after making the agent unavailable and notifying the Call Center Manager.
Data Modules	
In G2, data modules can be in either trunk groups or hunt groups and you can specify module preference.	In DEFINITY ECS, data modules cannot be in trunk groups. Upon moving to DEFINITY ECS, you must convert your data module trunk groups to non-ACD hunt groups.
Data Access	
G2 can use only one extension number for data access by using a trunk group.	DEFINITY ECS requires one extension number per hunt group member.

Inbound Call Management

Feature Definition

Inbound Call Management improves the handling of inbound calls in such applications as telemarketing, claims processing, etc. An application on a host processor is integrated with switch features such as Automatic Call Distribution (ACD), Call Vectoring, and Call Prompting to provide enhanced features and improve efficiency. The host process may be a CallVisor/PC, CONVERSANT voice system, Telephony Services Server (running Novell NetWare(R)) serving a local area network, or a processor from one of the CallVisor ASAI vendor partners. The CallVisor ASAI Planning Guide provides information on the various vendor partners.

Feature Differences

In both systems this application refers to a group of features: ACD/DDC/EUCD/UCD, Call Vectoring, and CallVisor ASAI Gateway.

Related features are Automatic Call Distribution, Call Vectoring, and CallVisor ASAI Applications.

Integrated Services Digital Network — Basic Rate Interface

Feature Definition

Integrated Services Digital Network (ISDN) - Basic Rate Interface (BRI) allows connection of the system to equipment or endpoints that support an Integrated Services Digital Network (ISDN) by using a standard ISDN frame format called the Basic Rate Interface (BRI).

An ISDN provides end-to-end digital connectivity and uses a high-speed interface which provides service-independent access to switched services. Through internationally accepted standard interfaces, an ISDN provides circuit or packet-switched connectivity within a network and can link to other ISDN supported interfaces to provide national and international digital connectivity. Two types of ISDN interfaces are currently defined: the PRI and the BRI.

Feature Differences

G2	DEFINITY ECS
Pool of Appearances	
G2 supports calls on a pool of appearances on a station that support voice and data calls to/from the same extension number using different call appearances.	DEFINITY ECS requires a separate extension on a station for data calls, designating one of the extensions for data.
Prime Line	
G2 provides a prime line for ISDN-BRI data calls. When a G2 BRI user places a data call, the switch automatically selects the appearance designated as the data prime line.	DEFINITY ECS, using separate extensions, does not provide a data prime line for BRI calls. Voice calls to an extension assigned to a WCBRI Data Module are offered to the station anyway because the WCBRI Data Terminal may also have voice capabilities.

Integrated Services Digital Network — Primary Rate Interface

Feature Definition

Integrated Services Digital Network (ISDN) - Primary Rate Interface allows connection of the system to an Integrated Services Digital Network (ISDN) by using a standard ISDN frame format called the Primary Rate Interface (PRI). The ISDN gives the system users access to a variety of public and private network services and facilities. The ISDN-PRI standard consists of layers 1, 2, and 3 of the Open System Interconnect (OSI) model. In ISDN-PRI, the transmission standard for layer 1 (the physical layer), is either DS1 (T1) or CEPT1 (E1).

Summary Table for ISDN-PRI

Table 2-22. Summary Table for ISDN-PRI

ISDN-PRI	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Access to AT&T's International services over ISDN-PRI	NA	NA	NA	NA	X	X	X	X	
Answer Supervision	NA	NA	NA	NA	X	X	X	X	
Bearer Capability Routing	NA	NA	NA	NA	X	X	X	X	
Call-by-Call Service Selection	NA	NA	NA	NA	X	X	X	X	
Calling Party Name/Number Display	NA	NA	NA	NA	X	X	X	X	
Channel Negotiations, Retry & Glare Resolution	NA	NA	NA	NA	X	X	X	X	
Connected Party Name/Number Display*	NA	NA	NA	NA	X	X	X	X	
Digital Transmission Testing Via ATMS	NA	NA	NA	NA	X	X	X	X	
End-to-End ISDN Routing	NA	NA	NA	NA	X	X	X		
Flexible Network-Specific Facility (NSF) Admin	NA	NA	NA	NA		X	X	X	
Hyperactive Facility Identification	NA	NA	NA	NA		X	X	X	
Internal Q.931 Flow Control	NA	NA	NA	NA		X	X	X	
ISDN Codeset Conversion†	NA	NA	NA	NA		X	X	X	Codeset 6/7 Compatibility
ISDN Two-way Trunk Busy-out	NA	NA	NA	NA	X	X	X	X	
Locally Provided Tones	NA	NA	NA	NA	X	X	X	X	
Negotiated Trunk Initialization	NA	NA	NA	NA	X	X	X	X	
Non-Facility Associated Signaling (NFAS)	NA	NA	NA	NA		X	X	X	
w/D-Channel Backup Option	NA	NA	NA	NA	NA	X	X	X	
Max Number PRI Interfaces/D-Channel	NA	NA	NA	NA	NA	20	20	20	
Max Trks/D Channel	NA	NA	NA	NA	NA	479	479	479	
PRI/Trunk Interworking	NA	NA	NA	NA	X	X	X	X	

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Table 2-22. Summary Table for ISDN-PRI — *Continued*

ISDN-PRI	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Private Network Services (ETN)	NA	NA	NA	NA	X	X	X	X	
Protocol Updates for Consistency w/AT&T PRI Spec	NA	NA	NA	NA			X	X	
Restricted and unrestricted (clear channel) facilities fully supported	NA	NA	NA	NA		X	X	X	
SID & ANI									
On Every Call	NA	NA	NA	NA	X	X	X	X	
Per Call On Request	NA	NA	NA	NA				X	
Tandemed User-to-User Information	NA	NA	NA	NA	X	X	X	X	for example, between DMI/MOS host computers

* On ISDN-PRI Public Network and non-DCS Private Network calls, Connected Party (which differs from the Called Party on redirected calls) Name/Number information is sent to the originating switch via the PRI trunk and displayed on the calling party's alphanumeric display.

† See Feature Differences table that follows for differences here.

Feature Differences

G2	DEFINITY ECS
Class of Service Assignment According to a class-of-service assignment, the G2 can respond to an ISDN preferred or exclusive routing request by populating a TCM information element.	The DEFINITY ECS does not offer this capability.
Mapping to Codesets Codeset Mapping is administered on a DS1 basis in G2. It permits the switch to adapt to changes in the codeset usage for certain features. Incoming information elements (IE) may be defined differently than outgoing IEs, and each IE may have a different mapping. It allows the G2 to interwork with the System 85 R2V4 to display name and number.	Codeset Mapping is administered on a trunk group basis in DEFINITY ECS. You may select which codeset (6 or 7) will be used to transmit supported features.

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G2	DEFINITY ECS
Accessing ISDN-PRI *Facilities* G2 users can access an ISDN-PRI facility via the G2 WCR feature, Trunk Verification by Station, or by dialing a trunk Access Code (this latter only applies to calls to G1 or DEFINITY ECS).	DEFINITY ECS can access ISDN-PRI trunks by AAR, ARS, DAC, and by UDP.
Changing Line Coding, etc. Line coding, signaling, and framing on the ISDN circuit pack can be administered without removing the trunks from their trunk groups.	To change the line coding, signaling, and framing, you must first remove the trunks from their trunk groups.
User/Network Administration G2 implements only user-side call states. This means that, at layer 3, the G2 is always the user side of the connection. Unless a G2 is connected to another G2, the layer 2 administration of user/network must *also* be user.	You can administer DEFINITY ECS as either user or network. This defines both the layer 2 and layer 3 user/network relationship. When connected to a G2, the DEFINITY ECS must always be administered as "network" and the G2 as "user." The layer 2 protocol is automatically the CCITT standard.
B8ZS In G2, if B8ZS line coding is administered, you have the option of inverting the bits on the D-Channel.	In DEFINITY ECS, D-channel is not inverted with B8ZS.
Mixed Signaling G2 does not support mixed signaling on a PRI interface.	DEFINITY ECS supports mixed signaling on an ISDN-PRI interface.

Intercept Treatment

Feature Definition

Intercept Treatment provides an intercept tone or a recorded announcement or routes the call to an attendant for assistance when calls cannot be completed or when use of a feature is denied.

- Intercept Treatment — Tone

  Provides a siren-type tone to internal calls that cannot be completed as dialed.

- Intercept Treatment — Recorded Announcement

  Provides a recorded announcement to DID and incoming Private Network Access calls that cannot be completed as dialed or that are transferred to incomplete or restricted stations. The System Manager selects and records the message.

- Intercept Treatment — Attendant

  Allows attendants to provide information and assistance to callers on all DID or incoming Private Network Access calls that cannot be completed as dialed or that are transferred to incomplete or restricted stations.

- Intercept Treatment — Station

  Allows a specific voice terminal to receive certain calls that cannot be completed because of a controlled restriction (see Controlled Restrictions feature) or because the called party has activated Do Not Disturb.

Summary Table for Intercept Treatment

Table 2-23. Summary Table for Intercept Treatment

	System 85					DEFINITY			
Intercept Treatment	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	DEFINITY ECS	Comments
Intercept Treatment Supported									
Attendant	X		X	X	X	X	X	X	
w/Atnd Diversion to Recorded Announcement		X	X	X	X	X	X	X	
Recorded Announcement	X	X	X	X	X	X	X	X	
w/Optional Timeout to Attendant Station								X	
Tone	X	X	X	X	X	X	X	X	
Intercept Tone		X	X	X	X	X	X	X	I-Tone
Reorder Tone		X	X	X	X	X	X		R-Tone

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Table 2-23. Summary Table for Intercept Treatment — *Continued*

Intercept Treatment	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	DEFINITY ECS	
Treatment Selection									
For DID Calls									
Default	Atnd	R-Tone	R-Tone	R-Tone	R-Tone	R-Tone	R-Tone	Atnd	
Other Assignable Treatment(s)	Ann	Ann,	Ann,	Ann,	Ann,	Ann,	Ann,	Ann	
		Atnd	Atnd	Atnd	Atnd	Atnd	Atnd		
For Internal Calls									
Default	I-Tone	I-Tone	I-Tone	I-Tone	I-Tone	I-Tone	I-Tone	I-Tone	
Other Assignable Treatment(s)		Ann,	Ann,	Ann,	Ann,	Ann,	Ann,		
		Atnd	Atnd	Atnd	Atnd	Atnd	Atnd		
For Private Network Calls									
Default	Atnd	I-Tone	I-Tone	I-Tone	I-Tone	I-Tone	I-Tone	Atnd	
Other Assignable Treatment(s)	Ann,	Ann,	Ann,	Ann,	Ann,	Ann,	Ann,	Ann	
	I-Tone	Atnd	Atnd	Atnd	Atnd	Atnd	Atnd		
For Calls to Recently									
Disconnected Extensions									
Default									
Other Assignable Treatment(s)		Ann,	Ann,	Ann,	Ann,	Ann,	Ann,		
		Atnd	Atnd	Atnd	Atnd	Atnd	Atnd		
		Tone→	Tone→	Tone→	Tone→	Tone→	Tone→		I-Tone vs. R-Tone depends on call source
For Calls Denied by COS/COR/FRL									
Default		Tone→	Tone→	Tone→	Tone→	Tone→	Tone→	I-Tone	I-Tone vs. R-Tone depends on call source
Other Assignable Treatment(s)		Ann,	Ann,	Ann,	Ann,	Ann,	Ann,		
		Atnd	Atnd	Atnd	Atnd	Atnd	Atnd		
For Calls Denied by Controlled									
Restr or DND features									
Default		Atnd	Atnd	Atnd	Atnd	Atnd	Atnd	I-Tone	
Other Assignable Treatment(s)								Ann,	
								Atnd	
								Sta	

→ Entries marked with an arrow direct the reader to the Comment entries.

Feature Differences

G2	DEFINITY ECS
Routing to an Announcement	
In G2, calls that route to a recorded announcement can be redirected (with timeout) to the attendant if the caller does not disconnect after the announcement.	This capability is not available in DEFINITY ECS.

Intercom

Feature Definition

DEFINITY ECS provides two features:

- Intercom— Automatic

  Provides a talking path between two voice terminal users. Calling users press the Automatic Intercom button and lift the handset, or vice versa. The called user receives a unique intercom alerting signal, and the status lamp associated with the Dial or Automatic Intercom button, if provided, flashes.

- Intercom — Dial

  Allows multi-appearance voice terminal users to gain rapid access to selected other voice terminal users within an administered group. Calling voice terminal users lift the handset, press the Dial Intercom button, and dial the 1- or 2-digit code assigned to the desired party. The called user receives alerting tone, and the status lamp associated with the Intercom button, if provided, flashes.

In addition, G2 provides a manual intercom feature.

Summary Table for Intercom

Table 2-24. Summary Table for Intercom

Feature	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Automatic Intercom	X	X	X	X	X	X	X	X	
Dial Intercom	X	X	X	X	X	X	X	X	
1- or 2-digit codes can be used	X	X	X	X	X	X	X	X	
1- or 2-digit codes can be used in the same group	X	X	X	X	X	X	X		
First digit can be 0	X	X	X	X	X	X	X	X	
Manual Intercom	X	X	X	X	X	X	X		
Bridged Manual Intercom	X	X	X	X	X	X	X		

Overview of Feature Differences

G2	DEFINITY ECS
Call Forwarding	
G2 intercom calls are handled separately from regular line appearances and are, therefore, not affected by Call Forwarding.	Since DEFINITY ECS intercom calls come over regular line appearances, Call Forwarding treats them like regular calls.
Kinds of Intercom	
G2 supports three kinds of intercom: auto, dial, and manual.	DEFINITY ECS supports auto intercom and dial intercom.
Intercom Groups	
G2 supports 280 Dial Intercom Groups of 28 and 300 Auto-Manual groups of 16 stations. In an auto-group, two members automatically alert each other, while the remaining members are treated as manual.	DEFINITY ECS supports 256 groups of 32 stations. Ranging and Filtering is supported for the list intercom-groups command.
Appearances	
G2 allows a terminal to have more than one appearance of a dial intercom group.	DEFINITY ECS allows a terminal to have only one appearance of a dial intercom group.
Intercom Alerting	
In G2 you can choose from six forms of intercom alerting.	DEFINITY ECS there is one form of alerting.
The system administrator may chose from six styles of Intercom Audible Alerting Signal.	There is one standard form of Intercom alerting: a single burst of unmodulated 750 Hz for 600 milliseconds repeated each 5.2 second ring cycle.
Manual Signaling	
Manual intercom members use Manual Signaling buttons to signal the intercom members they wish to speak to. A manual signaling button is set up to ring the specified station.	The Intercom appearance and the manual signaling button must be on different buttons. G2 Manual Intercom users can be moved to DEFINITY ECS intercom groups, but they must use Dial Intercom to reach their intended people.

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G2	DEFINITY ECS
Red and Green Lamps In G2, an intercom button is an appearance button with the full operation of the red In-Use and green feature-status indicators.	In DEFINITY ECS, a user has a primary extension with several 2-lamp line appearances. Intercom, Personal CO Lines, Terminating Extension Groups, and Call Answer Groups are assigned to feature buttons with green status lamps only. When an intercom button is used, the switch correlates it with an appearance of the station's primary extension. When every primary extension appearance is busy, Intercom calls cannot be placed or answered.

Minimizing the Impact of Intercom Feature Differences

G2 Manual Intercom group members can be administered to be be members of an intercom group, but they must use Dial Intercom to reach their intended people.

Intercom Administration Differences

Manual Intercom Not Available

G2 Manual Intercom group members must now use Dial Intercom to reach their intended people.

Intercom Ring

Users may notice that the intercom ring is different.

Intercom Dial Code Differences

Dial Intercom members may notice that dial codes are different because G2 allows a mix of one and two digit dial codes and DEFINITY ECS does not.

Capacity Differences

Because of capacity differences, users may not have the same functionality.

Interexchange Carrier Access

Feature Definition

The G2 Interexchange Carrier (IXC) Access feature allows customers to specify the particular interexchange carrier vender they wish to use for calls to a given dialing destination. The IXC Access feature uses the capabilities of the network routing features (AAR, ARS, or WCR) to routing calls to selected long distance service venders. On System 85 and DEFINITY G2.1 switches, this feature is controlled entirely through administration. On G2.2 switches, IXC Access may be entirely controlled through administration, or may optionally allow caller participation.

Summary Table for Interexchange Carrier (IXC) Access

Table 2-25. Summary Table for Interexchange Carrier (IXC) Access

Interexchange Carrier (IXC) Access	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Max Number of Digits Sent	NA	NA	NA	24	24	24	68	54	
Max Number of Digits Inserted	NA	NA	NA	20	20	20	31	36	
Max Number of Digits Deleted	NA	NA	NA	7	7	7	31	23	

Feature Differences

In G2 and DEFINITY ECS, IXC Access is a capability of the WCR feature. These capabilities are similar since both switches can allow users to dial an IXC code, route according to the dialed IXC code, send an un-dialed IXC code, or send a different IXC code.

G2	DEFINITY ECS
Ignoring an IXC	
G2 can ignore a dialed IXC for routing.	DEFINITY ECS cannot. Instead, DEFINITY ECS always correlates a dialed IXC with a pattern. DEFINITY ECS WCR routing software does not have an IXC "string type" (which it refers to as a "route code"). Therefore, an IXC string in either form (that is, "10XXX" or "101XXXX") is assigned as part of an address string. Using address string types for IXC codes implies that DEFINITY ECS can only use pattern preference-level digit modification to alter the digit contents of these codes.

Interflow and Intraflow

Feature Definition

Interflow and Intraflow allows ACD calls to be redirected from one split to another split under busy or unanswered conditions. Intraflow provides redirection of ACD calls to other splits within the system and may be activated using Call Coverage or Call Forwarding All Calls. Interflow uses the Call Forwarding All Calls feature to redirect ACD calls to an external location.

Feature Differences

G2	DEFINITY ECS
General Feature Information	
G2 uses inflow and outflow thresholds for interflow based on the number of calls in queue. Calls must satisfy the outflow level of calls in queue at the originating split and the inflow level at the terminating switch to interflow.	DEFINITY ECS uses call coverage that allows interflow to occur based on the time in queue (number of rings for don't answer) or if the queue is full.

See Automatic Call Distribution for additional feature differences. See also Look Ahead Interflow, Call Forwarding, Call Coverage, and Call Vectoring.

Interpartition Access

Feature Definition

The Interpartition Access (IPA) feature provides greater calling flexibility in a partitioned System 85 or DEFINITY Generic 2. Using IPA, a voice terminal user in one extension partition can call a voice terminal user in another extension partition, provided *both* partitions belong to the same partition group.

Feature Differences

Interpartition Access is not available in DEFINITY ECS. You can use DEFINITY ECS's Tenant Partitioning and/or AAR/ARS Partitioning and Class of Restriction to implement partitioning.

ISDN Gateway

DEFINITY ECS does not support ISDN Gateway.

See ‘‘CallVisor ASAI Applications’’ in this chapter.

Leave Word Calling

Feature Definition

Leave Word Calling allows internal system users to leave a short preprogrammed message for other internal users. Users can activate LWC at any time during a call attempt. For DEFINITY ECS, there can be multiple Message Server Adjuncts and AUDIX adjuncts.

Summary Table for Leave Word Calling (LWC)

Table 2-26. Summary Table for Leave Word Calling (LWC)

Leave Word Calling (LWC)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Stored in AP or 3B2 MS	X	X	X	X	X	X	X	X	MSA only — DEFINITY ECS
Stored in AUDIX	NA	NA	X	X	X	X	X	X	
Stored in Switch		X	X	X	X	X	X	X	
LWC Activation									
via FAC	X	X	X	X	X	X	X	X	
ext:recall:FAC:ext	X	X	X	X	X	X	X	X	
ext:recall:FAC								X	
FAC:ext	X	X	X	X	X	X	X	X	
by Called Party	X	X	X	X	X	X	X	X	
by Covering User	X	X	X	X	X	X	X	X	Coverage Callback

Feature Differences

G2	DEFINITY ECS
Locking/Unlocking Display	
Dial Access Code is used to lock and unlock the display of messages.	Unlocking requires dialing a pre-administered 3 to 8-digit security code.

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G2	DEFINITY ECS
Recognizing LWC *Messages* System recognizes presence or absence of Leave Word Calling message via administration.	System requires distinguishing between LED and neon MWI.
Storage of LWC Both systems allow the storage destination of LWC messages to be administered on a per extension (G2) or a per station (DEFINITY ECS) basis. G2 supports LWC storage on an AP-based Message Center;	DEFINITY ECS does not support connection to an AP.
Confirmation Tone Both G2 and DEFINITY ECS allow the calling party to leave a LWC message to the called party, even after the call is redirected to AUDIX, however G2 does not return confirmation in this case.	DEFINITY ECS returns a confirmation tone to the called party when the LWC message is left after AUDIX answers. For more information about tone administration see Additional Feature Characteristics in DEFINITY ECS under Call Waiting in this chapter.
Retrieving LWC *from Switch* In G2, LWC messages stored on the switch are retrieved via display.	In DEFINITY ECS, LWC messages stored on the switch can be retrieved via display or voice synthesis. A synthesized voice message can be sent in American English, British English, or Italian through the addition of the desired voice synthesis board.

G2 Feature Characteristics Not Available in DEFINITY ECS

G2 supports connection to an AP-based Message Center.

Leave Word Calling End-User Differences

Unlocking the display

In DEFINITY ECS, unlocking a display requires dialing a pre-administered 4-digit security code; G2 users will be used to using a Dial Access Code to lock and unlock the display of messages.

Leaving a LWC Message on AUDIX

DEFINITY ECS returns a confirmation tone to the called party when the LWC message is left after AUDIX answers. G2 users will not be used to receiving confirmation in this case.

Line Lockout

Feature Definition

Line Lockout removes single-line voice terminal extension numbers from service when users fail to hang up after receiving dial tone for 10 seconds and then intercept tone for 30 seconds. These intervals are administrable.

Line Lockout occurs as follows:

- A user does not hang up after the other party on a call is disconnected.

  In this case, the user receives the dial tone for 10 seconds and then receives the intercept tone for 30 seconds. The voice terminal is then taken out of service, if the handset is still lifted.

- A user pauses for 10 seconds between digits while dialing.

  In this case, the user receives intercept tone for 30 seconds. The voice terminal is then taken out of service, if the handset is still lifted.

The out-of-service condition remains in effect until the voice terminal user hangs up.

Feature Differences

In G2 this feature applies to both analog and multifunction sets; in DEFINITY ECS it applies to analog sets.

Look Ahead Interflow

Feature Definition

Look Ahead Interflow provides flexible and intelligent Automatic Call Distribution (ACD) load-balancing capability based on programmable call vectors. It enhances the Call Vectoring feature so that calls will not interflow to a remote location that cannot accept the calls.

Feature Differences

The primary difference between the G2 and DEFINITY ECS Look-Ahead Interflow features is that DEFINITY ECS does not re-attempt the Interflow when a rejection of the Look Ahead Interflow attempt is received, when a "route to" step is the final step in a vector or followed by a "stop" step. This can be emulated in DEFINITY ECS via looping within the vector. Also, DEFINITY ECS does not automatically retry a Look-Ahead Interflow "route-to" step to look for an idle trunk when busy facilities are encountered.

Minimizing the Impact of Look Ahead Interflow Feature Differences

DEFINITY ECS can emulate the G2 retry operation by following each final effective *route-to* with these two commands to create an unconditional loop:

- Delay 2 seconds (with the current feedback: ringback, music, or silence)
- Go to step number n-2 (where "n" is the number of the current *go-to step* command and where "n-2" is the number of the final effective *route-to* step).

Loudspeaker Paging Access

Feature Definition

This feature is called Loudspeaker Paging Access – Deluxe in DEFINITY ECS. It provides attendants and voice terminal users dial access to voice paging equipment and Call Park capabilities. Up to nine individual paging zones and one zone that can be used to activate all nine zones simultaneously can each be accessed using unique trunk access codes assigned to each zone. The access codes may be assigned on Abbreviated Dialing feature buttons or when activated by an attendant may also be assigned Trunk Group Select button(s) on the console.

Summary Table for Loudspeaker Paging Access

Table 2-27. Summary Table for Loudspeaker Paging Access

	System 85					DEFINITY			
Loudspeaker Paging Access	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
With Answer-Back									
Integrated into (Deluxe)	X	X	X	X	X	X	X	X	
Paging Feature									
Via Accessing Call Park & LS									
Paging Features separately								X	
With Music-on-hold while									
awaiting Answer-Back			Iss 1.3	X	X	X	X	X	

Feature Differences

G2 has a Loudspeaker Paging feature that is similar to DEFINITY ECS's Loudspeaker Paging Deluxe.

G2	DEFINITY ECS
Number of Paging Zones	
G2 supports 18 paging zones.	DEFINITY ECS allows 9 paging zones.

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G2	DEFINITY ECS
Waiting for Answerback To drop the loudspeaker paging speakers and place the paging party into a "wait-for-answerback" state, G2 users use the Recall button on both analog and multifunction sets, or a switchhook flash on analog only. There is a non-administrable timeout of paging equipment. CAS attendants accessing a CAS branch paging system via a Release Link Trunk also time out automatically.	In DEFINITY ECS, with Non-Deluxe Loudspeaker Paging, the Call Park feature is used to place the user into a "waiting for answer back" state before paging. This allows the paging equipment to be released by the paging party going on-hook when the paging announcement is completed. Paging equipment will also be released if the paging party doesn't disconnect within an administrable timeout interval. In DEFINITY ECS, with Deluxe Loudspeaker Paging, the system parks the call so the procedure appears more like the G2 procedure.

Main/Satellite/Tributary

Feature Definition

Main/Satellite/Tributary is one of several private networks supported by DEFINITY ECS and serves the needs of customers with a few locations in a small geographic area.

A Main/Satellite/Tributary configuration can function independently or serve as an ETN access arrangement. For a Main/Satellite configuration, attendant positions and public network trunk facilities are concentrated at the Main, and calls to or from satellite locations pass through the Main. To a caller outside the Main/Satellite complex, the system appears to be a single switch with one Listed Directory Number. This is accomplished with the optional Uniform Dial Plan software.

Tributary and Satellite locations are similar except that a Tributary has one or more attendant positions and its own Listed Directory Number.

DEFINITY ECS can serve as a Main, Satellite, or Tributary.

A small business can start with a single Main/Satellite or Main/Tributary complex and add trunk and switching facilities as the business grows. In this situation, tie trunks connect the main locations within an urban area and intercity traffic is routed via the public network. This arrangement favors a medium-size organization or one that has small isolated locations where the intercity traffic is too small to justify the cost of tie trunks.

Summary Table for Main/Satellite Service

Table 2-28. Summary Table for Main/Satellite Service

	System 85					DEFINITY			
Min/Satellite Service	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Main	X	X	X	X	X	X	X	X	
Satellite	X	X	X	X	X	X	X	X	
Tributary	X	X	X	X	X	X	X	X	
Main/Satellite Features									
Extended Trunk Access (ETA)		X	X	X	X	X	X	X	
Extension Number Steering									
(Max steering digits)		4	5	5	5	5	5	5	
Indialing Through Main		X	X	X	X	X	X	*	
Inter-PBX Attendant Service									

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Table 2-28. Summary Table for Main/Satellite Service — *Continued*

	System 85					DEFINITY			
Min/Satellite Service	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
(Attendant-seeking calls									
redirected to another location)									
Inter-PBX Coordinated Station									
Numbering									
Remote Dial Transfer Transfer									Transfer at Main
Uniform Dial Plan (UDP)		X*	X*	X*	X*	X*	X*	X†	

* S85/G2 does not have UDP, but does provide equivalent functionality when interacting with a S75/G1/DEFINITY ECS, which uses UDP in an extension-dialing (4- or 5-digit) subnetwork.

† UDP feature in DEFINITY ECS World Class Core is unchanged from S75/G1 UDP feature. It is guaranteed to work only if the private network dialing plan is administered to follow the USA standards.

Feature Differences

G2 has a feature called Main/Satellite/Tributary. DEFINITY ECS provides similar functionality.

G2	DEFINITY ECS
Activating Main/Satellite G2 has specific Main/Satellite feature administration that designates a switch as a main or a satellite. This administration activates the following Main/Satellite features.	DEFINITY ECS has no need for this administration since supported features are always active.

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G2	DEFINITY ECS
Remote Dial Transfer	
The G2 Main/Satellite feature provides a remote dial transfer capability for the users of satellites and for adjuncts connected with E&M trunk facilities. Using remote dial transfer, an analog station user at a satellite location who is active on a call can draw recall dial tone from the main location (by pressing the recall button or momentarily pressing the switchhook). At this time, the user can transfer the call to any other terminal in the Main/Satellite configuration.	DEFINITY ECS does not provide remote dial transfer for the users of DEFINITY ECS satellites.
Dial Plan	
G2 has special dial plan administration and trunk types for Main/Satellite call routing.	DEFINITY ECS uses UDP for equivalent call routing.
Extended Trunk Access	
G2 provides Extended Trunk Access on the satellite switch only.	Extended Trunk Access can be activated on any switch.
PRI Support	
Main/Satellite is not supported over PRI facilities.	PRI facilities can be used when the DEFINITY ECS is used as either a Main or Satellite switch.

Malicious Call Trace

Feature Definition

Malicious Call Trace (MCT) provides a way for terminal users to notify a predefined set of users that they may be party to a malicious call.

Feature Differences

G2	DEFINITY ECS
Restricting Controllers	
G2 restricts controllers to attendants.	In DEFINITY ECS, there is no such restriction and station-users can retrieve Malicious Call Trace (MCT) data if they have display sets with a special button administered.
Tracing Trunk-to-Trunk Calls	
G2 does not allow the tracing of trunk-to-trunk calls.	DEFINITY ECS allows the tracing of trunk-to-trunk calls.
History Report	
G2 provides no report.	DEFINITY ECS provides a history report of malicious calls.

Manual Signaling

Feature Definition

Manual Signaling allows a voice terminal user to signal another voice terminal user. The receiving voice terminal user hears a two-second burst of tone.

The signal is sent each time the button is pressed. If the receiving voice terminal is already being alerted with an incoming call, Manual Signaling is denied. The status lamp associated with the Manual Signaling button at the originating voice terminal flutters briefly to indicate the denial.

Feature Differences

G2	DEFINITY ECS
General Feature Information	
G2 manual signaling enables one station to signal another preselected station *or* a group of stations.	DEFINITY ECS allows signaling to one station only.

Modem Pooling

Feature Definition

Modem Pooling allows switched connections between digital data endpoints (data modules) and analog data endpoints and acoustic coupled modems. The analog data endpoint can be either a trunk or line circuit.

Summary Table for Modem Pooling

Table 2-29. Summary Table for Modem Pooling

	System 85					DEFINITY			
Modem Pooling	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Common Pool for Inc & Outg Calls	*	X	X	X	X	X	X	X	
Local (on Premises) Calls Supported						X	X	X	
Max Members per Modem Pool Group	99	99	99	99	99	99	99	32	
Max Modem Pool Groups	175	175	238	238	982	982	982	63	
Physical Arrangement									
External to Port Board†									
Automatic Operation w/1-Stage Dialing		X	X	X	X	X	X	X	
Manual Operation w/2-Stage Dialing	X	X	X	X	X	X	X	X	
Integrated in Port Board								X	
Transmission Supported									
Asynchronous Operation	X	X	X	X	X	X	X	X	
Synchronous 2-wire Operation		X#	X#	X#	X	X	X	X#	
User Selection of Modem Pool Group by DAC									
Analog Sta Preindication by FAC								X	
Select Modem Pool by FAC to									
Override Automatic MP Group Selection					Iss 1.1**	X	X		

* Common pool is possible with S85 R1 but not recommended because of the potential glare problems.

† CCITT V.32 modems (including the AT&T 2296) cannot be used with external Modem Pooling arrangements on switches equipped with older version tone detector boards SN255 and TN748 (without suffix) because these boards cannot detect the 2100-Hz tone supplied by such modems. Later version tone detector boards (SN255B for S85/G2 traditional module and TN748B or TN748C for G2 universal modules and DEFINITY ECS) do detect the 2100-Hz tone.

Reliable operation of synchronous 2-wire modem pooling cannot be guaranteed with DEFINITY ECS and S85 R2V1, as well as with S85 R2V2 & R2V3 software release earlier than R2V2 Issue 1.4 and R2V3 Issue 1.4 and R2V3 Issue 1.1 - because the tone detector signals only the application of tone, not its removal. The DEFINITY ECS and early S85 arrangements will still work if the host polls repeatedly until answer tone ceases from the far end modem; otherwise they will not.

** Although not covered in customer documentation, capability is provided in S85 R2V4 Issue 1.1 and G2 for users to select specific Modem Pool groups by dialing access codes. Assign "Feature 53" in PROC 350 to apply this capability to a particular Modem Pool group.

Feature Differences

G2	DEFINITY ECS
Route Advance G2 systems frequently use the Route Advance feature to make larger pools of modems, while still providing a separate dialed number for each speed.	DEFINITY ECS does not support Route Advance.
Modem Pool Speeds G2 modem pool equipment can be optioned to run at up to 6 different speeds.	DEFINITY ECS modem pools can run at 3 speeds.
Remote Troubleshooting G2's PROC 070 enabled technicians to determine data module states (for example DTR state, speed, etc.). This could be used remotely for troubleshooting.	DEFINITY ECS does not provide similar capability.
G2 PROC 962 enabled technicians to determine who is connected to a pooled modem port.	DEFINITY ECS does not provide similar capability.
Selection Via TAC G2 can select modem pool via a Trunk Access Code.	DEFINITY ECS does not support trunk-side data access and does not support this capability.

Move Agents from CMS

Feature Definition

Move Agents from CMS allows a user to move up to 32 agents from one split to another from the CMS terminal.

Users can change agents' split or skill assignments while the agents are logged in. In addition, with EAS one skill can be added, deleted or moved simultaneously for a group of up to 32 agents.

Feature Differences

Move Agents from CMS is the name of a DEFINITY ECS feature; G2 provides this same functionality, but under another name.

G2	DEFINITY ECS
Number of Agents	
G2 can move up to 1,023 agents (at one time) between splits from CMS.	DEFINITY ECS can move up to 32 agents (at one time) between splits from CMS.
Split 0	
G2 has split 0, which acts as a temporary placeholder for agents.	DEFINITY ECS does not support split 0.
Moving While Staffed	
Agents must be unstaffed	DEFINITY ECS agents can be staffed or unstaffed.

Multi-Appearance Preselection and Preference

Feature Definition

This feature provides multi-appearance voice terminal users with options for placing or answering calls on selected appearances.

- Ringing Appearance Preference

  When a user lifts the handset to answer an incoming call, the system automatically connects the user to the ringing call appearance. If more than one call is incoming, the user is automatically connected to the eldest (first-in) ringing call appearance. The in-use (red) lamp tracks the ringing appearance and the answered appearance.

- Idle Appearance Preference

  When a user lifts the handset to place a call, the system automatically connects the user to an idle appearance even if an incoming call is ringing at another appearance. The in-use (red) lamp tracks an idle appearance when the handset is lifted.

- Preselection

  Before lifting the handset to place or answer a call, the user can manually select an appearance (press a call appearance button or a feature button) where the in-use lamp is dark. Preselection is used, for example, when the user wants to reenter a held call or activate a feature. Preselection also activates the speakerphone if the voice terminal is so equipped.

  The Preselection option overrides both Preference options. If the user does not lift the handset within five seconds after using Preselection, the selected appearance returns to idle.

  Preselection can be used with a feature button. For example, if an Abbreviated Dialing button is pressed, a call appearance is automatically selected and, if the user lifts the handset within five seconds, the call is automatically placed. Preference dictates whether the user is connected to the ringing call appearance or to an idle call appearance. If there is no incoming call, the user is automatically connected to an idle call appearance upon lifting the handset. This is true, regardless of the Preference option assigned.

Summary Table for Multi-Appearance Preference

Table 2-30. Summary Table for Multi-Appearance Preference

	System 85					DEFINITY			
Multi-Appearance Preference	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Appearance Restricted to Originating & Priority Calls Any Appearance(s) can be Optionally Restricted	X	X	X	X	X	X	X		
Last Remaining Idle Appearance Restriction Optional per Station	NA	NA	NA	NA	NA	NA	NA	X	
Originating Call Preferences Idle Appearance Pref	X	X	X	X	X	X	X	X	
Terminating Call Preferences Ringing Appearance Pref	X	X	X	X	X	X	X	X	

Feature Differences

G2	DEFINITY ECS
G2 Operation: G2 provides options per multi-appearance station for No Appearance Preference or any of 3 alternative originating call preferences (Prime, Idle, or Last Appearance Preference); and any of the originating call preferences can be assigned either alone or in combination with either of 2 terminating call preferences (Ringing, or Calling Appearance Preference): — If No Appearance Preference (originating or terminating) is assigned, no call appearance is automatically selected; the user must use the Preselection feature to manually select a call appearance to answer or originate a call. — If Calling Appearance Preference is assigned and there is an unanswered incoming call either ringing the station or silently flashing a call appearance green status lamp, the call appearance associated with the incoming call is automatically selected. — If Ringing Appearance Preference is assigned and there is an unanswered incoming call ringing the station, the call appearance associated with the ringing call is automatically selected. An incoming call silently flashing a call appearance status lamp is not automatically selected.	*DEFINITY ECS Operation*: In DEFINITY ECS, the default Preference feature (Ringing Appearance Preference) works the same as Calling Appearance (terminating) Preference in combination with Idle Appearance (originating) Preference in G2. DEFINITY ECS provides an option, Idle Appearance Preference, which works the same as G2's Idle Appearance (originating) preference with No Appearance (terminating) Preference assigned. DEFINITY ECS also provides an option, Select Last Used Appearance, which works the same as G2's Last Appearance (originating) Preference. Finally, operation corresponding to G2's Ringing Appearance (terminating) preference is enabled with the "Per-Button Ring Control?" station option. DEFINITY ECS does not provide any equivalent of G2's Prime (originating), or No Appearance (originating) Preferences.

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G2	DEFINITY ECS
— If neither incoming preference is assigned and/or if there is no incoming call: a. Prime Appearance Preference automatically selects the designated prime call appearance b. Idle Appearance Preference automatically selects any idle call appearance c. Last Appearance Preference automatically selects the call appearance last used Upon going off-hook the user is connected to the selected call appearance identified by the lighted red I-Use lamp on the station.	

G2 Feature Characteristics Not Available in DEFINITY ECS

G2 supports Prime Line Preference, which is not supported in DEFINITY ECS.

Multiple Listed Directory Numbers

Feature Definition

Multiple Listed Directory Numbers allows a publicly published number for each incoming and two-way (incoming side) FX and local CO trunk group assigned to the system. Also allows DID numbers to be treated as LDNs.

When a CO or FX LDN is called, a trunk group is accessed. The trunk group then routes the call to the incoming destination designated for that trunk group. The incoming destination for an FX or CO trunk group can be one of the following:

- Attendant group
- ACD split
- DDC group
- UCD group
- Remote Access

All DID LDN calls route directly to the attendant group.

Feature Differences

G2	DEFINITY ECS
Number of DID *Numbers Supported* G2 supports 999 DID numbers.	DEFINITY ECS supports 20 DID numbers.
LDN Display Each LDN has its own attendant display ICI Associated with it.	Each LDN may have a 27-character name for display.

Music on Hold

Feature Definition

This feature provides music to a party that is on hold, waiting in a queue, parked, or on a trunk call that is being transferred. The music lets the waiting party know that the connection is still in effect.

The system provides automatic access to the music source.

Summary Table for Music on Hold

Table 2-31. Summary Table for Music on Hold

Music Access Features	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Music-On-Hold (MOH) Access→	X	X	X	X	X	X	X	X	Assigned per System*
MOH Applied System-wide								X	
Separate Music Option for Call Vectoring	NA	NA	NA	NA	X	X	X	X	

→ Entries marked with an arrow direct the reader to the Comment entries.

* Can have multiple music sources with Tenant Partitioning.

Feature Differences

G2	DEFINITY ECS
Music Sources	
G2 allows you to connect a music source to individual modules in order to minimize time-slot blockage.	DEFINITY ECS extends the music from a single source to a dedicated time slot in all port networks so that inter-port networking is not required. DEFINITY ECS also allows multiple music sources for vector delay or calls in queue.
MOH Administration	
G2 administers MOH as a trunk group.	DEFINITY ECS administers MOH on an auxiliary trunk, not as a trunk group.

Off-Premises Data-Only Extensions

Feature Definition

G2 Off-Premises Data-Only Extension feature provides switched access to data equipment at a remote location (greater than 5000 feet) from System 85 or G2 using analog or digital private line facilities that do not compete with voice traffic.

This feature is used for data communications, when a significant volume of data is exchanged between the switch and a remote host computer or cluster of data terminals. Operation of this feature is transparent to all users.

The users of the remote terminal cluster can access System 85 or G2 data endpoints using data terminal (keyboard) dialing. Unless specifically restricted, any terminal on the system that can originate data calls can access a remote data end point as though it were on-premises.

Feature Differences

G2	DEFINITY ECS
Hardware Support	
In G2, the traditional module off-premises data-only extensions use SN243 and universal modules use TN746, and you can assign traditional module data-only extensions trunk-side access or line-side access.	DEFINITY ECS supports universal modules and the TN746, and off-premises data-only extensions are assigned line-side.

Off-Premises Extension/Station Service

Feature Definition

This feature is called Off-Premises Station (OPS) in DEFINITY ECS. It allows a voice terminal located outside the building where the switch is located to be connected to the system. If CO trunks are used, the voice terminal must be analog and must be FCC-registered (or, outside the US, registered by the appropriate governmental agency).

OPS Administration Differences

In DEFINITY ECS, the R Balance Network field must be completed to administer automatic control of the signal loss associated with the added line distance. TN767 supports Mu-law, TN464B supports A-Law. TN464C/D supports both Mu-law and A-law and conversion between Mu-law and A-law.

Summary Table for Off-Premises Station/Extension (OPS/OPX)

Table 2-32. Summary Table for Off-Premises Station/Extension (OPS/OPX)

	System 85					DEFINITY			
Station/Extension (OPS/OPX)	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	Comments
Analog Off-Premises Extension (OPX)	X	X	X	X	X	X	X		
Analog Off-Premises Station (OPS)	X	X	X	X	X	X	X	X	
DS1 Off-Premises Station (OPS)				X	X	X	X	X	

Feature Differences

G2 has 2 separate features: Off Premises Station (OPS, line side) and Off Premises Extension (OPX, trunk side). DEFINITY ECS has an Off Premises Station feature that's comparable to G2's feature with the same name, but has no trunk-side OPX feature. However, DEFINITY ECS OPS, when used in combination with certain other features such as Call Detail Recording, can mimic most functions of G2 OPX.

Override

Feature Definition

The G2 Override feature permits authorized multi-appearance voice terminal users to interrupt other terminal users who are on a 2-party connection. Only terminal users who required the ability to contact other terminal users on a preemptive basis should be assigned this feature. The talking parties hear a warning tone before the third party enters the connection. The warning tone is a 4 second burst of 440-hertz tone. An override call to a multi-appearance voice terminal intrudes on a 2-part connection only when all appearances (including originating only appearances) are busy. If any appearance is idle, the override call terminates to the idle appearance with distinctive 3-burst ringing.

Feature Differences

This G2 feature, sometimes called Executive Override, is not available in DEFINITY ECS. DEFINITY ECS Busy Verification may provide similar functionality since it gives a warning tone every 15 seconds, not just when the call is interrupted.

Personal Central Office Line

Feature Definition

This feature is called Personal Central Office Line (PCOL) in DEFINITY ECS. It provides a dedicated trunk for direct access to or from the public network for multi-appearance voice terminal users.

Each PCOL can have appearance at multiple multi-appearance voice terminals. Users assigned to this feature press the PCOL feature button to answer and place calls — dial access is not provided. The status lamp associated with the PCOL button indicates the busy or idle status of the trunk.

An incoming PCOL call rings all voice terminals assigned the feature (ringing can be either audible or silent, depending on administration). The PCOL button status lamp flashes even if all call appearances at the voice terminal are active. If a call appearance is idle, the status lamp associated with that appearance also flashes.

CO, FX, and WATS trunks can be assigned to this feature.

PCOLs are not assigned a COR.

Summary Table for Personal Central Office Line

Table 2-33. Summary Table for Personal Central Office Line

Personal Central Office Line (PCOL)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Bridged PCOL (Max Bridged Stations (partners))	16	16	16	16	16	16	16	16	
Conf/Trans allowed on PCOL	Iss 1.6	Iss 1.2	X	X	X	X	X	X	
PCOL can be assigned Call Coverage Service								X	

Feature Differences

G2	DEFINITY ECS
Red and Green Lamps In G2, PCOL has an appearance button of its own with the full operation of the red In-Use and green feature-status indicators.	In DEFINITY ECS, a user has a primary extension with several 2-lamp line appearances, while PCOL, Intercom, Terminating Extension Groups and Coverage Answer Groups are assigned to feature buttons with green status lamps only. When a user presses a PCOL button, the switch correlates the PCOL button with an appearance of the station's primary extension. Therefore, if every appearance of the primary extension is busy, PCOL calls cannot be placed or answered.
Call Coverage In G2 a PCOL cannot be assigned call coverage.	DEFINITY ECS supports call coverage for PCOL.
Differentiating PCOL *calls from other calls* It is easier for users to answer PCOL calls differently than regular Call Appearance calls. Incoming PCOL calls flash that button and users can push the PCOL button to pick up the PCOL call and answer it appropriately. Call appearances flash and can be answered in a different way.	PCOL lines look like bridged appearances; incoming PCOL calls light the PCOL button but flash the DEFINITY ECS appearance. It is harder to tell whether incoming calls are PCOLs or regular calls. If the customer wants to answer each call differently, a workaround is available to give the user a chance to decide whether the call is PCOL or not.

Minimizing the Impact of Personal CO Line Differences

If users must answer PCOL calls differently from the way they answer regular call appearance calls, administer stations to have Idle Line Preference. Idle Line Preference forces the user to actually press a call appearance in order to answer any incoming call. Having to press the call appearance gives the users a chance to check to see if the PCOL button is flashing and to answer the call appropriately.

Power Failure Transfer

Feature Definition

Power Failure Transfer provides a service to and from the local telephone company CO, including WATs, during a power failure.

Feature Differences

This feature is similar on both systems and is strictly a hardware arrangement. DEFINITY ECS is limited to 35 power failure transfer stations while the only G2 limitation is in the number of facilities relative to 574-5 transfer panels.

Precedence Calling

Feature Definition

G2 Precedence Calling operates in the Automatic Voice Network (AUTOVON). However Precedence Calling can be adapted for use within any private network that uses a “STAR:” or hub-like configuration. The Precedence Calling feature provides two capabilities: *preemption* and automatic *diversion to attendant assistance.* These capabilities help to ensure the rapid completion of important calls. Precedence Calling is specifically designed for national defense and emergency calling situations. On System 85 or DEFINITY Generic 2, the Precedence Calling feature enables the switch to function effectively in the AUTOVON environment and can extend this ability to an associated Distributed Communications System (DCS) network.

Feature Differences

This feature, used by the U.S. military, is not available in DEFINITY ECS, but limited functionality can be provided using external equipment, as done with G1.

Privacy — Manual Exclusion

Feature Definition

This feature allows multi-appearance voice terminal users to keep other users with appearances of the same extension number from bridging onto an existing call.

Exclusion is activated by pressing the Exclusion button on a per-call basis. If the Exclusion button is pressed while other users are bridged onto the call, the other users are dropped from the call. The Privacy — Manual Exclusion feature is automatically deactivated when the Exclusion button is pressed a second time or when the party who activated Privacy — Manual Exclusion is dropped from the call.

Privacy — Manual Exclusion is used with PCOL, TEG, and Bridged Call Appearance features.

Feature Differences

In G2, activating Manual Exclusion excludes others from bridging onto a call. In DEFINITY ECS, Manual Exclusion also excludes others from bridging onto a call if the user stays on until completion; however, if the user puts the call on hold or activates any other features during the call, the user must reactivate Manual Exclusion in order to continue to exclude interruptions.

Queue Status Indicators

Feature Definition

This feature is called Queue Status Indications in DEFINITY ECS. It provides indications of queue status for ACD calls based on the number of calls in queue and time in queue.

Two types of Queue Status Indications are provided:

- Number of Queued Calls
- Oldest Queued Time

Feature Differences

Both systems provide queue status information on the alphanumeric display and via an auxiliary warning lamp. The queue warning lamp differences are covered in Chapter 2 of this book.

G2	DEFINITY ECS
Lamp	
G2 does not support Queue Status Indication via a lamp on the station.	DEFINITY ECS does support Queue Status Indication via a lamp on the station.

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G2	DEFINITY ECS
Queue Status Availability	
With G2, queue status is provided on the display along with the incoming call information when an agent is being alerted for an ACD or non-ACD call and remains displayed while active on the call. The queue status can be updated by pressing the Normal button. The queue status information appears to the right of the incoming call display as follows: "a = caller to split/VDN yyy xxx" where yyy is number of calls and xxx is oldest call queue time in seconds. Queue status cannot be obtained on demand.	With DEFINITY ECS, queue status can be obtained on demand on any station set by pressing a Queue Status Indicator button and does not require that an agent be on a call. The queue status information replaces the incoming call information on a 1-line display set or is shown on the second line on a 2-line display set and is formatted as follows: "split name (or ext.) Q-time xx:xx calls yyy" where xx:xx is oldest call queue time in minutes and seconds and yyy is number of calls.
G2 provides queue status automatically when ACD calls are received.	DEFINITY ECS does not automatically provide queue status. You must use the queue status button to get queue status display information.

Queuing

Feature Definition

NOTE:
This feature refers to trunk queuing. For information on queuing in an ACD environment, see Automatic Call Distributionn.

When all the accessible routes (trunk groups) for an outgoing call are busy, G2 Queuing allows the switch to hold the call waiting for a trunk to become available. A queue is an ordered sequence, in this case of outgoing calls, waiting to be processed.

Feature Differences

G2	DEFINITY ECS
Forms of Trunk Queuing	
G2 supports two forms of trunk queuing: Ringback and Off-Hook. For each, there are two options: Outgoing Trunk Group and Pattern Queuing.	DEFINITY ECS has one form of trunk queuing (ringback queuing) and uses Preference Queuing within WCR.
Ringback Calls	
On G2, when an outgoing trunk dials a destination and trunks are busy, the user hangs up and the system rings the user back when a trunk is free.	In DEFINITY ECS, all the digits are collected and the system redials the call for you.

Radio Paging Access

Feature Definition

The G2 Radio Paging Access feature allows users to page a person over a radio receiver. The paged party must be carrying a radio receiver that is set to the radio paging system. The paged party can answer the page by using a telephone and dialing an answer-back channel. Remote Access trunk users can also use this feature. Radio Paging Access is useful for persons who do not normally remain at one location or who cannot remain out of reach for even short periods of time. Possible users of this feature include medical, managerial, or emergency personnel, or anyone requiring a personal paging service.

Feature Differences

Both G2 and DEFINITY ECS support this functionality, although DEFINITY ECS does not call it a feature.

G2 has built in hardware that supports Radio Paging Access, but most systems use Customer Provided Equipment (CPE) for Radio Paging. The use of CPE on both systems is similarly implemented.

Recall Signaling

Feature Definition

Recall Signaling allows the user of an analog station to place a call on hold and consult with another party or activate a feature. After consulting with that third party, the user can conference the third party with the original party by another recall signal, or return to the original party by pressing Recall twice or by flashing the switchhook twice. (''Transfer'' between ''Hold'' and digital stations have similar functionality using their ''Hold,'' ''Conference,'' and ''Transfer'' buttons.)

The recall signaling can be accomplished by pressing the flashhook, using a Ground Key on a Rotary or DTMF station, or by using the Recall Button on a DTMF station.

Feature Differences

Both G2 and DEFINITY ECS support Recall Signaling.

In G2, a Recall button on multi-appearance terminals is used with the Attendant Recall, Call Park, Loudspeaker Paging Access, and Serial Calls features. DEFINITY ECS does not support the use of a Recall button on multi-appearance terminals.

Recorded Announcement

Feature Definition

The Recorded Announcement feature provides a recorded announcement to callers under a variety of circumstances. For example, announcements can be used to let callers know that a call cannot be completed as dialed, that their call is in queue, or that all lines are busy. By letting announcements perform these tasks, attendants and other users are free to perform other operations.

Summary Table for Recorded Announcement

Table 2-34. Summary Table for Recorded Announcement

	System 85					DEFINITY			
Recorded Announcement	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
Announcement Source									
Auxiliary Adjunct	X	X	X	X	X	X	X	X	
Connected via:									
Auxiliary trunk circuit	X	X	X	X	X	X	X	X	
Analog line circuit								X	
w/Remote Recording			→	→	→	→	→	→	w/Cook Electric device
Integrated (board)								X	
Recording speed									
(recording time)									
32KBS(4min:16sec)	NA	NA	NA	NA	NA	NA	NA	X→	32/16KBP opt per announcement
16KBS(8min:32sec)	NA	NA	NA	NA	NA	NA	NA	X→	32/16KBP opt per announcement
w/Remote Recording	NA	NA	NA	NA	NA	NA	NA	X	

→ Entries marked with an arrow direct the reader to the Comment entries.

Feature Differences

G2	DEFINITY ECS
Analog Announcements G2 does not support analog announcements.	DEFINITY ECS supports recorded announcements with an analog switch interface.
Integrated Announcement Board G2 does not have a built-in announcement board, but uses separate announcement machines.	DEFINITY ECS has integrated announcement boards and can also use separate announcement machines. DEFINITY ECS also supports multiple integrated announcement boards.
Queue Slots In G2, queue slots are relatively unlimited.	In DEFINITY ECS, up to 1,000 queue slots are available for analog or auxiliary trunk interface queue slots and, in addition, up to 1,000 queue slots are available for integrated board queue slots.
Cycle Wait Time The auxiliary trunk announcement units will not connect to the caller until the announcement reaches the beginning of its playing cycle.	DEFINITY ECS Integrated Announcement begins playing the announcement at the beginning whenever a call connects, eliminating the cycle wait time.

Remote Access

Feature Definition

This feature is called Remote Access (with Security Measures) in DEFINITY ECS. It permits authorized callers from remote locations to access the system via the public network and then use its features and services.

Remote Access users can dial into the system using DID, CO, FX, or 800 Service trunks. The Remote Access feature is assigned an extension number, as any voice terminal. When a call is received on a trunk group dedicated to Remote Access, the system routes the call to the assigned extension number. If DID is provided and if the Remote Access number is within the range of numbers that can be accessed by DID, then the Remote Access feature can be accessed through the DID feature.

After access to the feature, the user hears system dial tone, and, for system security, may be required to dial a Barrier code. If a valid Barrier code is dialed, the user may again hear dial tone, and can place local or long-distance calls as allowed. An authorization code may be required to place calls.

The destination of incoming, non-DID, trunk calls can be an attendant or an extension number. The destination is specified on each individual trunk group. When the trunk group is dedicated to Remote Access, the Remote Access extension number is specified. In this case, the user does all dialing. If an attendant is needed on a call, the user dials the public network telephone number assigned, the Barrier code, and **attd** (the attendant access code). To provide attendant-assisted calling, service can be arranged so the attendant handles calls during the day, but Remote Access applies after normal business hours. This is accomplished by setting the trunk group destination as ‘‘attd’’ (the attendant), and specifying the Remote Access extension number as the Night Station number. Incoming calls route to the attendant unless the Night button on the primary console is pressed. When Night Service is in effect, incoming calls route to Remote Access.

Summary Table for Remote Access

Table 2-35. Summary Table for Remote Access

	System 85					DEFINITY			
Remote Access	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
w/Barrier Codes									
4-7 Digits								x	
4 Digits	X	X	X	X	X	X	X	X	

Continued on next page

Table 2-35. Summary Table for Remote Access — *Continued*

Remote Access	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
w/Authorization Codes									
In addition to Barrier Codes	*	*	*	*	*	*	X	X	
In place of Barrier Codes	X	X	X	X	X	X	X	X	
w/E&M to interface w/MEGACOM-800				Iss 1.1	X	X	X	X	
w/Distance Insensitivity (to prevent echo suppressors from blocking dial tone)									
Precursor Tone					X	X	X	X	for manual dialing
Abbreviated Dial Tone						X	X		for terminal dialing

* After having entered a Barrier Code, a S85/G2 user can dial an AAR/ARS/WCR access code and given a low FRL for the Remote Access trunk, the user will be prompted for an Auth Code. However, for placing station calls or accessing switch features, there's no way to get prompted for an authorization code. In contrast, DEFINITY ECS 4 can request the Auth Code up front — in addition to the Barrier Code and adds to the number of correct digits a user must enter for the sake of security.

Feature Differences

G2	DEFINITY ECS
Access to Remote Access	
G2 uses a dedicated CO trunk group for access to the Remote Access feature.	DEFINITY ECS defines an extension number that DID users and other tie trunk or extension users can dial to access the Remote Access feature.

Restrictions

Feature Definition

DEFINITY ECS supports eleven separate restrictions:

- Restriction - Controlled

  Allows an attendant or voice terminal user with console permission to activate and deactivate the following restrictions for an individual voice terminal or a group of voice terminals:

  — Outward

  — Total

  — Station-to-Station

  — Termination

- Restriction — Fully Restricted Service

  Fully Restricted Service is a Class of Restriction (COR) that prevents assigned stations from having access to public network calls. Stations have access to internal calls only. In addition, fully restricted station users cannot use authorization codes to deactivate this feature.

- Restriction — Miscellaneous Terminal

  Restricts callers at specified voice terminals from accessing certain other voice terminals.

- Restriction — Miscellaneous Trunk

  Restricts users at specified voice terminals from accessing certain trunk groups, such as WATS.

- Restriction — Toll

  Restricts users at specified voice terminals from placing calls that have been designated as toll calls by system administration.

- Restriction — Voice Terminal — Inward

  Restricts callers at specified voice terminals from receiving public network, attendant-originated, and attendant-extended calls. A denied call is routed to intercept tone, a recorded announcement, or the attendant.

- Restriction — Voice Terminal — Manual Terminating Line

  Restricts callers at specified voice terminals from receiving calls other than those from an attendant. All other calls are routed to intercept tone, a recorded announcement, or an attendant. The voice terminal user can originate calls and activate features.

- Restriction — Voice Terminal — Origination

  Restricts callers at specified voice terminals from originating calls. Voice terminal users can receive calls.

- Restriction — Voice Terminal — Outward

  Prevents specified voice terminal users from placing calls to the public network. Calls can be placed to other voice terminal users, to the attendant, and over tie trunks.

- Restriction — Voice Terminal — Public

  Restricts callers at specified voice terminals from receiving public network calls. A denied call is routed to intercept tone, a recorded announcement, or the attendant.

- Restriction — Voice Terminal — Termination

  Restricts voice terminal users on specified extension numbers from receiving any calls. The restricted users can, however, originate calls.

Summary Table for Restrictions

Table 2-36. Summary Table for Restrictions

Restrictions	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Class of Service (COS) or Class of Restriction (COR)									
Limits access to endpoints	COS	COS	COS	COS	COS	COS	COS	COR	access to terminals, trunks, etc.)
Limits access to features	COS	COS	COS	COS	COS	COS	COS	COS	
Max Number of COS	63	63	63	63	63	63	63	16	
Max Number of COR	NA	NA	NA	NA	NA	NA	NA	96	
Controlled Restrictions									
Controlled by Attendant	X	X	X	X	X	X	X	X	
Restrictions that can be Controlled									
Outward	X	X	X	X	X	X	X	X	
Terminal to Terminal	X	X	X	X	X	X	X	X	
Combined Outward & Terminal to Terminal	X	X	X	X	X	X	X	X	
Total Restriction	X	X	X	X	X	X	X	X	
Termination Restriction	X	X	X	X	X	X	X	X	
Combined Outward & Termination	X	X	X	X	X	X	X		
Miscellaneous Trunk Restrictions	X	X	X	X	X	X	X	X	
Voice Terminal Restriction	X	X	X	X	X	X	X	X	

Continued on next page

Table 2-36. Summary Table for Restrictions — *Continued*

Restrictions	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Code Restriction	X	X	X	X	X	X	X	X	
Toll Analysis								X	
Toll Restriction-Battery Reversal	X	X	X	X	X	X	X		
Toll Restriction -0/1	X	X	X	X	X	X	X	X	
Full Restriction	X	X	X	X	X	X	X	X	
Inward Restriction	X	X	X	X	X	X	X	X	
Manual Terminating Line	X	X	X	X	X	X	X	X	
Originating Restriction	X	X	X	X	X	X	X	X	
Outward Restriction	X	X	X	X	X	X	X	X	
Terminal to Terminal	X	X	X	X	X	X	X	X	
Termination Restriction	X	X	X	X	X	X	X	X	

Feature Differences

Both G2 and DEFINITY ECS provide various administrable restrictions. Although numerous details of the G2 and DEFINITY ECS restriction features differ, most of the G2 capabilities can be emulated by DEFINITY ECS. In G2, restrictions are assigned as part of 63 COSs (classes of service). In DEFINITY ECS, restrictions are assigned as part of 64 CORs (classes of restriction), each of which is paired with one of up to 16 COSs (providing up to 1024 COS/COR combinations).

G2	DEFINITY ECS
G2 Controlled Restrictions: G2 allows an attendant to activate controlled restrictions for stations. G2 provides two combinations of controlled restrictions including: — Outward and Terminal-to-Terminal — Outward and Termination.	*DEFINITY ECS Controlled Restrictions:* DEFINITY ECS allows either an attendant or a station user with attendant permissions to activate controlled restrictions. DEFINITY ECS does not provide combined restrictions.

Continued on next page

G2	DEFINITY ECS
G2 Code and Toll Restrictions: G2 provides three separate features for each COS. Code Restriction is independent from the Toll and WCR Toll Restrictions. The G2 Code Restriction feature restricts users at specified voice terminals from placing public-network calls to certain numbers with the local area code, to certain foreign area codes, and to service codes. There are four levels of Code Restriction that operate analogously to the FRL feature. This feature becomes unreliable when interchangeable NPAs are introduced and will not be supported. You will have to use WCR to do call screening. Several tables are provided for FX trunks.	*DEFINITY ECS Toll and Code Restrictions:* DEFINITY ECS provides the Toll Restriction feature applied on both a trunk-group and a COR basis as a calling-party restriction. Within this framework, there are two levels of restriction: TAC-tollsp 0.2 Restricts toll calls dialed using the trunk access code All-toll Restricts both ARS toll calls and TAC-toll calls.
In G2.2, the toll restriction feature applies to calls where users have: Dialed a trunk-group access code to access a trunk group -or- Dialed a digit string with a “0” or “1” as the first digit (G2.2) Earlier switches also considered 0 or 1 as the second digit on toll calls. G2 has a fifteen number unrestricted call list. Toll and code restriction only works for Trunk group DAC calls. It is ignored for WCR. WCR toll analysis is done at the preference using individual toll tables.	*DEFINITY ECS Code and Toll Restrictions* Toll can be 0 or 1 as first or second digit. FX trunks are not screened for toll office codes — all numbers are permitted unless they match the 0/1 toll criteria. DEFINITY ECS also provides restricted and unrestricted call lists. The same toll translations are used for both TAC access and ARS.
Miscellaneous Trunk Restrictions: G2 supports this feature.	*Miscellaneous Trunk Restrictions:* DEFINITY ECS supports this feature via Class of Restriction and provides more trunk-restriction groups than the G2 does.

Ringing Cutoff

Feature Definition

Ringing Cutoff allows the user of a multi-appearance voice terminal to turn certain audible ringing signals on and off. Visual alerting is not affected by this feature.

When this feature is enabled, only Priority ring (three-burst ringing), Intercom ring, and Manual Signaling rings at the voice terminal. One-burst, two-burst, and redirection notification does not ring. When this feature is disabled, the voice terminal has normal ringing.

Feature Differences

The G2 feature name is Ringing Cutoff; the DEFINITY ECS feature name is Ringer Cutoff.

G2	DEFINITY ECS
Overriding Ringing	
G2 Ringing Cutoff overrides ringing for Intercom and Manual Signaling.	DEFINITY ECS Ringer Cutoff does not.
Overriding Ring-Ping	
In G2, Ringing Cutoff automatically overrides the ring-ping for Send All Calls and Call Forwarding.	In DEFINITY ECS, the ring-ping is still heard in these cases.
Overriding Priority Calling	
G2 Ringing Cutoff overrides Priority Calling	DEFINITY ECS Ringer Cutoff does not override Priority Calling.

Ringing Transfer

Feature Definition

The G2 Ringing Transfer feature allows a multi-appearance voice terminal user to transfer all ringing for a given extension number to other voice terminal(s). When Ringing Transfer is active for an extension, a call terminating to an appearance of that extension rings a predefined subset of the other terminals sharing the same appearance.

For example an executive who normally receives all calls can transfer ringing to the secretary's voice terminal. This is useful when the executive is out of the office or otherwise occupied.

This operation applies to all calls arriving at the extension while the feature is activated.

Feature Differences

This feature is not available in DEFINITY ECS. In G2, there is an assortment of choices for every bridged appearance, and an executive can push this button and have the phone ring at the secretary's phone rather than the executive's phone. DEFINITY ECS has an "abrev-ring" button in association with the Abbreviated and Delayed Ring feature. This feature button works differently than G2 Ringing Transfer. Most notably, "abrev-ring" must be pressed for each individual call.

Route Advance

Feature Definition

G2 Route Advance automatically reroutes outgoing calls over alternate trunk groups when the initially-accessed trunk group is busy.

The Route Advance feature offers efficient use of available trunk groups. To provide minimum traffic interference, the first-choice trunk group would be 1-way outgoing trunks. Subsequent trunk groups might be 2-way. The alternate trunk groups are used primarily for incoming traffic. This allows spill over from the first-choice trunk group. The last (fifth-choice) trunk group could be assigned for Remote Access. These remote access trunks, being the last-choice trunk, should then remain virtually unblocked for Remote Access. The trunk-group access code determines the first-choice trunk group.

Feature Differences

Although this G2 feature is not available in DEFINITY ECS, equivalent routing capabilities are possible through AAR/ARS.

Minimizing the Impact of Route Advance Differences

G2 automatically reroutes calls over alternate trunk groups when the initially accessed trunk group is busy. Using Route Advance, a caller can dial a single trunk-group dial access code and access one of the two to five trunk groups in a Route Advance list.

Although DEFINITY ECS does not provide the Route Advance feature, DEFINITY ECS can emulate the alternate routing capabilities provided by the Route Advance feature using the DEFINITY ECS Automatic Alternate Routing (AAR) and the Automatic Route Selection (ARS) features by:

- Implementing an AAR or ARS pattern containing the two to five trunk groups in a Route Advance list as the pattern's preferences
- Using the AAR/ARS trunk-group hunting function to select the first preference with an idle trunk to route each call.

However, when this is done, users must change their dialing habits. See below.

Route Advance End-User Differences

New Dialing Sequence

If your company implements AAR/ARS to emulate Route Advance, users must change their dialing habits. The new dialing sequence will have the form:

```
AAR/ARS DAC + Address Digits.
```

The previous dialing sequence had the form:

```
Trunk-Group DAC + Address Digits
```

or, for Host Computer Access calls, just:

```
Trunk-Group DAC.
```

If Host Computer Access is not used, the AAR/ARS DAC can be made to correspond to the previous Trunk Group DAC and the user will notice very little difference. Call set-up time may appear to be slightly longer if ISDN-PRI tie trunks are not used.

Service Observing

Feature Definition

Service Observing allows a specified user, such as a supervisor, to observe a call that involves other users while the call is in progress. The call can be observed on a listen-only or listen-and-talk basis.

NOTE:
The use of Service Observing features may be subject to federal, state, or local laws, rules or regulations and may be prohibited pursuant to the laws, rules, or regulations or require the consent of one or both of the parties to the conversation. Customers should familiarize themselves with and comply with all applicable law, rules and regulations before using these features.

Summary Table for Service Observing Features

Table 2-37. Summary Table for Service Observing Features

Service Observing Features (Button activated at MFT)	System 85					DEFINITY			Comments
	R1	R2V1	R2V2	R2V3	R2V4	G2.1	G2.2	ECS	
Agent Override			X	X	X	X	X		
Service Observing				X	X	X	X	X	
Applies to									
ACD	NA	NA	X	X	X	X	X	X	
Non-ACD	NA	NA						X	

Feature Differences

This is a DEFINITY ECS feature; G2 provides similar functionality as part of Automatic Call Distribution. See Automatic Call Distribution in this chapter for additional feature differences on Service Observing capabilities..

G2	DEFINITY ECS
Who Can Be Observed	
In G2 only ACD agents can be observed.	DEFINITY ECS allows observing of non-ACD stations.
Analog Stations	
G2 does not support service observing of an analog station.	DEFINITY ECS does.
G2 provides Agent Override to allow observing using an analog station (activation via a dial code).	DEFINITY ECS provides a Service Observing Feature Access Code (FAC) so observing can be done from any phone, even off-premises.
G2 provides service observing of agents. G2 limits service observing to the observing of agents only and requires multi-function sets for both observer and observed agent.	DEFINITY ECS provides service observing of any extension (ACD agent and non-ACD agent), Class of Restriction permitting. DEFINITY ECS also allows service observing of analog sets and service observing on a VDN.

System Measurements

Feature Definition

System Measurements provides reports on items such as trunk group usage, hunt group usage and efficiency, attendant group activity and efficiency, and security violations.

Individual reports are available for each of the following:

- Attendant Groups
- Attendant Positions
- Automatic Circuit Assurance
- Blockage Study
- Call Rate
- Call Summary
- Call By Call Trunk Group
- Coverage Paths
- Coverage Principals
- DS1 Link Performance Measurements
- DS1 Facility Link Performance Measurements
- Hunt Groups
- Lightly Used Trunks
- Load Balance Study
- Modem Pool Groups
- Outage Trunks
- Performance Attendant Group
- Performance Hunt Group
- Performance Trunk Group
- Performance Summary
- Processor Occupancy and Communications Links
- Route Patterns
- Security Violations
- System Status
- Tone Receiver
- Traffic Summary

- Trunk Group Hourly
- Trunk Group Summary
- Wideband Trunk Group Hourly
- Wideband Trunk Group Summary

All reports are on-demand reports. None are given automatically. Reports are available on the administration terminal or a remote administration terminal. The reports can be printed if a printer is associated with the terminal. The reports can also be scheduled to print at the system printer via the Report Scheduler and System Printer feature.

Feature Differences

DEFINITY ECS provides switch-based traffic measurement reports. G2, however, can only send traffic data to Monitor I, which is capable of generating traffic reports.

Terminal Busy Indication

Feature Definition

This feature is called Facility Busy Indication in DEFINITY ECS. It provides multi-appearance voice terminal users with a visual indication of the busy or idle status of an extension number, a trunk group, terminating extension group, a hunt group (DDC or UCD group), or any loudspeaker paging zone, including all zones. The Facility Busy Indication button provides the voice terminal user direct access to the extension number, trunk group, or paging zone.

When the lamp associated with the Facility Busy Indication button is lighted, the tracked resource is busy. If the lamp is dark, the resource is idle. If the lamp is flashing, the tracked resource is placing a call to the voice terminal with the button.

Pressing the Facility Busy Indication button automatically selects an idle call appearance and places a call to the resource.

Feature Differences

The G2 Terminal Busy Indications feature is similar to the DEFINITY ECS Facility Busy Indication. In G2, this feature is provided for extensions; in DEFINITY ECS this functionality is provided for stations, trunk groups, hunt groups, code calling, and paging.

G2	DEFINITY ECS
Contact Interface	
G2 supports contact interface (on traditional modules only, using the SN241). This interface is used for CAS and ACD split status thresholds to light external lamps for status displays. Some customers use these contacts to close the Tip-Ring path on an analog line with Terminal Busy Indication to display these occurrences on specific terminals.	DEFINITY ECS does not support this capability.
Pressing the G2 Terminal Busy Indication feature button has no effect.	DEFINITY ECS allows you to press the Facility Busy Indication feature button and place a call to the feature button's assigned extension.

Timed Recall on Outgoing Calls

Feature Definition

G2 Timed Recall on Outgoing Calls provides control over the use of outgoing trunks when there is an excessive number of lengthy calls. Timed Recall automatically transfers control of the outgoing calls from selected voice terminals to an attendant after a predetermined time interval of 1 to 31 minutes. This feature applies to voice terminals with a specific class of service designated in switch translation. The switch sends a warning tone to the calling party 30 seconds before the transfer occurs. The warning tone is a 440-hertz tone with a duration of 1 second. When a call is transferred to an attendant, it is identified by the Attendant Display feature. At this time, the attendant assumes control of the call. The attendant may talk with the calling and called party to decide whether the call should continue or not.

Feature Differences

This G2 feature is not available in DEFINITY ECS.

Trunking and Trunk Group Hunting

Feature Definition

Both G2 and DEFINITY ECS support this functionality.

Feature Differences

See also Modem Pooling and Host Computer Access in this chapter.

G2	DEFINITY ECS
Trunk Hunting Options	
There is no option in G2 for hunting over the trunks within a group; the most-idle-trunk is used.	DEFINITY ECS adds linear and circular (preferential) trunk hunting to most-idle-trunk hunting.
Module Preference	
G2 provides module preference.	DEFINITY ECS does not.
Trunk/Line-Side Data Access	
In G2, hosts are assigned to trunk groups.	In DEFINITY ECS, you must assign host ports to line-side hunt groups.
Data Modules	
G2 supports trunk-side data modules and therefore trunk groups with data modules.	DEFINITY ECS does not support trunk-side data modules.

Uniform Dial Plan

Feature Definition

Uniform Dial Plan (UDP) provides a common 4- or 5-digit dial plan (specified by Dial Plan administration) that can be shared among a group of switches. Interswitch dialing and intraswitch dialing both require 4- or 5-digit dialing. The UDP is used with ETN, Main/Satellite/Tributary, and DCS configurations. Additionally, UDP can be used alone to provide uniform 4- or 5-digit dialing between two or more private switching systems without ETN, Main/Satellite/Tributary, or DCS configurations.

Summary Table for Uniform Dial Plan (UDP)

Table 2-38. Summary Table for Uniform Dial Plan (UDP)

	System 85					DEFINITY			
Uniform Dial Plan (UDP)	**R1**	**R2V1**	**R2V2**	**R2V3**	**R2V4**	**G2.1**	**G2.2**	**ECS**	**Comments**
4-Digit dialing w/Multidigit Steering		X*	X*	X*	X*	X*	X*	X	
5-Digit dialing									
w/Prefix dialing (uses Multidigit									
Steering or AAR)		X	X	X	X	X	X	X	
w/Unrestricted 5-digit dialing				X	X	X	X	X	
Extension Number Portability									
For Unrestricted 5-digit Dial Plan				X	X	X	X	X†	
For 4-digit Dial Plan					Iss 2	X	X	X†	
Unrestricted 5-Digit UDP				X	X	X	X	X	

* S85/G2 does not have UDP but does provide equivalent functionality when interacting with a S75/G1/DEFINITY ECS that uses UDP in an extension-dialing (4- or 5-digit) subnetwork.

† AlthoughDEFINITY ECS does not provide ENP, the DEFINITY ECS Unrestricted 5-Digit Uniform Dial Plan feature provides equivalent functionality. However, it may not support the full 100,000 extensions supported by the S85/G2 ENP feature, and it does not support the Recent Disconnect and Station Number Steering features that are often associated with S85/G2 ENP.

Feature Differences

G2	DEFINITY ECS
General Feature Information	
UDP in G2.1 and earlier switches was called "RNX routing." In G2.2, the name was changed to UDP, for consistency. There is a separate related Extension Number Portability feature.	In DEFINITY ECS, this feature is Unrestricted Uniform Dial Plan, UUDP, which includes Uniform Dial Plan and Extension Number Portability.
Extension Numbers Supported	
G2 UDP supports all combinations of the leading two digits of the extension number in G2.1 and earlier. With G2.2, any extension number or range can be handled. ENP supports all 100,000 extension numbers.	DEFINITY ECS can support up to 50,000 table entries. In almost all cases, however, the DEFINITY ECS capacity will meet all customers' UDP needs.
Requirements for Call Routing	
UDP and ENP always use AAR/WCR for call routing.	UDP does not require AAR for call routing.
Raising the FRL	
UDP and ENP always raise the call's FRL to the maximum value of seven to assure routing.	In DEFINITY ECS, UDP raises FRL on Node extension types and, for other types, retains the call originator's FRL; but ENP raises the FRL to the maximum value of seven. (R5si doesn't support ENP.)
Digit Conversion	
G2 allows digit conversion (M-N) on UDP/ENP calls.	DEFINITY ECS only allows digit conversion (M-N) on AAR extension types.

World Class Routing

Feature Definition

Both G2 and DEFINITY ECS enable users to flexibly dial any location in the world, regardless of the dial plan used at that location. The following are key components of:

- Toll analysis compares a dialed number to entries in the system's list. Based on the results, calls may be restricted from completion.
- Automatic Route Selection (ARS) digit analysis compares a dialed public network number with entries in the system's tables, mapping the number to a selected public network routing pattern.
- Automatic Alternate Routing (AAR) digit analysis compares a dialed private network number with entries in the system's tables, mapping the number to a selected private network routing pattern.

It supports the ARS and AAR capabilities as separate features, but, through some generalized administration applicable to both features, provides both the same routing abilities. In addition, a number of capabilities enhance the flexibility of routing in supporting your domestic and/or global calling requirements.

Summary Tables for World Class Routing Capabilities & Features

The two tables here provide summary information on World Class Routing. The first table, containing one page of information, is an overview that covers G2.2, R5si, and R5r. The second table, covering multiple pages, details the differences between the G2.2 and DEFINITY ECS World Class Routing features.

Overview Table for World Class Routing

ITEM	G2.2	R5si	R5r
ARS/AAR			
AAR/ARS Patterns(Shared)	1,023	254	640
Shared Patterns for Measurement	64	20	25
Trunk Groups in an ARS/AAR Pattern	16	6	16
Toll Tables	63	32	32
Entries per Toll Table	800	800	800
RHNPA Tables	NA	32	32
UDP (Entries)	100,000	240	50,000
Choices per RHNPA Table	NA	12	12
Entries in RHNPA Tables	NA	1,000	1,000
FRLs	8	8	8
Inserted Digit Strings	4,096*	1,200	3,000
Digits Inserted (M to N)	31	18	18
Digits Deleted (M to N)	31	18	23
Digits Inserted for ARS/AAR (Subnet)	31	36	36
Digits Deleted for ARS/AAR (Subnet)	31	18	23
Routing Networks (or Numbering Plans)	7	2	2
Conditional Routing Plans	3	NA	NA
TOD Plan	7	8	8
ARS/AAR Table Entries			
(NPA,NXX,RXX,HNPA,FNPA)	57,344	2,000	2,000
Digit Conversion Entries	4,096	300	400

Detailed Table for World Class Routing

* The limit is 4096 unique strings. If more than one dialed digit string is modified in the same manner (such as: delete 3 digits and insert ‘751’), they count as 1.

World Class Routing Capabilities & Features	DEFINITY G2.2	DEFINITY ECS	Comments
Call Routing Feature Summary			
Automatic Alternate Routing (AAR)		X	Private Network Routing
Automatic Route Selection (ARS)		X	Public Network Routing
Eight Networks	X		Private & Public Network Routing
Digit Analysis			
Internal Digit Analysis			
AAR/ARS/Network Access Code Recognized	X	X	
AAR Access Code (Number of digits)	1-4	1-4	typically single-digit "8"
ARS Access Codes (Number of digits)	1-4	1-4	typically single-digit "9"
Single Access Code for all ARS calls	X	X	
Separate Toll & Non-Toll Access Code*	X	X	
Optional Dial Tone (DT) after AAR/ARS			
Access Code	X	X	
Opt Per System vs. Per Network	Netw	Sys	
Per Sys/Netw Opt applies to calls from stas	X		
Per Sys/Netw Opt applies to calls from trks			
For *All* Trks		X	
For Trks w/per trk grp DT Opt **Only**	X		
Extension Number Portability (ENP)	X	X	
Prefixed Routing (ARS Access Code for			
calls incoming from Tie & APLT trunks)	X	X	
Uniform Dial Plan (UDP) Calls Recognized	X	X	
Network Digit Analysis			
Exception Strings Recognized	X		
With Wild Card Digits Recognized	X	NA	
Max (external) Networks Supported	7	2	
Network Partition Groups	NA	8†	
Network Numbering Plans Supported			
ETN-like Private Networks	X	X	
North American Numbering Plan (NANP)	X	X	
International Numbering Plan Formats	X	X	
Unrestricted Numbering Plan Formats up			

Continued on next page

World Class Routing Capabilities & Features	DEFINITY G2.2	DEFINITY ECS	Comments
to 18-digit numbers	X◊	X	18-Digit Analysis
Network Dial Plan Formats supported			
Toll Prefix			
Any Digit String	X		
Digit "1" (for NANP)	X	X	
Max Number of Patterns/RHNPA table	#	12	
Maximum Digit Combination Capacities	57,344◆	2000	
18-Digit 01X-XXXXXXXXXXXXXX			
Combinations	5050	2000	
Digit String Limits			
Max Digit String Length	68	36	
Max Digits Specified for Analysis	18	18	
Total Digit Strings - All Networks	57344◆	2000	
Different Patterns Possible for Int'l vs.			
Operator-assisted	X	X	2 patterns
Generalized International Call Routing	X	X	
Can Select Pattern on **any** <= 18-dig string	X	X	
Interexchange Carrier Codes			
Route on dialed IXC	X	X	
Recognize but ignore dialed IXC	X	X	
Account Codes			
AAR-Account Code Prefix	X		
Full account code -- any network	X		
Route Selection			
Call Categories	256		
AAR Conditional Routing	3	NA	Satellite Hop Control
Tenant Service Call Categories	~	8~	
Attendant Partitions	41	NA	
Station Partitions	1000	NA	
Route Selection Patterns	1023	640	

Continued on next page

World Class Routing Capabilities & Features	DEFINITY G2.2	DEFINITY ECS	Comments
AAR Partitioning		X	
ARS Partitioning		X	
Network Partitioning	X		
Routing Plans or Call Categories for Partitioning	256	8*b	
Time of Day Plans	7	8	
Patterns per TOD Routing Plan	1,023**	640**	
TOD Plan Changes per Day	6	6	
Route Selection Patterns			
Patterns shared by AAR & ARS (Max number)	1,023	640	
Max AAR/ARS Patterns for Measurements	64‡	25	
Preferences (that is, trk grps) per Pattern	16	16	
Preference Order **NOT** Limited to Increasing FRL	X	X	"X" means NOT limited
AAR Overflow to DDD	X	X	
Warning Tone on Overflow to Toll	X◊◊		
Warning Tone on any preference	X		
BCC Parameters in PRI	X	X	Also called GRS in DEFINITY ECS Trunk Signaling
Bearer Capability Routing	X	X	
Bearer Capability Classes (BCC)		X	5 BCCs (0-4)
Bearer Capability Class of Service (BCCOS)	X		256 BCCOSs (0-255)
Facility Restriction Levels (FRLs)	8	8	FRLs (0-7)
IXC Identification	X	X	
Network Specific Facility Assignment	X	X	
WATS Band Identification	X	X	
Symmetrical Routing			
(Basic) Symmetrical Routing	X		First Preference
Enhanced Symmetrical Routing	##		Any Preference
Digit Modification & Sending			
ARS/WCR Toll Restriction			
Code Conversion (Prefix Toll Digit) (for example, "1") if needed	X	X	

Continued on next page

World Class Routing Capabilities & Features	DEFINITY G2.2	DEFINITY ECS	Comments
Number of Toll Lists/Tables	63	32	
Entries per Toll Table	800	800	
Digit Conversion	X	X	
M = <= 18, N = <= 18	X	X	M to N Digit Conversion
Digit Conversion Entries (ARS/AAR)	4096	400	
With Tail-End Hop Off	X	X	
AAR to ARS Crossover		X	
Network Crossover	X		
Digit Insertion/Deletion	X	X	
IXC Access	X	X	
For NANP	X	X	
For Foreign Countries	X	X	
Subnet Trunking	X	X	
Queuing			
Queue on Any or All Trunk Group in			
Pattern (Pattern Queuing)	X		
Queue on *Any 1* Trunk Group in Pattern		X	
Queue on *First* Trunk Group in Pattern	X	X	

* In DEFINITY ECS, two access codes are provided for ARS; however, there is no difference in functionality. In G2.2, these are available to network 1 only.

† Digit Analysis is done in partitions in DEFINITY ECS. Digit Analysis is done in Networks in G2.2. Partitioning in G2.2 occurs after analysis.

◊ 18 digit analysis at a time - can analyze multiple strings.

1023 patterns shared by all networks in G2.2. There is not structure that limits pattern choice.

◆ G2.2 can always accommodate at least 5050 numbers, and as many as 57344 depending on the number of digits involved, the number format, and how alike the numbers are (the more alike the better). These numbers are shared among all networks.

~ G2.2 does not have "Tenant Service" Call Categories, but it does provide 256 categories that are used for Tenant, Conditional Routing, and Time of Day Routing. You could use all 256 for Tenant or use a subset for tenant and some for TOD and Conditional Routing. DEFINITY ECS uses Partition Groups for partitioning and time-of-day routing.

** G2.1 and earlier releases use three sets of ARS patterns, one for each TOD plan. In G2.2 the TOD Plan can cause any initial digit analysis pattern (VNI) to point to any real pattern number (0-1023). DEFINITY ECS uses AAR/ARS partition groups.

‡ 64 per TOD plan in R2/G2

◊◊ In G2.2 warning tone is applied whenever a particular preference is used and marked to give tone. Equivalent functionality to previous releases requires routing toll calls and non-toll calls to different patterns. Also, in G2.2 warning tone does not necessarily imply toll routing.

Applies only to specially marked trunk groups.

Feature Differences

G2.2 has added a new feature called World Class Routing, replacing S85 and G2.1 AAR/ARS. DEFINITY ECS has added an umbrella capability called World Class Routing under which are grouped a number of features: Automatic Alternate Routing, Automatic Route Selection, Generalized Route Selection, Toll Analysis, and others. For the sake of this section in this document, we are using the terms G2 WCR and DEFINITY ECS WCR.

G2	DEFINITY ECS
Number of Routing Networks	
G2.2 WCR provides seven routing networks.	DEFINITY ECS WCR provides two: one for AAR routing and one for ARS routing.
Number of Patterns	
G2.2 WCR provides 1023 patterns that are shared by the seven routing networks.	DEFINITY ECS WCR provides 640 patterns that are shared by the two routing networks.
Conditional Routing	
G2.2 WCR provides conditional routing (usually used to limit the number of satellite hops in a private-network call).	DEFINITY ECS WCR does not provide conditional routing.
Symmetrical Routing	
G2.2 supports symmetrical routing.	DEFINITY ECS does not support symmetrical routing.

Continued on next page

G2	DEFINITY ECS
Unauthorized Call Control G2.1 and prior releases have a system-wide UCC level. G2.2 WCR can correlate a different unauthorized call control (UCC) level (that is, FRL level "0" to "7") with each digit string assigned to a routing network.	DEFINITY ECS WCR has a system-wide Unauthorized Call Control level (that is, minimum FRL needed for a call to successfully complete to a controlled number).
Denying Routing The G2.2 WCR feature can absolutely deny routing to certain numbers for every user by resolving those number's digit strings to Virtual Nodepoint Identifier (VNI) 0 or an empty pattern.	DEFINITY ECS routes to "deny" or an empty pattern.
Warning Tone On a per-preference basis, depending on a specific trunk group's role as a preference within a G2.2 WCR pattern, G2.2 WCR can return warning tone (usually to advise a user that the software has selected an expensive preference to route the user's specific call). Earlier releases assume that application of warning tone implies toll and is used for toll-denial.	DEFINITY ECS WCR does not provide warning tone for any preferences.
Conditional Counts, TOD *Plans, Partitions* G2.2 WCR can provide up to three conditional counts, seven time-of-day plans, and 999 extension partitions in up to 256 combinations, that can be used by any of the seven routing networks to determine the routing pattern.	DEFINITY ECS WCR can provide up to eight extension partitions and eight time-of-day plans in up to eight combinations that can be used by the AAR and ARS routing networks.

Continued on next page

G2	DEFINITY ECS
Dial Access Codes	
G2 WCR provides two dial access codes for Network 1 (usually used for ARS routing): a toll and a nontoll dial access code.	DEFINITY ECS WCR also provides two dial access codes for the ARS routing network, but both access codes provide identical access to the feature.
Toll Restriction	
G2 provides an ARS/WCR toll restriction assignment that is independent of the toll restriction assignment used for DAC access of trunk groups.	DEFINITY ECS provides toll and nontoll access to the ARS routing network strictly in relation to the Toll Restriction assignment in each user's Class of Restriction -- not in relation to the dial access code dialed.

Capacity Comparisons

3

Overview of Capacity Tables

This chapter provides a table that compares capacities of G2.1 and G2.2 to R5si 8/12 MB and R5r.

NOTE:
Not all maximum capacities listed in the following tables can be reached simultaneously with all versions or all configurations of the system.

Table 3-1. G2/R5 Capacity Comparison

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Abbreviated Dialing (AD)				
AD Lists Per System	52,224	52,224	2,400	5,000
AD List Entry Size	20	20	24	24
AD Entries Per System	262,144	262,144	12,000	100,000
Auto Dialing Button[1]				
Entries per System	262,143	262,143	NA[1]	NA[1]
Enhanced List (System List)	NA	NA	1	1
Max. Entries	NA	NA	10,000	10,000
Group Lists	9,999	9,999	100	1,000
Max. Entries	95	95	100	100
Group Lists/Extension	2	2	3	3
System List	1	1	1	1
Max. Entries	9,999	9,999	100	100
Personal Lists	(1)	(1)	2,400	5,000
Max. Entries	95	95	100	100
Personal Lists/Extension	2	2	3	3
Applications Adjuncts				
CallVisor ASAI Adjuncts			8	8
Asynchronous Links (RS232)	NA	NA	5	10
SMDR Output Devices	1	1	2	2
Journal:System Printer	NA	NA	2:1	2:1
Property Mgt. Systems	NA	NA	1	1
BX.25 Physical Links[2]	8	8	8	16
App. Processors (i.e., 3B2-MCS)	7	7	1	7
AUDIX Adjuncts	8	8	1	8
CMS Adjuncts	1	1	1	1
ICM Adjuncts (ISDN Gateway)	1	1	1	1
BX.25 Processor Channels	64	64	64	128
Hop Channels	128	128	64	128

1. There is no limit on the maximum number of auto dial buttons (other than the system limit on button capacity).
2. In the case of SCC/ESCC/CSCC, only four BX.25 physical links are supported in the configuration.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Automatic Call Distribution (ACD)				
Announcements per Split	2	2	2	2
Announcements per System	# Aux Trks	# Aux Trks	128	256
Splits[1]	60	60	99	600
ACD Members per Split	1,023	1,023	200	999
Split Members per System Measured ACD Agents (Switch Limits)			1000	10,000
Logged-In Splits per Agent[2]				
No CMS			4	4
R2 CMS			3	3
R3 CMS			3	3
R3V2 CMS			4	4
R3V4 CMS[3]			4	4
R3V5 CMS			20	20
Queue Slots per Group	UL*	UL*	200	999
Queue Slots per System			1,500	15,000
ARS/AAR/WCR				
AAR/ARS/WCR Patterns (Shared)	NA	1,023	254	640
ARS/AAR/WCR Table Entries (NPA, NXX, RXX, HNPA, FNPA)	2,000	57,344	2,000	2,000
Choices per RHNPA Table	10	10	12	12
Digit Conversion Entries	2,048	4,096	400	400
AAR/ARS Digit Conversion				
Digits Deleted for ARS/AAR[4]			28	28
Digits Inserted for ARS/AAR			36	36
AAR/ARS/WCR Sub-Net Trunking				
Digits Deleted for ARS/AAR	7	68	28	28
Digits Inserted for ARS/AAR	20	31	36	36
Digits Sent for ARS/AAR	31	68	40	56

1. All references to Hospitality Parameter Reduction on the Customer Option form have been removed from the Capacities Tables.
2. In the case where going from 4 to 3 login maximums, a change to the hunt group form will also be required, which in turn would require all agents to be logged-out. In one extreme case, this is potentially avoided and R2 & R3 CMS will handle the fourth login as UNSTAFFED appropriately.
3. R3V3 CMS was renamed to R3V4 CMS to match the DEFINITY switch numbering.
4. plus up to 7 inter-exchange carrier (IXC) digits.

* UL = unlimited

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
ARS/AAR/WCR (con't)				
Entries in HNPA & RHNPA Tables	999		1,000	1,000
FRLs	8	8	8	8
Inserted Digit Strings[1]	NA	57344	1,200	3,000
Patterns for Measurement				
Shared Patterns for Measurement	NA	1023	25	25
RHNPA Tables	160	717	32	32
Routing Plans			8	8
Toll Tables	63	63	32	32
Branches per Toll Table	800	512	800	800
Trunk Groups in an ARS/AAR Pattern	16	16	6	16
UDP (Entries)	100,000	100,000	10,000	50,000
TOD Plans	3	7	8	8
Attendant Service				
Attendant Consoles (day:night)	40	40	15:1	27:1
Attendant Console 100s Groups/Attendant	100	100	20	20
Attendant Control Restriction Groups	63	63	96	96
Centralized Attendant Service				
Release Link Trunks at Branch	16	16	99	255
Release Link Trk Grp at Branch	1	1	1	1
Release Link Trunks at Main	110	110	400	4,000
Release Link Trk Grp at Main[2]	40	40	99	666

1. This is the number of 12 character inserted-digit-strings available for AAR/ARS/WCR preferences.
2. The number of ''Release Link Trunk Groups at Main'' is the same as the number of trunk groups in the system.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Attendant Service (con't)				
Other Access Queues				
Max. Number of Queues	1	1	12	12
Max. Number of Queue Slots[1]	NA	NA	80	80
Size Range of Reserved Queue	NA	NA	2-75	2-75
Reserved Queue Default Size	NA	NA	5	5
Queue Length	UL*	UL*	80	300
Switched Loops/Console	6	6	6	6
Authorization				
Authorization Codes	90,000	90,000	5,000	90,000
Classes of Restriction	NA	NA	96	96
Classes of Service	63	63	16	16
Length of Authorization Code	4-7	4-7	4-7	4-7
Length of Barrier Code	4	4	4-7	4-7
Length of Forced Entry Account Codes			1-15	1-15
Restricted Call List	5	5	1	1
Remote Access Barrier Codes	1	1	10	10
Toll Call List	63	63	1	1
Unrestricted/Allowed Call Lists	NA	NA	10	10
Total Call List Entries	1,840	1,840	1,000	1,000
Automatic Callback Calls			240	1,500
Automatic Wakeup				
Simultaneous Display Requests	NA	NA	10	30
Wakeup Requests per System	NA	NA	2,400	15,000
Wakeup Request per Extension	NA	NA	1	1
Wakeup Requests per 15 min. Interval	NA	NA	450	950

1. The ''Maximum number of queue slots'' is referred to as ''emergency access queue length'' in R5si.

* UL = Unlimited

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Basic CMS				
Measured Agents or Login IDs	NA	NA	400	2,000
Measured Splits	NA	NA	99	600
Measured Trunk Groups	NA	NA	32	32
Measured VDNs	NA	NA	99	512
Reporting Periods				
Intervals	NA	NA	25	25
Days	NA	NA	7	7
Cabinets				
EPN				
MCC[1]	NA	NA	2	43
SCC[1]	NA	NA	8	164
Inter-Port Network Connectivity				
Port Networks	NA	NA	3	44
Max. No. of Port Networks/Cabinet	1	1	1	2
Switch Nodes (Simplex)	NA	NA	NA	3
Switch Nodes (Duplex)	NA	NA	NA	6
DS1 Converter Complex (Simplex)	NA	NA	NA	41
DS1 Converter Complex (Duplex)	NA	NA	NA	82
PPN				
MCC[2]	NA	NA	1	1
SCC/ESCC	NA	NA	4	NA
CSCC	NA	NA	NA	NA

1. Only EPNs in R5r can be DS1-remote EPNs.
2. MCC includes Medium Cabinet.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Call Appearances				
Bridged Images/Appearance	15	15	7	15
Call Appearances/Station[1]	52	52	54	54
Max. Appearances per Ext.	12	12	10	10
Min. Appearances per Ext.	1	1	0	0
Total Bridged Appearances	32,000	32,000	2,400	25,000
Max. Simultaneous Off-Hook per Call[2]	2	2	5	5
Call Coverage				
Coverage Answer Groups (CAG)	NA	NA	200	750
Coverage Paths	4,094	4,094	999	9,999
Coverage Paths Incl. in Call Covg. Report			100	100
Coverage Path per Station	2	2	4	4
Coverage Points in a Path	3	3	6	6
Max Users/Coverage Path[3]	ul (4)	ul	3,500	36,065
Members per CAG	8	8	8	8
Number of Coverage Paths for which Each Station Can Be a Member			300	300
Call Detail Recording				
CDRU Trackable Extensions	NA	NA	2,400	25,000
Intra-Switch Call Trackable Extensions	NA	NA	1,000	5,000
No. of CDRUs/System[4]	8	8	1	1
Max. No. of CDR Records that Can Be Buffered in the Switch	6000	6000	300	1,900
No. of Records Buffered for the Primary Output Device that Will Cause Secondary Device to be Busied Out for 2 Minutes	NA	NA	200	1,800

1. The number of call appearances is the sum of primary and bridged appearances; at most 10 can be primary. A maximum of 54 administrable buttons are supported for the 7434D terminal — 34 buttons in the basic terminal and an additional 20 buttons in the coverage module.
2. Does not apply to conferencing.
3. The maximum number of users per coverage path is equal to the number of extensions.
4. The CDRU adjunct capacity is 40,000 calls per hour, and it exceeds the system call capacity for all systems except for R5r.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Call Forwarding (Follow-me)				
Call Forwarded Digits (off-net)	7	31	16	16
Call Forwarded Numbers	3,276	3,276	2,400	25,000
Call Park				
Attnd. Grp. Common Shared Exten. Nos.	9	9	80	80
No. of Parked Calls	9	9	723	10,604
Call Pickup Groups				
Call Pickup Members/Group	32,000	32,000	50	50
Call Pickup Members/System	32,000	32,000	2,400	25,000
No. of Groups	999	999	800	5,000
Call Vectoring				
Max. Skills a Call Can Simultaneously Queue to	NA	3	3	3
Priority Levels	4	4	4	4
Recorded Announcement	84	255	128	256
Steps per Vector	15	15	32	32
Vector Directory Numbers	32,000	32,000	512	20,000
CMS Measured VDNs[1]			512	2,000
Vectors per System	128	511	256	512
No. of Collected Digits for Call Prompting			16	16
No. of Dial-Ahead Digits for Call Prompting			24	24
Vector Routing Tables			10	100
CallVisor ASAI				
Active Station Control Assoc.			2,000	6,000
Call Controllers per Call			1	1
Call Monitors per Call			14	14
Station Controllers per Station			2	2
Max. Simultaneous Call Classif.			40	400

1. Measured limits depend on the CMS release used.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
CallVisor ASAI (con't)				
No. of CallVisor ASAI Links (Open & Proprietary)			8	8
Notification Requests (Monitors)			300	10,000
Simultaneous Active Call Controlled Calls			300	3,000
Switch to Adjunct Associations (Routing)			127	127
No. of Open MultiQuest Billing Requests			100	1,000
Conference Parties	3	3	6	6
Simultaneous 3-way Conf. Calls[1]	(2)	(2)	483	7,084
Simultaneous 6-way Conf. Calls[2]	13	13	240	3,520
Data Parameters				
Administered Connections	NA	NA	128	128
Alphanumeric Dialing				
Max. Entries			200	1,250
Characters/Entry			22	22
PRI Endpoints (PE)			25	50
Access Endpoints (No. of Trunks)			400	4,000
Digital Data Endpoints	8,000	8,000	800	7,500
Dial Plan				
DID LDNs	999	999	8	20
EAS Agent Login IDs[3]			1,500	10,000
Extensions	32,703	32,703	3,500	36,065
Extension No. Portability[4]	73,200	73,200	10,000	50,000
Feature Dial Access Codes	NA	NA	77	77
No. of Digits	1-4	1-4	1-4	1-4

1. Simultaneous 3-way Conference Call=(483 / 3)* number PNs.
2. Simultaneous 6-way Conference Call=(483 / 6)* number PNs.
3. Login IDs count against the "Extensions" switch capacity.
4. The numbers shown in ''Extension Number Portability'' are Uniform Dialing Plan (UDP) entries.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Dial Plan (con't)				
Integrated Directory Entries[1]	NA	NA	2,416	25,028
Max. Extension Size	5	5	5	5
Min. Extension Size	1	1	1	1
Miscellaneous Extensions[2]			900	3,317
Names				
No. of Names[3]	32,767	32,767	4,215	36,511
No. of Characters in a Name	30	30	27	27
Non-DID LDNs	999	999	50	666
Prefix Extensions	Yes	Yes	Yes	Yes
Trunk Dial Access Codes				
No. of Access Codes	NA	NA	317	884
No. of Digits	1-4	1-4	1-4	1-4
Do Not Disturb (DND)				
DND Requests per System	NA	NA	2,400	25,000
Simultaneous Display Requests	NA	NA	10	30
Expert Agent Selection (EAS)				
Skill Groups	NA	600	99	600
VDN Skill Preferences	NA	3	3	3
Max. Skills a Call Can Simultaneously Queue to	NA	3	3	3
Agent Login IDs	NA	NA	1,500	10,000
Max. Skills per Agent	NA	5	20	20
Max. Agents that can be Logged-In				
When Each Has 20 Skills Assigned	NA	NA	50	500
When Each Has 4 Skills Assigned	NA	1023	250	2,500
When Each Has 1 Skill Assigned	NA	1023	500	5,200

1. The Integrated Directory Entries = Stations + Attendant Consoles.
2. Used for PCOL groups, common shared extensions, access endpoints, administered TSCs, code calling IDs, LDNs, hunt groups, announcements, and TEGs.
3. The Number of Names = number of stations + attendant consoles + trunk groups + digital data endpoints + miscellaneous extensions.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Facility Busy Indicators				
Buttons per Tracked Resource[1]	17	17	100	500
No. of Indicators (Station & Trk Grps)	NA	NA	3,600	10,000
Hunt Groups				
Announcements per Group	1	1	2	2
Announcements per System	84	255	128	1000
Groups	60	60	99	600
Group Members per Group	1,024	1,024	200	999
Group Members per System	1,024	2,048	1,000	10,000
Queue Slots per Group	981	981	200	999
Queue Slots per System	10,500	10,500	1,500	15,000
Intercom Translation Table (ICOM)				
Automatic/Manual and Dial				
ICOM groups per system	580	580	32	256
G2 Auto/Manual (Auto)	300	300	32	256
Dial	280	280	32	256
Members per ICOM group				
G2 Auto/Manual (Auto)	16	16	32	32
Dial	28	28	32	32
Members per System	320	320	1,024	8,192
Last Number Dialed				
Entries/System[2]	6,000	6,000	3,216	32,528
Number of Digits	30	30	24	24

1. With DEFINITY ECS this limit is enforced. However, customers upgrading are not forced to decrease their number of buttons.
2. The Last Number Dialed Entries = Stations + Digital Data Endpoints + Attendant Consoles.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Leave Word Calling (Switch-Based)				
Messages Stored	6,000	6,000	2,000	6,000
Messages per User	16	16	125	125
Remote Message Waiting Indicators				
Per Extension	3	3	80	80
Per System	ul	ul	240	1,250
Simultaneous Message Retrievers	ul	ul	60	400
System-Wide Message Retrievers	32,000	32,000	10	10
Malicious Call Trace				
Max. Simultaneous Traces	15	15	16	16
MLDN				
Via DID	999	999	8	20
Via CO	999	999	99	666
Modem Pool Groups				
Mode 2/Analog				
Group Members per System	6,000	6,000	160	2,016
Number of Groups	982	982	5	63
Members per Group	99	99	32	32
Networking				
CAS Nodes	40	40	99	99
DCS Nodes[1]				
BX.25	63	63	20	20
ISDN PRI	NA	NA	20	20
Hybrid	NA	NA	20	20
ENP Nodes[2]	900	900	999	999
Paging				
Code Calling IDs	125	125	125	125
Loudspeaker Zones	18	18	9	9

1. The actual limit in the software is 63, but due to performance considerations the recommended number of DCS Nodes is 20.
2. The numbers here are node number addresses.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Partitions[1]				
Attendant Group	40	40	15	27
Ext. Partition Group	50	50	8	8
Extension Partition	100	100	8	8
Tenant Partition	100	100	20	100
Personal CO Lines (PCOL)				
PCOL Appearances	16	16	4	16
PCOL Lines (Trunk Groups)	150	150	200	200
PCOL Trunks Per Trunk Group	1	1	1	1
Port Circuit Pack Slots[2]				
Per EPN				
MCC Std. Reliability	60	60	99	99
SCC Std. Reliability	54	54	71	71
Small Cabinet Std. Reliability (Upgrade only)			39	39
Per PPN				
MCC Std. Reliability	NA	NA	89	80
SCC Std. Reliability			64	NA
ESCC Std. Reliability			70	NA
CSCC Std. Reliability			NA	NA

1. DEFINITY ECS supports Tenant Partitioning.
2. Only port slots are included in this count. For example, there are 100 port slots per MCC EPN cabinet. One slot in the cabinet is already dedicated for the Tone/Clock board. Other service circuits may be required which would further reduce the number of port slots available. In R5r and R5si carriers, the service slot may be equipped with service boards that do not require tip and ring connections

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Recorded Announcements				
Analog & Aux. Trunk Announcements				
Analog & Aux. Trunk Queue Slots per Annc.	NA	NA	150	1,000
Analog & Aux. Trunk Queue Slots per System	10,500	10,500	150	1,000
Calls Connected per Annc.				
Aux. Trunk	256	256	150	1,000
Analog Port	NA	NA	150	1,000
Integrated Announcements				
Integrated Annc. Circuit Pack	NA	NA	5	10
Channels Connected per Integrated Annc. Circuit Pack	NA	NA	16	16
Calls Connected per Integrated Annc.	NA	NA	50	1,000
Integrated Annc. Recording Time (Min:Sec) Per Pack				
16 KB recording	NA	NA	8:32	8:32
32KB	NA	NA	4:16	4:16
64KB	NA	NA	2:8	2:8
Integrated Queue Slots per System	NA	NA	200	4,000
Total Recorded Announcements	84	255	128	256
System Administration				
No. of Logins			15	15
Admin. History File Entries	NA	NA	500	1,250
Simultaneous Administration Command			1	5
Simultaneous Maintenance Command			1	5
Simultaneous SM Sessions	2	2	5	8
Printer Queue Size	NA	NA	50	50

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Speech Synthesis Circuit Packs	NA	NA	6	40
Channels per Speech Circuit Pack	NA	NA	4	4
Terminating Extension Groups (TEG)				
TEGs	NA	NA	32	32
Users That May Share a TEG	NA	NA	4	4
Time Slots				
Simultaneous Ckt. Switched Calls[1]	5,520	5,520	723	7,712
Total Slots	11,776	11,776	1,536	22,528
Time Slots for Voice & Data[2]	11,040	11,040	1,449	21,208
Time Slots per Port Network	512	512	512	512
Tone Classifiers				
Tone Receivers (General)[3]	246	458	200	840
Tone Detector Boards	246	246	NA	NA
General Purpose Tone Detectors	NA	NA	NA	NA
Touch-Tone Receivers	246	458	NA	NA
TTR Queue Size	NA	NA	4	4
Prompting TTR Queue Size	NA	NA	80	80

1. 241 Simultaneous Circuit-Switched Calls per port network, except for R5si which are 180 Simultaneous Circuit Switched Calls and R5r which has a total of 7,712 (limited by the number of call records supported).
2. There are 483 time slots for Voice and Data per port network.
3. DEFINITY ECS will use TN744 Call Classifier for basic TTR usage as well as call prompting/call classification/MFC. In addition, the new TN2182 Tone/Clock/Detector is used for multiple tone detection functions. The number of TN748, TN420, or TN744 boards is limited only by the number of available slots. There is a single limit on the total number of tone receiver (classifier) ports for the system: TN748/TN420 have 4 ports for TTR use, TN748/TN420 have 2 ports for GPTD use, TN744 has 8 ports for call prompting/call classification/MFC/TTR/GPTD use, and TN2182 has 8 ports for call prompting/call classification/MFC/TTR/GPTD use.

Table 3-1. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Trunks				
DS1 Circuit Packs	511	511	30	166
Queue Slots for Trunks	UL*	UL*	198	1,332
PRI Interfaces via PI[1]			8	NA
PRI Interfaces via PACCON			30	NA
PRI Interfaces via PKTINT			NA	166
PRI Temporary Signaling Connections				
TSCs in System			656	4,256
Call Associated TSCs			400	4,000
Non Call Associated TSCs			256	256
Administered TSCs			128	128
Ringback Queue Slots	UL*	UL*	198	1,332
Total PRI Interfaces			30	166
Trunk Groups Hourly Measurements			25	75
Trunk Groups in the system	982	982	99	666
Trunk Members in a Trunk Group	255	255	99	255
Trunks in System (Incl. Rem. Access)	6,000	6,000	400	4,000
Measured Trunks in System			400	4,000

1. Only one Processor Interface (PI) board is supported, and therefore a total of four physical links (used for BX.25 or PRI) are available. PRI interface via the PI is not available in Germany. PRI interface via the PACCON must be used.

* UL = unlimited

Table 3-2. G2/R5 Capacity Comparison - *Continued*

ITEM	G2.1	G2.2	R5si 8/12 MB	R5r
Voice Terminals[1]				
Associated Data Modules (e.g., DTDMs)	16,000	16,000	800	7,500
BRI Stations[2]	1,000	10,000	1,000	7,000
Digital Stations	10,000	10,000	2,400	25,000
Display Stations	10,000	10,000	2,400	10,000
Stations	32,000	32,000	2,400	25,000
VuStats				
Measured Agents or Login IDs	NA	NA	400	2,000
Measured Splits	NA	NA	99	600
Measured Trunk Groups	NA	NA	32	32
Measured VDNs	NA	NA	99	512
Reporting Periods				
Intervals	NA	NA	25	25
Days	NA	NA	1	1
Display Formats	NA	NA	50	50
Simultaneous Updating Displays	NA	NA	100	

1. The following items detract from the total number of available “Stations” on a given switch:
   - — Analog Music-On-Hold
   - — Attendants
   - — Modem Pool Conversion Resources
   - — TAAS Port
   - — Stations (Digital, Display, BRI, etc.)
   - — Analog Announcements
   - — Analog External Alarm Port
   - — Agent Login IDs
   - — ACD Agents

2. R5si and R5r BRI stations can be display stations.

References

A

The following is a list of DEFINITY Enterprise Communications Server (ECS) Release 5 documents, including a brief description of each document.

To order these or other DEFINITY documents, contact the Lucent Technologies Publications Center at the address and phone number on the back of this document's title page. A complete list of Business Communications Systems (BCS) documents, including previous issues of the documents listed here, is provided in *BCS Publications Catalog,* 555-000-010.

Basic DEFINITY ECS Documents

The following are basic documents for anyone using DEFINITY ECS.

DEFINITY Enterprise Communications Server Release 5 — Pocket Reference, Issue 1, **555-230-207**

A compact reference containing hardware descriptions, system parameters, and listings of features and system configurations.

DEFINITY Enterprise Communications Server Release 5 — Feature Description, Issue 1, **555-230-301**

Provides comprehensive technical descriptions of system features and parameters. Includes the applications and benefits, feature interactions, administration requirements, hardware and software requirements, and a brief discussion of data communications and private networking configurations.

DEFINITY Enterprise Communications Server Release 5 — Implementation, Issue 1, **555-230-302**

Provides step-by-step procedures for preparing the hardcopy forms that correspond to the screens and are required to implement the features, functions, and services of the system. Includes procedures for completing a communications survey. Includes an initial set of blank forms (555-230-655B, 555-230-653B).

DEFINITY Enterprise Communications Server Release 5 — Implementation Blank Forms, Issue 1, **555-230-303**

Provides additional blank hardcopy forms that correspond to the screens that are required to implement the features, functions, and services of the system.

Copies of these forms are automatically included with the *DEFINITY Enterprise Communications Server Release 5 Implementation, Issue 1*, 555-230-302. Use this order number to purchase additional forms.

DEFINITY Enterprise Communications Server Release 5 — System Description and Specifications, Issue 1, **555-230-210**

Provides a technical description of the systems and is intended for service personnel, sales personnel, and customers who need a comprehensive overview of the system. Includes descriptions of hardware, software features, technical specifications, environment requirements, maintenance requirements, and illustration of components.

DEFINITY Enterprise Communications Server Release 5 — System Monitoring and Reporting, Issue 3, **555-230-511**

Provides detailed descriptions of all the measurement, status, and security reports available in the system and is intended for administrators who validate traffic reports and evaluate system performance. This document was titled *Traffic Reports* for earlier systems. It includes corrective actions for potential problems.

DEFINITY Communications System Generic 1 and Generic 3 — Installation and Test, Issue 5, **555-230-104**

Provides descriptions of the procedures for installing and testing the system's common equipment and adjuncts. Includes setup procedures for the system management terminal, power and grounding requirements, and testing steps. Includes compete details on system wiring. Provides both domestic and international information.

DEFINITY Enterprise Communications Server Release 5 — Installation for Single-Carrier Cabinets, Issue 2, **555-230-894**

Provides procedures and information for hardware installation and initial testing of single-carrier cabinets. This document is available in the following languages: English, German (DE), Dutch (NL), Brazilian Portuguese (PTB), European French (FR), Castillian Spanish (SP), and Japanese (JA).

To order, append the language suffix to the document number; for example, 555-230-894DE for German. No suffix is needed for the English version.

DEFINITY Enterprise Communications Server Release 5 — Installation and Test for Multi-Carrier Cabinets, **555-230-112**

Provides procedures and information for hardware installation and initial testing of multi-carrier cabinets.

DEFINITY Communications System Generic 3 Version 1.1 - Version 4 Upgrades and Additions, Issue 2, **555-230-107**

Provides procedures for an installation technician to convert an existing DEFINITY Communications System earlier than Generic 3 Version 4 to Generic 3 Version 4.

DEFINITY Enterprise Communications Server Release 5 — Upgrades and Additions for R5r, Issue 1, **555-230-121**

DEFINITY Enterprise Communications Server Release 5 — Upgrades and Additions for R5vs/si, Issue 1, **555-230-120**

Provides procedures for an installation technician to convert an existing DEFINITY Communications System Generic 3 Version 4 to DEFINITY ECS.

Included are upgrade considerations, lists of required hardware, and step-by-step upgrade procedures. Also included are procedures to add control carriers, switch node carriers, port carriers, circuit packs, auxiliary cabinets, and other equipment.

DEFINITY Enterprise Communications Server **Release 5 —** ***Maintenance for R5r, Issue 5***, **555-230-105**

DEFINITY Enterprise Communications Server Release 5 — Maintenance for R5vs/si, Issue 9, **555-204-105**

Provides detailed descriptions of the procedures for monitoring, testing, and maintaining the systems. Included are maintenance commands, step-by-step trouble-clearing procedures, the procedures for using all tests, and explanations of the system's error codes.

DEFINITY Enterprise Communications Server Release 5 — Overview, Issue 2, **555-230-024**

Provides a detailed overview of the system including descriptions of many of the major features, applications, hardware, system capabilities, and the support provided with the system.

DEFINITY Communications System Generic 3 Planning and Configuration, Issue 2, **555-230-601**

Provides step-by-step procedures for the account team in determining the customer's equipment and hardware requirements to configure a system according to the customer specifications. Includes detailed requirements and block diagrams. This document reflects Generic 3 Version 2 software, but still contains relevant information.

BCS Products Security Handbook, Issue 5, **555-025-600**

Provides information about the risks of telecommunications fraud and measures for addressing those risks and preventing unauthorized use of BCS products. This document is intended for telecommunications managers, console operators, and security organizations within companies.

DEFINITY Communications System and System 75 and System 85 Terminals and Adjuncts Reference, Issue 7, **555-015-201**

Provides descriptions of the peripheral equipment that can be used with System 75, System 85, DEFINITY Communications System, and DEFINITY ECS. This document is intended for customers and Lucent Technologies account teams for selecting the correct peripherals to accompany a system.

DEFINITY Communications System Generic 1, Generic 3, and System 75 Voice Terminal Guide Builder, Issue 3, **555-230-755**

Provides capability to produce laser-printed documentation for specific voice terminals. The software is supported by a comprehensive user's guide and on-line help. This product requires a 386 PC, minimum of 6MB disk space, minimum of 4MB RAM, a printer supported by Microsoft GDI printer drive, and Microsoft Windows 3.1 or higher. A mouse is recommended.

Call Center

The following list of documents are Call-Center specific.

DEFINITY

DEFINITY Enterprise Communications Server Release 5 — Call Vectoring/EAS Guide, Issue 1, **585-230-521**

Provides information on how to write, use, and troubleshoot vectors, which are command sequences that process telephone calls in an Automatic Call Distribution (ACD) environment. It is provided in two parts: tutorial and reference.

The tutorial provides step-by-step procedures for writing and implementing basic call vector scripts.

The reference includes detailed descriptions of the call vectoring features, vector management, vector administration, adjunct routing, troubleshooting, and interactions with management information systems (including the Call Management System).

DEFINITY Enterprise Communications Server Release 5 — Basic Call Management System (BCMS) Operations, Issue 1, **555-230-706**

Provides detailed instructions on how to generate reports and manage the system and is intended for telecommunications managers who wish to use Basic Call Management System (BCMS) reports and system managers responsible for maintaining the system.

CentreVu CMS

CentreVu Call Management System Release 3 Version 5 — Administration, Issue 1, **585-215-820**

CentreVu Call Management System Release 3 Version 5 — Reports, Issue 1, **585-215-821**

CentreVu Call Management System Release 3 Version 5 — Custom Reports, Issue 1, **585-215-822**

CentreVu Call Management System Release 3 Version 5 — Upgrades and Migrations, Issue 1, **585-215-826**

CentreVu Call Management System Release 3 Version 5 — External Call History Reference, Issue 1, **585-215-824**

CentreVu Call Management System Release 3 Version 5 — Forecast, Issue 1, **585-215-825**

Networks

The following list of documents are network-specific.

DEFINITY Communications System Generic 3 Wideband Technical Reference, Issue 1, **555-230-230**

Provides detailed information regarding the Wideband Switching feature for the system and is intended for users and technical support personnel involved with the installation, administration, and operation of this feature. This feature provides high speed end-to-end connectivity between customer endpoints where dedicated facilities are not economical or appropriate. The primary function is to support high speed video-conferencing and data applications.

DEFINITY Communications System Generic 2.2 and Generic 3 Version 2 DS1/CEPT1/ISDN PRI Reference Manual, Issue 1, **555-025-107**

Provides a detailed technical description of digital trunks in the DEFINITY Communications Systems. This includes trunks conforming to the DS1 standard (1.544 Mbps) and the CEPT1 standard and all other methods of signalling, including bit-oriented signalling as well as ISDN-PRI signalling. This document includes background information on these topics, information on how digital trunk capabilities have been designed into the DEFINITY Communications System and information for field personnel and customers on how to provision and administer digital trunk capabilities and features. Provides both domestic and international information.

Application Specific Documents

The following list of documents are application-specific.

DEFINITY Enterprise Communications Server Generic 2 to Release 5 — Transition Reference, Issue 1, **555-230-622**

Provides information on the differences in features and administration between the old and new systems when upgrading from a Generic 2 system to DEFINITY ECS.

ASAI

DEFINITY Enterprise Communications Server Release 5 — CallVisor ASAI Planning Guide, Issue 5, **555-230-222**

Provides procedures and directions for the account team and customer personnel for effectively planning and implementing the CallVisor Adjunct/Switch Application Interface (ASAI) PBX-Host environment. The CallVisor ASAI is a communications interface that allows adjunct processors to access switch features and to control switch calls. It is implemented using an Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI). Included are hardware and software requirements.

DEFINITY Enterprise Communications Server Release 5 — CallVisor ASAI Protocol Reference, Issue 5, **555-230-221**

Provides detailed layer 3 protocol information regarding the CallVisor Adjunct/Switch Application Interface (ASAI) for the systems and is intended for the library or driver programmer of an adjunct processor to create the library of commands used by the applications programmers. Describes the ISDN message, facility information elements, and information elements.

DEFINITY Enterprise Communications Server Release 5 — CallVisor ASAI Technical Reference, Issue 5, **555-230-220**

Provides detailed information regarding the CallVisor Adjunct/Switch Application Interface (ASAI) for the systems and is intended for the application designer responsible for building and/or programming custom applications and features.

DEFINITY Enterprise Communications Server Release 5 — Installation, Administration, and Maintenance of CallVisor ASAI Over the DEFINITY LAN Gateway, Issue 2, **555-230-223**

Provides procedures for installation, administration, and maintenance of the CallVisor Adjunct/Switch Application Interface (ASAI) Ethernet application over the DEFINITY LAN Gateway and is intended for system administrators, telecommunications managers, Management Information System (MIS) managers, LAN managers, and Lucent personnel. The ASAI-Ethernet application

provides ASAI functionality using 10Base-T Ethernet rather than BRI as a transport media.

DEFINITY Enterprise Communications Server Release 5 — Overview, Issue 2, **555-230-225**

DEFINITY Enterprise Communications Server Release 5 — CallVisor PC ASAI Installation and Reference, Issue 3, **555-246-205**

ACD

DEFINITY Enterprise Communications Server Release 5 — Automatic Call Distribution (ACD) Agent Instructions, Issue 5, **555-230-722**

Provides information for use by agents after they have completed ACD training. Includes descriptions of ACD features and the procedures for using them.

DEFINITY Enterprise Communications Server Release 5 — Automatic Call Distribution (ACD) Supervisor Instructions, Issue 4, **555-230-724**

Provides information for use by supervisors after they have completed ACD training. Includes descriptions of ACD features and the procedures for using them.

Console Operations

DEFINITY Communications System Generic 1 and Generic 3 Console Operations, Issue 2, **555-230-700**

Provides operating instructions for the attendant console. Included are descriptions of the console control keys and functions, call-handling procedures, basic system troubleshooting information, and routine maintenance procedures.

DEFINITY Enterprise Communications Server Release 5 — Console Operations Quick Reference, Issue 2, **555-230-890**

Provides operating instructions for the attendant console. Included are descriptions of the console control keys and functions, call handling, basic system-troubleshooting information, and routine maintenance procedures. This document is available in the following languages: English, German (DE), Dutch (NL), Brazilian Portuguese (PTB), European French (FR), Colombian Spanish (SPL), and Japanese (JA).

To order, append the language suffix to the document number; for example, 555-230-894DE for German. No suffix is needed for the English version.

Hospitality

An Introduction to DEFINITY Communications System Generic 3 Hospitality Services, Issue 1, **555-230-021**

Provides an overview of the features available for use by the lodging and health industries to improve their property management and to provide assistance to their employees and clients. Included are brief definitions of many of the system features, descriptions of the hardware, planning considerations, and list of the system capabilities.

DEFINITY Communications System Generic 1 and Generic 3 Hospitality Operations, Issue 2, **555-230-723**

Provides step-by-step procedures for using the features available for use by the lodging and health industries to improve their property management and to provide assistance to their employees and clients. Includes detailed descriptions of reports.

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