

COMPUTER-LINKED APPLICATION INFORMATION MANAGEMENT SYSTEM (CLAIMS) 4

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ATTACHMENT A — CLAIMS 4 DOCUMENTATION LIST

Fact Sheet Section Descriptions

1 PROJECT BACKGROUND

1.1 DESCRIPTION

The Immigration and Naturalization Service's (INS') Computer-Linked Application Information Management System (CLAIMS) 4 processes and manages applications for immigration-related benefits. Current design supports the Naturalization (N400) processing with extensibility to encompass all immigration-related benefits.

The CLAIMS subsystems also provide automated support for the full range of benefits functions and processes. CLAIMS 4 resides on multiple platforms, including a Siemens E70 located in Dallas, Texas. Software is developed and maintained using the Oracle relational database system and Visual Basic. Access to the computer is provided via local area network (LAN) gateways with associated routers and cabling.

The CLAIMS 4 application has initially been divided into subsystems, which support the major functions that CLAIMS 4 is required to provide as specified by the CLAIMS 4 Functional Requirements Document (FRD). A subsystem is a collection of functionally cohesive modules that work together to satisfy a major CLAIMS 4 function. Typically, a subsystem in CLAIMS 4 will not trace directly to a single module. However, in most cases, each subsystem will trace to a single executable file or dynamic link library (DLL). The CLAIMS 4 system architecture comprises several major subsystems, which include the following:

- Receipting
- Adjudication
- Batch Status Update (BSU)
- Case Status
- Case Management (CM)
- Scheduler/Batch Scheduler
- Notices
- Reports
- Oath Ceremony Management (formerly DocProd)
- System Maintenance
- External Interface
- Workflow Admin

These subsystems are designed to be stand-alone components that do not require support from the other subsystems for execution, however, are launched from the main switchboard. Some of the components provide both a GUI and an exposed public server interface. The GUI interface provides the user with interactive information pertaining to system functions. The server interface is designed to provide functionality to multiple other subsystems. Overnight functions are typically executed by one of the server components and thus do not require an attended workstation for

execution. An example would be an interface job, initiated by Service Center personnel on a client workstation, but executed on the application server.

The CLAIMS 4 data are contained in a central location, an Oracle relational database management system (RDBMS). Connectivity to this data store is provided via INS controlled wide area and local area network facilities. The Intersolv Oracle Open Database Connectivity (ODBC) framework is utilized to connect applications to the data store via custom data service components.

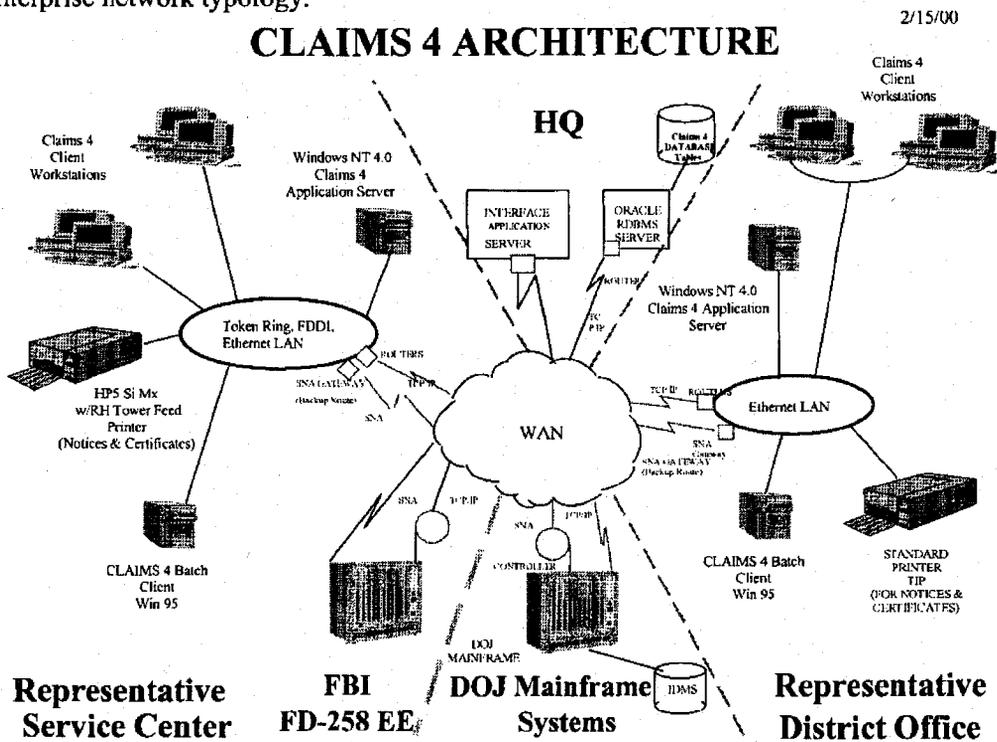
1.2 GOALS

The primary function of CLAIMS 4 is to provide automated support for the processing of N-400 naturalization applications, including the receipt, data entry, and other initial processing operations of the Service Centers, as well as the adjudications and oath ceremony management activities of the local offices. It was designed to be extensible and scalable, with a view to accommodating processing of other INS benefits applications in the future.

CLAIMS 4 is used by the Service Center units responsible for naturalization processing, INS Adjudicators at local offices responsible for adjudicating naturalization cases, INS clerks supporting these functions, and regional and headquarters management with oversight responsibilities.

1.3 DETAILS

This CLAIMS 4 Architecture exhibit depicts the hardware infrastructure required for successful deployment of CLAIMS 4 throughout the INS and provides a high-level diagram that identifies the INS enterprise network typology.



1.3.1 Internal Interfaces

CLAIMS 4 interfaces internally with the following nine (9) INS systems. Following is a list containing the name of the interface system and a description of the interface process.

1. Central Index System (CIS)
 - a. Send/Receive Verification of A-Number.
 - b. Send/Receive information for Close Out Process.
 - c. Send/Receive A-File Transfer Request
2. Reengineered Naturalization Automated Casework System (RNACS)
 - a. Send/Receive Update/Transfer of C4 cases
 - b. Receive RNACS cases Transferred into C4
 - c. Receive Fingerprint Requests from RNACS
 - d. Send FP Request Update to RNACS
3. Computer-Linked Application Information System (C3 LAN)
 - a. Receive Fingerprint Requests from C3
 - b. Send FP Request Update to C3
4. Refugee, Asylum, and Parole System (RAPS)
 - a. Receive Fingerprint Requests from RAPS
 - b. Send FP Request Update to RAPS
5. Receipt and Alien-File Accountability and Control System (RAFACS)
 - a. Insert new Receipt Record into RAFACS
6. FD258-EE (Enterprise Edition)
 - a. Receive Fingerprint Update from EE
7. Complete File Review (CFR)
 - a. Receive file review information from C4.
8. Performance Analysis System (PAS)
 - a. Receive tracking information on G-22.2 and G-22.3 Report of field
9. Change of Address by Phone Service (CoA)
 - a. Send request to C4 to update applicant with a new address.

1.3.2 External Interface

CLAIMS 4 interfaces externally with only one non-INS system. Following is the name of the interface system and a description of the interface process. Federal Bureau of Investigation (FBI)

- a. Send/Receive FBI Name Check Update – Send is processed from C4 to INS Production Control via SendDirect. After tape production, INS Production Control interfaces with FBI. Receive processing is exactly reversed.

- b. Receives Fingerprint results – C4 interfaces with FD258EE and FD258 Tracking systems to receive fingerprint results.

1.3.3 Performance Requirements

No current performance requirements have been established.

1.3.4 Second Tier Help Desk

This section describes the availability of system specific Operations Support. The support organization is split into two separate tiers with an additional organization for LAN Support. The first tier is that of the Help Desk. The Help Desk provides support to the customer Monday–Friday, 8:00 a.m. to 7:00 p.m. Eastern Standard Time (EST). Support consists of ticket generation from issues identified by the customer as well as basic knowledge training. The following provides the metrics for this support:

- Average number of requests opened per month during the period of 12/01/99–11/31/2000: 508 (LA Office not included)
- Average number of requests closed per month during the period of 12/01/99–11/30/2000: 491

The second tier is that of the Production Control Team. This team provides the analysis, resolution and documentation of issues created under Help Desk tickets created in the first tier. Additional work is provided by members of the team in regards to the Interface Batch processing done for this division. A total of 47 interface jobs are executed on a daily basis.

The LAN Support organization provides analysis, resolution and documentation for CLAIMS-related hardware, software, and network issues for field sites, development, and testing environments. LAN Support provides support to the customer 24 hours a day, seven days a week.

2 HARDWARE/SOFTWARE

2.1 HARDWARE

2.1.1 Hardware – Server Configuration

2.1.1.1 Sites Up to Mid 1999

- HP Netserver LX Pro
- Dual Pentium Pro 200 MHz
- 512MB of RAM
- Windows NT 4.0,
- Raid 5 Controller

2.1.1.2 Sites After Mid 1999

- Dell PowerEdge 4300 / 4400
- Dual Processor 350-550 MHz
- 512MB of RAM
- Windows NT 4.0,

- Raid 5 Controller

2.1.2 Hardware – Client Configuration

- HP Vectra VL Series, Dell Optiplex GXi/GXa/GX1/GX110
- 32 or 64MB of RAM
- Windows 95B
- Ethernet NIC

2.1.3 Hardware – Miscellaneous Equipment

- Scanner, Symbol 2D laser Barcode Scanner
- Scanner, Welch Allyn ScanTeam 2380 Wand Scanner
- Notice/Certificate Printers, HP 5Si MX w/Towerfeed Option or HP 8000 DN
- Desktop DAO Printer, HP Laserjet 6L or Laserjet 1100
- Bar-Code Printer (SC Only), Datamax Prodigy Label Printer
- Bar-Code Printer (SC Only), Zebra Stripe Barcode Label Printer
- Check Franker, CBM - 810

2.2 SOFTWARE

The CLAIMS 4 application is coded in Visual Basic 5.0 with SP3. It is based on a two-tier client server architecture, with a central data repository. Constant connectivity via Open Database Connectivity (ODBC) is required. The majority of data processing occurs on the client machine, with workflow transactional control on a Windows NT application server at each site. A wide variety of stand alone executables, in-process servers and out-of-process servers are utilized. Local area connectivity to the application server is provided through remote automation services.

The application is based on a custom workflow process, which governs case management flow and provides user access based on the current case state.

2.2.1 Software – Server Configuration

- Windows NT 4.0
- Windows NT 4.0 Service Pack 5
- Office 95 Professional (Access/PowerPoint/Excel/Word)
- Intersolv ODBC, ver. 3.01
- Oracle for Windows NT/95, ver. 7.3
- Btrieve, ver. 6.15 (SCs only)
- CLAIMS 4 Server Software

2.2.2 Software – Client Configuration

- Windows 95, Ver. B
- Office 97 (Access/PowerPoint/Excel/Word)
- cc:mail
- InsMenu
- A2B
- Intersolv ODBC, ver. 3.01

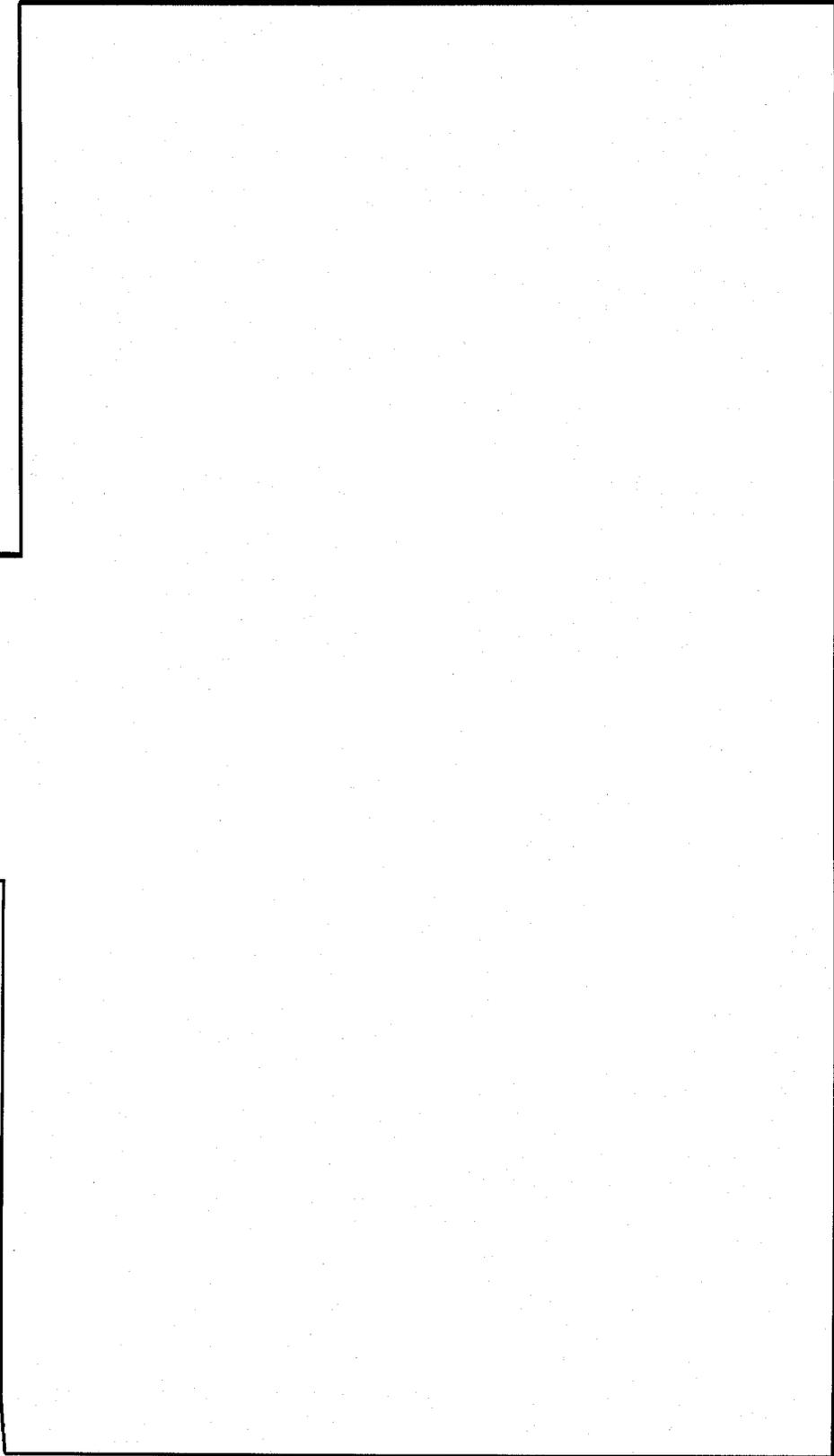
- Oracle Client for Windows 95/NT, ver. 7.3
- McAfee Antivirus
- Novell Client
- CLAIMS 4 Client Software

The following diagrams illustrate the existing architecture of the executables in the CLAIMS 4 client application. (Circled numbers are connector points, bridging flow from one component to another.)

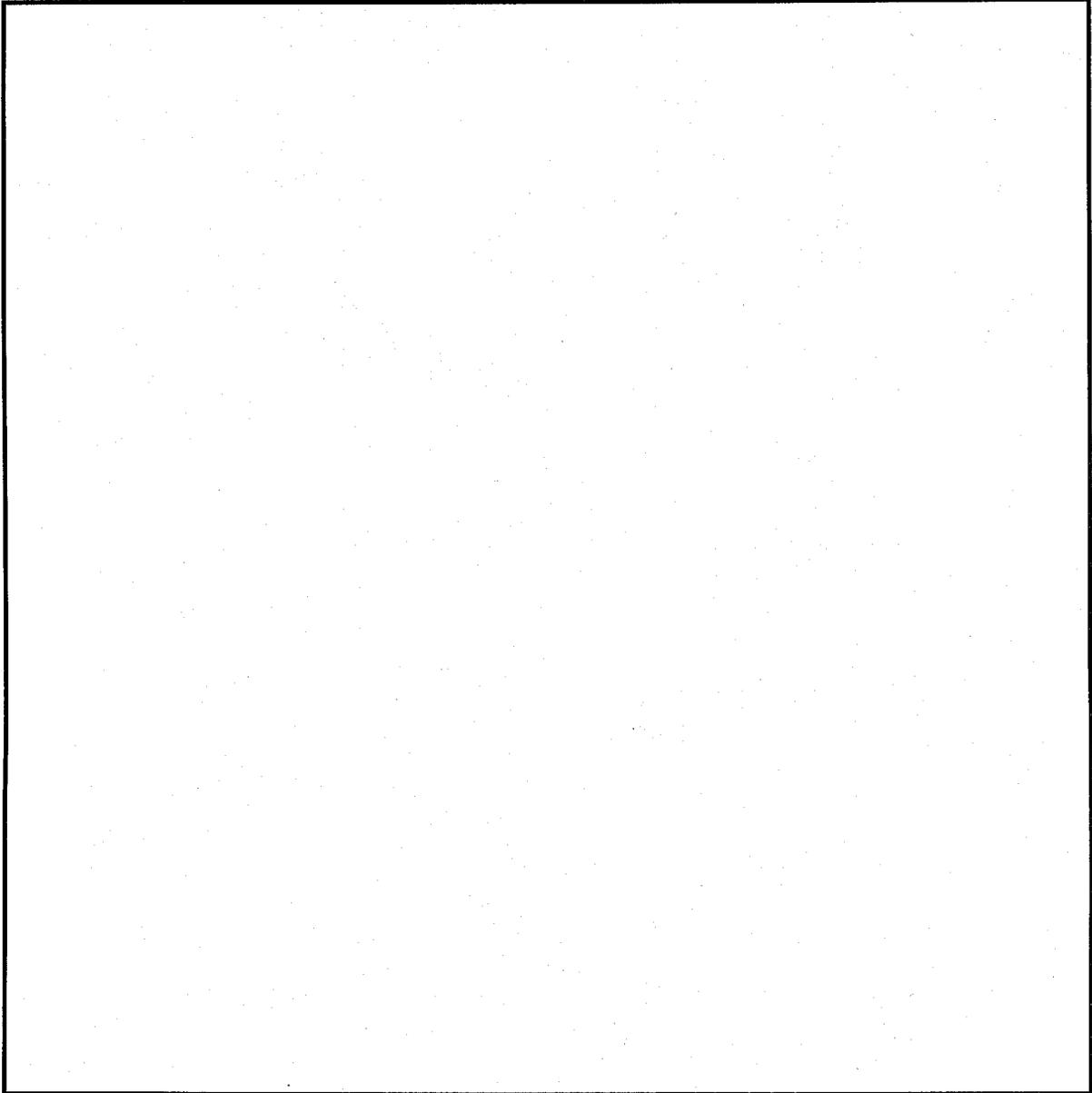
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CLAIMS 4 CLIENT APPLICATIONS

Release 5.2.0 March 23, 2000



(b)(2)



3 SIZING/CAPACITY/TRANSACTION FREQUENCY

3.1 SIZING/CAPACITY

The application is composed of the listed Visual Basic projects. Each project has the number of forms, modules and classes listed, with the corresponding lines of code for each type of source code module.

VB PROJECT NAME	NO FORMS	LOC	NO MODS	LOC	NO CLASS	LOC
Adj	27	41,600	6	3,213	26	35,700
NtAdj	1	180	4	1,267	20	7,735
AddCh	6	3,380	1	235	6	1,059
BSU	6	3,420	4	845	7	2,040
Case Mgt	5	3,040	3	122	2	90
Case Stat	16	7,400	2	170	20	3,672
Resolution	13	7,060	6	748	14	1,938
AddEdit	1	160	2	185	3	1,197
Barcode	1	10	2	491	1	335
Barcode2D	2	45	2	350	11	2,465
CkPrn	1	28	1	3	1	148
ClaimsDLL	1	10	2	28	12	1,124
DbMgr		0	3	855	53	18,020
LgMgr1	1	172	1	5	1	122
LkUps	2	1,368	3	468	4	2,635
OCX	18	14,160	1	94	1	40
RegCl	1	104	1	19	1	20
StarcC4Bat	1	240	2	418	4	335
StarcC4Bat		0		0	0	0
Switchboard	7	6,180	3	978	12	1,284
Systray	1	79	1	14	1	63
WfCl		0	1	148	5	1,802
WfSvr	2	234	2	646	3	2,040
DESel	2	2,400		0		0
Groups	8	11,280	6	1,020	21	4,165
I881	13	9,860	2	374	18	3,808
n400	23	9,300	1	388	27	5,372
fCreate		0	5	1,134	24	4,658
Finance	15	7,740	7	133	28	3,978
PayMerge	1	93	1	279	2	1,352
Install	1	40	4	706	4	106
CoaRNAC		0	3	352	4	495
Conv2C4	3	1,130	2	813	5	2,295

VB PROJECT NAME	NO FORMS	LOC	NO MODS	LOC	NO CLASS	LOC
FBIResp	4	9,280	1	216	3	255
258Conv	3	1,120	3	1,734		0
Interfaces	2	1,620	2	792	9	607
Applic	5	1,906	5	1,049	48	17,510
Services	2	444	1	146	13	2,329
RNACSConv	3	960	2	1,692		0
RNACS2C4		0	3	267	2	473
SysLog		0	1	3	1	82
Mailroom	9	4,500	3	56	19	1,836
nArch	1	71	2	386	5	767
nBatch	3	184	5	2,057	28	6,256
nCreate	1	16	5	1,141	22	4,590
nEngine	1	266	5	1,110	11	3,298
nLookup		0	2	102	2	792
Notices	21	10,920	6	2,210	19	2,992
nPrint	1	10	2	134	7	753
DocDB		0	1	3	1	43
FD258Manifest	1	16	4	612	7	1,428
Labels	2	268	1	7	2	306
N646		0	1	17	3	420
OCReport		0	1	17	2	209
Reports	17	8,140	4	1,233	18	4,488
BatSched	6	5,900	3	697	14	5,287
SchSer		0	2	340	6	1,046
Scheduler	54	58,600	13	5,967	35	10,166
SysMaint	50	35,000	4	733	17	3,043
WfAdmin	4	1,420	1	328	1	26
WFMon	9	23,600		0	9	1,853
C42RNAC		0	3	391	6	1,488
C4Prod	31	17,260	6	867	13	2,975
C4Reco	19	5,440	2	510	3	136
Conv2C4	3	1,120	2	816	5	2,278
FileMove	2	820	2	170	7	602
FPSked	6	3,820	5	612	5	391
RNACS2C4		0	2	238	2	493
Sub Totals	439	323,414	189	43,150	686	189,308
Grand Total						555,872

Database size: for Production, Training, and Development Versions:

- Number and size of tables

The database contains 240 tables, 13 views, 66 stored procedures, and 10 packages.

Database tablespace statistics are:

Current Tablespace Usage							
TABLESPACE_NAME	Total Bytes	SQL Blocks	VMS Blocks	Bytes Free	% Free	Bytes Used	% Used
CFRDATA	157,286,400	9,600	307,200	44,089,344	28.031	113,197,056	71.969
CFRINDX	52,428,800	3,200	102,400	40,665,088	77.563	11,763,712	22.438
IBSCLAIMS1	8,404,336,640	512,960	16,414,720	3,577,708,544	42.57	4,826,628,096	57.43
IBSCLAIMS2	8,404,336,640	512,960	16,414,720	4,876,271,616	58.021	3,528,065,024	41.979
IBSCLAIMS3	10,506,731,520	641,280	20,520,960	2,963,161,088	28.203	7,543,570,432	71.797
IBSCLAIMS4	10,506,731,520	641,280	20,520,960	3,916,824,576	37.279	6,589,906,944	62.721
IBSCLAIMS4	2,002,780,160	122,240	3,911,680	138,182,656	6.9	1,864,597,504	93.1
IBSCLAIMS4	6,207,569,920	378,880	12,124,160	357,384,192	5.757	5,850,185,728	94.243
IBSCLAIMS5	4,199,546,880	256,320	8,202,240	1,384,595,456	32.97	2,814,951,424	67.03
IBSCLAIMSIDX1	6,301,941,760	384,640	12,308,480	311,427,072	4.942	5,990,514,688	95.058
IBSCLAIMSIDX1	4,508,876,800	275,200	8,806,400	4,140,138,496	91.822	368,738,304	8.178
IBSCLAIMSIDX2	8,404,336,640	512,960	16,414,720	4,410,507,264	52.479	3,993,829,376	47.521
IBSCLAIMSIDX3	12,609,126,400	769,600	24,627,200	5,621,547,008	44.583	6,987,579,392	55.417
IBSCLAIMSIDX4	12,609,126,400	769,600	24,627,200	447,119,360	3.546	12,162,007,040	96.454
IBSCLAIMSIDX4	5,242,880,000	320,000	10,240,000	185,696,256	3.542	5,057,183,744	96.458
IBSCLAIMSIDX4	4,194,304,000	256,000	8,192,000	4,133,994,496	98.562	60,309,504	1.438
IBSCLAIMSIDX4_2	10,506,731,520	641,280	20,520,960	1,046,626,304	9.961	9,460,105,216	90.039
IBSCLAIMSIDX5	4,194,304,000	256,000	8,192,000	123,944,960	2.955	4,070,359,040	97.045
IBSCLAIMSIDX5	6,291,456,000	384,000	12,288,000	462,667,776	7.354	5,828,788,224	92.646
IBSCLAIMSIDX5	2,112,880,640	128,960	4,126,720	227,196,928	10.753	1,885,683,712	89.247
IBSCLAIMSIDX5	4,812,963,840	293,760	9,400,320	250,150,912	5.197	4,562,812,928	94.803
RBS01	2,097,152,000	128,000	4,096,000	393,199,616	18.749	1,703,952,384	81.251
RBS02	2,097,152,000	128,000	4,096,000	996,130,816	47.499	1,101,021,184	52.501
STANDARD	104,857,600	6,400	204,800	76,562,432	73.016	28,295,168	26.984
STDIDX	104,857,600	6,400	204,800	92,717,056	88.422	12,140,544	11.578
SYSTEM	524,288,000	32,000	1,024,000	359,972,864	68.659	164,315,136	31.341
TEMP	2,102,394,880	128,320	4,106,240	539,017,216	25.638	1,563,377,664	74.362
TEMP2	1,048,576,000	64,000	2,048,000	1,048,559,616	99.998	16,384	0.002
TEMP_MAINT	6,301,941,760	384,640	12,308,480	5,856,280,576	92.928	445,661,184	7.072
TEMP_MAINT	6,741,278,720	411,455	13,166,560	6,348,046,336	94.167	393,232,384	5.833
TEMP_MAINT	6,741,278,720	411,455	13,166,560	6,374,260,736	94.556	367,017,984	5.444
TOOLS	104,857,600	6,400	204,800	9,945,088	9.484	94,912,512	90.516
USERS	104,857,600	6,400	204,800	103,923,712	99.109	933,888	0.891
TOTAL	160,304,168,960	9,784,190	313,094,080	60,858,515,456		99,445,653,504	

Following is a brief description of the releases turned over to the STARS Systems Management / Integration (SM/I) contractor for user acceptance testing or to production for use between the dates 11/01/1999 and 12/01/2000:

CLAIMS 4 Release 5.1.2 11/15/1999

- New functionality included: changes/fixes affecting the C4/Woodlawn Change of Address Interface, Data Entry, Finance, Batch Status Update, Workflow, FP Scheduler, ASC Manifest and Production Control utilities
- Number of System Change Requests (SCRs) delivered in the release: 22

CLAIMS 4 Release 5.1.3 12/02/1999

- Release included contains changes to correct the Case Closeout function, to correct workflow for the Oath Ceremony RNACS update, and to document the production fix for the Detailed Fee Register report.
- #SCRs delivered in the release: 3

CLAIMS 4 Release 5.1.4 02/08/2000

- This release contained new functionality and bug corrections to:
 - Revise the RNACS/C4 interface programs for corrections, enhancements and performance improvements,
 - Revise affected notice template text for the telephone center consolidation effort
 - Revise the denial notice template for the N-336 fee change
 - Correct the Pay Override function for application underpay status
 - Revise workflow to remove unnecessary activities
 - Revise the Fingerprint Scheduler utility to include password encryption
 - Update the Country Code table
 - Revise the Adjudications English sentences exam.
- #SCRs delivered in the release: 19

CLAIMS 4 Release 5.1.5 03/17/2000

- This release contained functionality to modify the FBI response interface for Claims3 requests.
- #SCRs delivered in the release: 3

CLAIMS 4 Release 5.1.6 03/24/2000

- This release contained solutions to correct the Change of Address jurisdiction logic and to enhance performance for the G22 Adjudication Denial reporting.
- #SCRs delivered in the release: 2

CLAIMS 4 Release 5.1.7 04/26/2000

- This release contains a ticket to enhance performance for the G22 Adjudication Denial reporting.
- #SCRs delivered in the release: 1

CLAIMS 4 Release 5.1.8 05/10/2000

- This release contains System Change Requests (SCRs) to revise the C3 FP workflow, update a CBO address, refresh the Standard Zip Code local lookup table from Oracle, revise the FP notice period, and revise the Change of Address interface.
- #SCRs delivered in the release: 5

CLAIMS 4 Release 5.2.0 06/12/2000

- This release contains SCRs and bug corrections to:
 - Implement the new Service Center Denial function, and other Adjudication Enhancements
 - Implement the new post-Data Entry address edit/validation function
 - Correct the notice print job display and reprint function, the group management function in Data Entry, the underpayment notice for I-881 applications, the Case
 - Resolution function for A-Number changes, the Attorney validation logic and Finance/Switchboard run-time errors.
- #SCRs delivered in the release: 57

CLAIMS 4 Release 5.2.1 07/20/2000

- This release contains SCRs and bug corrections to:
 - Disable the I-881 application data entry function
 - Modify the FD258 Fingerprint sweeps utility
 - Correct the C3/C4 Fingerprint interface and disable the batch call to address edit
 - Correct the GUI Resolution save error
 - Correct the underpay logic for remittances
 - Enhance the G22 reporting counts
 - Correct the confirmation file for cases transferred from RNACS to C4
 - Update and refresh the Oracle and local lookup tables.
- #SCRs delivered in the release: 8

CLAIMS 4 Release 5.2.2 08/16/2000

- This release contains a SCR to add a record to the IBS_LK_SECTION_OF_LAW table in the Oracle database and the local Access database (ibslkup.mdb).
- #SCRs delivered in the release: 1

CLAIMS 4 Release 5.2.3 09/15/2000

- This release contains an SCR to implement the C4/PAS interface, in support of automated G-22 reporting for INS.
- #SCRs delivered in the release: 1

CLAIMS 4 Release 5.2.4 09/29/2000

- This release contains SCRs and bug corrections to:
 - Optimize and fix the FP Sweeps production utility program
 - Implement reports in support of LA go-live

- Change the N400 appointment notice lead print time
- Correct the Service Center Denial reports
- #SCRs delivered in the release: 5

CLAIMS 4 Release 5.2.5 10/19/2000

- This release contains a bug correction to correct the 30,000 error message received in Adjudications.
- #SCRs delivered in the release: 1

CLAIMS 4 Release 5.2.6 11/01/2000

- This release contains SCRs and bug corrections to support the LA Go-Live Project (Phase I), and additional C4 maintenance items.
- #SCRs delivered in the release: 22

CLAIMS 4 Release 5.2.7 11/22/2000

- This release contains 2 SCRs to implement the Bellflower District Office requirements in support of the C4 LA Go-Live.
- #SCRs delivered in the release: 2

The following is a brief description of the planned releases for the period 12/01/2000 to 5/01/2001:

CLAIMS 4 Release 5.2.8 12/12/2000

- This release contains SCRs and bug corrections to implement maintenance changes for the Adjudications, Case Management, Interface and Workflow functions, and to support enhancements for the LA and Bellflower Go-Live effort.
- #SCRs delivered in the release: 9

CLAIMS 4 Release 5.2.9

- This release will contain SCRs in support of the LA Go Live effort.
- #SCRs to be delivered in the release: Exact number unknown.

CLAIMS 4 Release 5.3

- This release will contain SCRs in support of the reengineered Notices module for the District Offices and the Service Centers.
- #SCRs to be delivered in the release: Exact number unknown.

CLAIMS 4 Release 5.4

- This release will contain SCRs in support of the reengineered Oath ceremony Management module (formerly Document Production).
- #SCRs to be delivered in the release: Exact number unknown.

Major new functionality planned:

1. Data Entry Module (New N400 Form)
2. "Full-service" Adjudication Module

The following database enhancements are also being planned:

- Transition of the database structure to a normalized schema, supporting wider extensibility, expandability, and case archival functionality.
- Transition to a distributed, robustly replicated, structured database supporting remote and disconnected user environments.
- Transition of the application architecture to an n-Tier environment, supporting distributed computing and promoting wider code reutilization. The first phase of this effort includes isolation of data services functionality to effectively isolate the database from the application.

3.2 TRANSACTION FREQUENCY

The SMI contractor provided the following transaction frequency information.

Total Users	Ave Users Connected
7226	1250

DB Block Buffers			
Percent = (100*(1-(Physical Reads/(Consistent Gets + DB Block Gets))))			
Physical Reads	Consistent Gets	DB Block Gets	Percent Above 70%
203,415,795	1,909,303,042	77,956,770	89.76

Shared Pool Size (Execution Misses)		
Executions	Cache Misses Executing	% Ratio (STAY UNDER 1%)
116,276,198	362,651	.311887563

Shared Pool Size (Dictionary Gets)		
Data Dictionary Gets	Get Misses	% Ratio (STAY UNDER 12%)
88,951,092	123,101	.138391781

Log Buffers
VALUE (Near 0?)
243

Latch Information			
GETS	MISSES	IMMEDIATE_GETS	IMMEDIATE_MISSES
32,175,278	30,792	0	0
3,081	1,608	81,697,522	14,704

DataFile's Disk Activity							
TABLESPACE	Phy Reads	Phy Writes	Blk Reads	Blk Writes	Read Time	Write Time	File Total
IBSCLAIMS1	64,686,362	174,372	150,912,537	174,372	37,058,733	249,478	253,006,376
IBSCLAIMS3	7,512,461	142,160	19,645,323	142,160	5,525,869	202,312	32,967,973
IBSCLAIMSIDX4_2	6,255,405	181,019	6,255,405	181,019	3,944,393	289,816	16,817,241
IBSCLAIMS2	5,282,323	170,099	8,505,645	170,099	3,834,097	294,080	17,962,263
IBSCLAIMSIDX3	2,833,178	452,532	3,738,571	452,532	3,467,339	711,017	10,944,152
IBSCLAIMS4	1,334,537	1,393	2,846,168	1,393	1,199,919	2,765	5,383,410
IBSCLAIMS4	1,187,272	19,070	2,521,962	19,070	1,040,264	26,134	4,787,638
TEMP	1,154,975	748,006	2,555,918	2,961,699	489,699	3,014	7,910,297
IBSCLAIMSIDX1	1,139,908	136,955	1,162,129	136,955	906,439	204,026	3,482,386
IBSCLAIMSIDX2	647,425	237,297	713,895	237,297	814,685	347,363	2,650,599
TEMP_MAINT	419,029	209,291	692,758	780,055	173,072	22,293	2,274,205
IBSCLAIMS4	400,484	1,168	843,709	1,168	321,148	1,654	1,567,677
TEMP_MAINT	373,903	221,737	563,325	690,882	125,400	63,490	1,975,247
RBS01	284,034	450,162	284,034	450,162	281,052	1,139,212	1,749,444
IBSCLAIMSIDX5	224,686	139,132	224,686	139,132	394,472	226,031	1,122,108
IBSCLAIMS5	211,664	6,906	841,047	6,906	129,307	9,331	1,195,830
TEMP_MAINT	170,290	186,361	262,781	407,867	74,822	112,561	1,102,121
IBSCLAIMSIDX1	119,764	56,231	126,021	56,231	128,102	98,720	486,349
TOOLS	114,520	12,241	117,469	12,241	79,522	20,311	335,993
SYSTEM	111,285	21,857	165,091	23,666	114,283	23,570	436,182
IBSCLAIMSIDX5	109,470	40,121	109,470	40,121	199,242	60,123	498,424
IBSCLAIMSIDX5	85,988	35,246	85,988	35,246	157,094	53,720	399,562
IBSCLAIMSIDX4	59,122	62,906	59,122	62,906	103,464	100,961	347,520
IBSCLAIMSIDX4	42,688	41,373	42,688	41,373	76,522	61,289	244,644
IBSCLAIMSIDX5	26,512	10,524	26,512	10,524	47,811	15,956	121,883
IBSCLAIMSIDX4	24,746	33,940	24,746	33,940	29,841	41,360	147,213
CFRDATA	13,087	519	51,256	519	5,031	1,147	70,412
STANDARD	5,129	111	9,723	111	7,034	0	22,108
STDIDX	4,872	115	5,695	115	7,390	8	18,187
USERS	1,880	1,899	1,888	1,899	778	851	8,344
CFRINDX	1,188	1,202	1,188	1,202	1,061	3,534	5,841
RBS02	114	111	114	111	1	0	451
TEMP2	113	111	113	111	0	0	448

4 LIFE CYCLE PHASE

CLAIMS 4 is in the Operations and Maintenance life cycle phase.

5 DATA RETENTION PERIOD

There are no specific requirements for data retention from within the INS. Archive requests need to be defined by INS and implemented in C4 (as no C4 N400 cases have been archived to date).

6 ISSUES / CONCERNS

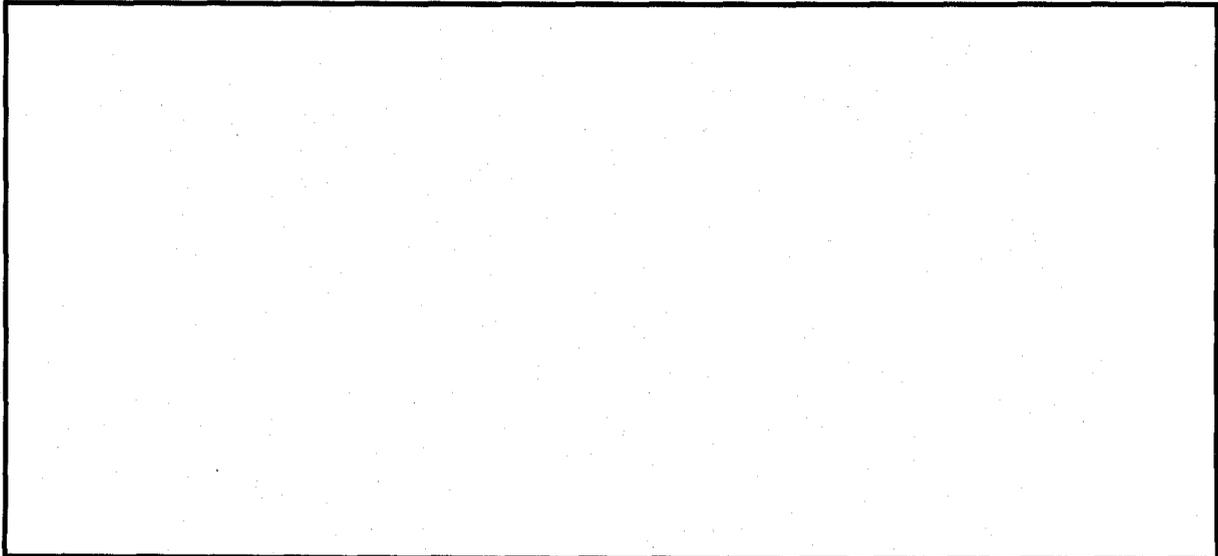
The current database structure does not represent the Corporate Logical model, nor does it optimize the use of primary or inherited keys, which impedes performance.

7 SECURITY

Only individuals who have been authorized through INS' Password Issuance Control System (PICS) process are able to logon to the LAN. (The PICS authorization process applies to all INS applications.)

In addition to these controls, CLAIMS 4 enforces additional controls. At logon to the CLAIMS 4, the user must enter a logon ID and password, which are validated before access is granted. Users must also be authorized for specific access privileges (read, insert, modify, delete) within the Oracle database.

(b)(2)



CLAIMS 4 makes use of data integrity controls provided by Oracle database software. In addition, users are only allowed to see the functions that they are authorized to perform, as determined by validation routines invoked at the time the user logs onto CLAIMS 4.

Virus detection and elimination software is installed in user workstations as part of the initial ('go-live') CLAIMS 4 configuration. Update of the signature files is a responsibility of each of the participating field sites.

Password crackers/checkers, integrity verification programs, and intrusion detection tools are not used for CLAIMS 4, nor has penetration testing been performed. Their application would be a responsibility of the participating field sites. Message authentication is not used.

System performance monitoring has been used to analyze system performance logs in real time to troubleshoot availability problems, including system and network slowdowns and crashes. The performance of this function is the responsibility of INS HQ and its SMI contractor.

Physical and environmental protection is not under the control of the CLAIMS 4 application. CLAIMS 4 runs at the four regional INS Service Centers, and at 70 District Offices and Sub-offices that process N-400 applications.

8 SKILL SETS

The following skill sets are currently used to perform the O&M tasks under the current contract.

TITLE	FULL TIME EQUIVALENT (FTE)	QUALIFICATIONS
Technical Writing Specialist	2	Analyzes and interprets highly specialized technical information to compose detailed documentation and technical manuals. Conducts complex documentation and user needs analysis. Studies customer environment by analyzing job tasks, organizational structure and user needs to propose documentation solutions. Interviews technical personnel, interprets reports, specifications and drawings to increase understanding of processes and document requirements. May plan documentation development process and coordinate writing projects. Reviews documentation for an entire project.
Administrative Assistant II	2.7	Under minimal direction, responsible for providing analytical and specialized administrative support functions. Interacts with outside departments to resolve problems of a confidential nature such as compensation, benefits, and financial reporting. Coordinates special projects by analyzing project, determining approach, compiling/analyzing data and preparing report/recommendation using PC skills, knowledge of administrative systems, and understanding of policies and procedures. Determines administrative procedures and methods and work priorities. Plans and coordinates meetings, conferences, and employee functions. May direct and coordinate work of other administrative personnel.
Financial Analyst -Senior	.7	Under minimal direction, performs complex financial analysis in support of the Service Unit (SU) and corporate objectives. Leads development, interpretation and implementation of financial concepts for financial planning and control. Reviews and analyzes the effects of current financial practices, policies, and procedures on the strategic unit's financial position. Recommends changes in financial analysis methodology to streamline project activities and improve productivity. Leads preparation of forecasts, budgets, operating statistics and financial analysis for business proposals, determining methods and timelines. Recognizes and solves complex business problems through financial analysis, such as lease-versus-purchase analysis, capital appropriations analysis, or discounted cash flow analysis. Provides comprehensive financial expertise for business decisions by analyzing rates of return, depreciation, capital appropriations requirements, investment opportunities, investment performance, due diligence, and governmental requirements. Performs financial and statistical analysis for special projects such as acquisitions and joint ventures. Uses and creates advanced financial models; uses EDS financial systems and PC software to complete tasks and automate work.

TITLE	FULL TIME EQUIVALENT (FTE)	QUALIFICATIONS
Program Manager	.3	Plans, directs and coordinates the acquisition and development of new business to an operational account stage for opportunities valued at more than one million dollars. Initiates, supports and participates in negotiations with prospective customer. Analyzes current situation and develops business plans, sales strategy and targeted customer audience to achieve acceptance of new business opportunity. Determines customer requirements and translates these requirements into operational plans. Determines, monitors and reviews costs, operational budgets and schedules and staffing requirements for project team. Analyzes effects of project upon various operating and support areas, such as information processing/data centers, assembly and manufacturing, to determine the most practical and cost effective method to obtain the required resources. Provides guidance to project team and management in directing development of new applications and formulating contingency plans in areas such as schedule revisions, manpower adjustments, fund allocations, and work requirements. Provides guidance in strategic systems planning to project team and/or customers team. May be responsible for preparing incoming management for transition from implementation to business operating stage.
Software Systems Engineer Manager I	.5	Directs and coordinate activities of small, short term or simple software programming and analysis activities. Develops standards for software applications, directs staff to implement required systems and directs the interface of software systems with hardware and applications systems.
Software Systems Engineer Manager II	2	Directs and coordinates the activities of software programming and analysis activities. Develops standards for software applications, directs staff to implement required systems and directs the interface of software systems with hardware and applications systems.
Business Analyst	1	Under general direction, supports the development, enhancement, and maintenance of business solutions using information technology based on customer needs. Acts as a liaison between customers and other support groups to identify business processes, systems, and product requirements. Documents customer specifications and interacts with other support groups to apply understanding of customer's business. Supports aspects of the business cycle including proposals, feasibility studies, implementations, and new business development. Plans and leads customer projects with some guidance. Anticipates, researches, identifies, and develops solutions to customer problems. Participates in training activities for peers and customers. Initiates measures to eliminate non-value added activities through process improvement.
Quality Assurance Manager	.5	Plans, directs and coordinates the quality review of departmental operations and related support systems to

TITLE	FULL TIME EQUIVALENT (FTE)	QUALIFICATIONS
		ensure compliance with contractual requirements. Establishes review criteria and procedures. Oversees the identification and resolution of quality issues. Reviews documented results and reports on quality assurance activities. Monitors the implementation of system or procedural enhancements to ensure customer acceptance and satisfaction. Provides overall direction for the development of related training programs for internal staff.
Quality Assurance Specialist	.5	Under minimal direction, studies, measures and analyzes EDS customer and account team member satisfaction level. Plans, coordinates and executes quality reviews for multiple accounts and customers to assess contract obligations and customer expectations. Conducts in-depth interviews with multiple levels of customer management. Analyzes and compiles complex quality statistics to determine account trends and documents findings to management. Advises managers in preparing an action plan following each quality review. Identifies and researches account concerns and problem areas and oversees implementation of procedural/system solutions to improve performance quality. Identifies account management trends across the organization and proposes methods and policies for quality improvement.
Quality Control Manager	.5	Plans, directs and coordinates quality control-related activities. Responsible for ensuring that all hardware products represent the maximum quality and reliability attainable. Approves all quality control procedures, technical specifications and procurement of quality-related test equipment. Responsible for overall program design.
Software Systems Engineer – Senior	8.4	Under limited direction, provides top-level technical expertise, including performing in-depth and complex software systems programming and analysis. Main responsibilities include problem resolution and providing technical leadership for the group. Possesses broad knowledge of internal operating systems, applications implications and customer areas.
Software Systems Engineer Supervisor	.3	Assigns, directs, and checks the work of software systems engineers and/or software support personnel to ensure that operating systems solutions are achieved. Oversees daily activities of updating, enhancing, debugging, and configuring related software products for operating systems, based on customer requirements. Interacts with customers and vendors to determine system requirements and solutions. Reviews system reports and provides technical guidance to staff. Establishes directives for future systems by evaluating and planning for software or hardware upgrades. Monitors the development of operating systems to ensure standards and procedures are followed and customer requirements are met.

TITLE	FULL TIME EQUIVALENT (FTE)	QUALIFICATIONS
Software Systems Engineer – Advanced	5	Under minimal direction, provides specialized expertise within multiple systems, software disciplines, as well as general knowledge of related disciplines, applications implications, and customer areas. Responsible for performing in-depth analysis and technical support of systems software products, including complex problem resolution, design, development, testing, operational integration, and user support. Assists Software System Engineers (SEs) with customization, installation maintenance, setting of standards, and optimizing product performance. Leads planning and conversions for new hardware/software products. Assists in the development of Software SEs.
Enterprise Architect/Staff Engineer – Senior	1.9	Acts independently to provide business and/or technical information technology consulting support to EDS strategic units and customer enterprises. Works with executives in EDS and customer organization to formulate enterprise-wide business and/or technical information technology product and/or service strategies. Develops and applies state-of-the-art consulting methodologies, business models and organizational behavior models to conceptualize methods to apply business and/or technical information technology products and services as strategic assets. Applies extensive industry and enterprise knowledge to identify and recommend integrated solutions, products and services to support the enterprise's accomplishments of business goals or technical needs. Provides recommendations and guidance in the design, development, implementation and management of products and solutions. Researches and recommends EDS' and the SU's position and new emerging technologies, techniques and tools. Assists with the application of emerging technologies to current EDS and customer environments. Conceptualizes and proposes new and add-on opportunities for the customer and EDS. Supports and participates in the conceptualization and development of EDS' technology policy, methodologies, models, techniques and strategies. Develops and delivers executive presentations to customers and EDS management. Transfers knowledge to others and serves as a mentor/coach for selected specialty areas.
Software Systems Engineer – Consultant	4.3	Acts independently or under the most general direction as a top-level technician. Possesses superior knowledge of the internal operating systems, databases, on-line systems, or communications software. Proficient in the state-of-the-art technology. May develop new technology, modify the structure of existing software products or provide technical guidance to complex projects. Normally reports directly to a manager rather than a supervisor.
Systems Engineer – Consultant	1.2	Acts independently as a technical advisor on the most specialized phases of system design, implementation, analysis and programming. Leads and participates in major

TITLE	FULL TIME EQUIVALENT (FTE)	QUALIFICATIONS
		system studies and implementations. Responsible for supporting systems engineers and internal marketing teams in solving complex problems involving a broad range of technologies and industry issues. Investigates state-of-the-art technology and applies it to the EDS environment. Communicates technical alternatives to management and recommends action. Functions as technical expert during product presentations to customers. May develop new technology.
Business Analyst - Advanced	4.5	Under minimal direction, coordinates and supports the development, enhancement, and maintenance of products and services applicable to multiple lines of a customer's business using information technology. Anticipates and identifies user problems and needs. Recommends business solutions based on customer requirements and industry trends. Leads, plans, schedules, and controls complex projects and activities with customers, support groups, and vendors on concurrent projects. Applies extensive knowledge of the customer's business and industry to develop project specifications. Advises on methods to improve business processes and remove non-value-added activities. Coordinates and participates in proposals, feasibility studies, implementations, and new business development. Leads the training of customers and peers and builds relationships with multiple customer levels.
Business Analyst - Senior	6.5	Through self-directed activities, influences the strategic direction of the customer and EDS. Applies knowledge of the entire customer organization to recommend and coordinate the development, enhancement, and maintenance of a customer's business systems, processes, and products. Develops innovative business solutions using information technology and knowledge of customer business and industry trends. Leads teams on large projects, studies, and implementations. Leverages industry knowledge and customer relationships to identify new business opportunities that make the customer and EDS successful. Presents the results of business studies to EDS and customer senior management. Promotes and directs process improvement activities and training of peers and customers.
Systems Administrator – Advanced	1	Under minimal direction, coordinates operational designs, develops support plans, coordinates implementations, and provides second level support for local area network (LAN), campus area network (CAN), and wide area network (WAN) solutions encompassing heterogeneous platforms. Develops system support requirements by reviewing and analyzing customer business processes and evaluating available EDS and/or supplier capabilities. Leads project teams in implementing new or upgraded designs and coordinates project efforts with support groups. Provides technical support for marketing initiatives through

TITLE	FULL TIME EQUIVALENT (FTE)	QUALIFICATIONS
		<p>participation in proposals and marketing studies. Creates plans that support implementation of changes. Participates in system support design and performance evaluation reviews. Advises on distributed network computing issues. Establishes and maintains security and integrity standards and controls. Ensures support plans and services meet customer needs and expectations. Assists in the evaluation, testing and recommendation of hardware, software, and network configurations based on customer need. Coaches others in the application of new operational support technologies. Analyzes user requirements and statistics to identify trends and resolve performance issues. Keeps abreast of emerging operational support technologies and industry trends. Recommends appropriate price/performance improvement opportunities.</p>
Systems Administrator - Senior	1.5	<p>Under broad direction, leads and coordinates the operational support and implementation activities for local area network (LAN), campus area network (CAN), and wide area network (WAN) service offerings encompassing heterogeneous platforms. Assists leadership in determining tactical and strategic direction of the organization as it relates to emerging operational support technologies. Researches, analyzes, and recommends new operational support technologies, tools, and techniques. Coaches others on the application of new operational support technologies. Reviews distributed computing and network designs to select appropriate operational support strategies and ensure efficient use of resources. Conducts system support design and performance evaluation reviews. Identifies, develops, and updates operational support standards and procedures. Participates with corporate strategic planning teams. Keeps abreast of emerging operational support technologies and industry trends. Recommends price/performance improvement opportunities.</p>

9 CONTRIBUTING DOCUMENTATION

- System Design Document for CLAIMS 4, April 12, 2000 (NCY00.20003-01.UB0-EDS)
- Functional Requirements Document for CLAIMS 4, April 12, 2000 (NCY00.10000-00.DC1-EDS)
- User Manual for CLAIMS 4 District Office, June 30, 2000 (NCY00.70002-00.DC0)
- User Manual for CLAIMS 4 Service Center, June 30, 2000 (NCY00.70000-00.D@0)
- Version Description Document for CLAIMS 4 Release 5.2.7, January 18, 2001 (NCS00.A0154-00.F*0)

- Examinations System Operations and Administration Guide, December 15, 1998 (NCY00.50003-00.W*1-EDS)
- Security Guide for the Computer Linked Application Information Management System CLAIMS 4, October 26, 2000 (NCY00.30067-00.W*0-EDS)

Attachment A provides a comprehensive list of the CLAIMS 4 documents available in the CM Library.