



"We connect great people with great people."

**MATRIX Resources, Inc.
115 Perimeter Center Place, NE
Suite 250
Atlanta, GA 30346-1249
USA**

<http://www.matrixresources.com/>

GSA FSS Contract GS- 35F-0429S

Effective: May 24, 2006 thru May 23, 2011



GSA SCHEDULE 70 - SIN 132-51

INFORMATION TECHNOLOGY (IT) PROFESSIONAL SERVICES

| | |
|-----------------------|--|
| FPDS Code D301 | IT Facility Operation and Maintenance |
| FPDS Code D302 | IT Systems Development Services |
| FPDS Code D306 | IT Systems Analysis Services |
| FPDS Code D307 | Automated Information Systems Design and Integration Services |
| FPDS Code D308 | Programming Services |
| FPDS Code D310 | IT Backup and Security Services |
| FPDS Code D311 | IT Data Conversion Services |
| FPDS Code D313 | Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) Services |
| FPDS Code D316 | IT Network Management Services |
| FPDS Code D317 | Creation/Retrieval of IT Related Automated News Services, Data Services, or Other Information Services (All other information services belong under Schedule 76) |
| FPDS Code D399 | Other Information Technology Services, Not Elsewhere Classified |

The MATRIX Difference

*A solid foundation of cultural and organizational excellence drives the success of MATRIX Resources, Inc. as one of the premier IT services companies in the United States and Canada. MATRIX was founded in 1983 on the principles of integrity, fairness, genuine care for our employees, and an unwavering commitment to Client satisfaction. Twenty-three years later MATRIX has emerged as a recognized leader in IT services. A \$164 million company, we have experienced 23 uninterrupted years of financially stable and debt-free operations. In addition, **MATRIX has a 4A1 Dun & Bradstreet rating**, the highest any organization can have in our industry classification. Throughout our history, we have impacted Client organizations by meeting and exceeding their growing and evolving demands for premier technical talent and innovative business solutions through three complementary service lines: Staffing Solutions, Project Solutions, and Workforce Solutions.*

MATRIX Resources, Inc. Company Information

Business Start Date: 12/19/82

Company URL: <http://www.matrixresources.com/>

Duns: 07-716-3350

SIN: 132-51

NAICS Codes under SIN 132-51:

561310 - Employment Placement Agencies

541511 – Custom Computer Programming Services

541512 – Computer Systems Design Services

541513 – Computer Facilities Management Services

541519 – Other Computer Related Services

CAGE Code: 1R1T4

SIC Code: 7361 - Employment Agencies

Taxpayer Identification Number (TIN): 58-1494307

Geographic scope: National and International

Terms & Conditions and Ordering Instructions

Minimum Order Value: \$ 500.00

Maximum Order Value: \$ 500,000 (negotiable)

F.O.B. for all Services offered to the Federal Government: Destination

To place an order with *MATRIX Resources, Inc.*

USE  *Advantage!* OR FAX to our Corporate Office:

**MATRIX Resources, Inc.
115 Perimeter Center Place, NE
Suite 250
Atlanta, GA 30346-1249**

**ATTN: Nancy Morgan, Business Development Analyst
Phone: 770-677-2476 or 800-627-3533 ext: 2476
Fax: 770-668-0384**

For additional information contact:

Don Palmer, Vice President of Field Operations - 770-677-2407

Delivery Time: As agreed upon between both parties.

Guarantee/Warranty: 30 days

Discounts:

Prices shown are NET Prices; Basic Discounts have been deducted.

Prompt Payment: 1% discount if paid in less than 10 days.

Net due 30 days.

Quantity: As requested.

Dollar Volume:

- 1. For annual billing of \$1,000,001 to \$2,000,000 -- 3% discount
(in addition to negotiated discount hourly rates)**
- 2. For annual billing above \$2,000,001 -- 5% discount (in
addition to negotiated discount hourly rates)**

Remit to address:

MATRIX Resources, Inc.

P.O. Box 101177

Atlanta, GA 30392

GSA Advantage!

GSA Advantage! is an on-line, interactive electronic information and ordering system that provides on-line access to vendors' schedule prices with ordering information. GSA Advantage! will allow the user to perform various searches across all contracts including, but not limited to:

- (1) Manufacturer;**
- (2) Manufacturer's Part Number; and**
- (3) Product categories.**

The following Authorized FSS Information Technology Schedule Pricelist is also available on the GSA Advantage! System. Agencies can browse GSA Advantage! by accessing the Federal Supply Service's Home Page via the Internet at

<http://www.fss.gsa.gov/>

MATRIX Resources, Inc. GSA PRICING for Information Technology Services

| Information Technology Labor Category Rates | |
|--|---------------------------|
| <i>Job Category</i> | <i>Hourly Rate</i> |
| 1. Junior Data Architect | \$59.51 |
| 2. Mid-level Data Architect | \$70.08 |
| 3. Senior Data Architect | \$87.27 |
| 4. Junior Database Administrator | \$57.78 |
| 5. Mid-level Database Administrator | \$70.75 |
| 6. Senior Database Administrator | \$86.83 |
| 7. Junior Database Analyst | \$57.78 |
| 8. Mid-level Database Analyst | \$64.35 |
| 9. Senior Database Analyst | \$82.43 |
| 10. Junior Desktop Support Analyst | \$35.70 |
| 11. Mid-level Desktop Support Analyst | \$50.25 |
| 12. Senior Desktop Support Analyst | \$55.10 |
| 13. Junior IT Analyst | \$50.69 |
| 14. Mid-Level IT Analyst | \$63.91 |
| 15. Senior IT Analyst | \$90.36 |
| 16. Junior Network Engineer | \$59.06 |
| 17. Mid-level Network Engineer | \$69.20 |
| 18. Senior Network Engineer | \$79.34 |
| 19. Junior Programmer/Analyst | \$52.45 |
| 20. Mid-level Programmer/Analyst | \$59.06 |
| 21. Senior Programmer/Analyst | \$79.34 |
| 22. Junior Project Manager | \$56.86 |
| 23. Mid-level Project Manager | \$66.12 |
| 24. Senior Project Manager | \$88.16 |
| 25. Junior Quality Assurance Analyst | \$48.49 |
| 26. Mid-level Quality Assurance Analyst | \$55.60 |
| 27. Senior Quality Assurance Analyst | \$76.18 |
| 28. Junior Software Engineer | \$50.25 |
| 29. Mid-level Software Engineer | \$63.91 |
| 30. Senior Software Engineer | \$81.10 |
| 31. Junior System Administrator | \$45.40 |
| 32. Mid-level System Administrator | \$55.98 |

| Information Technology Labor Category Rates | |
|---|--------------------|
| <i>Job Category</i> | <i>Hourly Rate</i> |
| 33. Senior System Administrator | \$68.32 |
| 34. Junior Technical Writer | \$44.30 |
| 35. Mid-level Technical Writer | \$55.10 |
| 36. Senior Technical Writer | \$70.08 |
| 37. Junior Telecommunications Engineer | \$48.05 |
| 38. Mid-level Telecommunications Engineer | \$62.59 |
| 39. Senior Telecommunications Engineer | \$77.36 |

MATRIX Resources, Inc. - Labor Category Descriptions

1. Commercial Job Title: Junior Data Architect

Minimum/General Experience:

One to three or more years of experience in database analysis and data modeling in a relational database management systems (RDBMS) environment. Experience using RDBMS structured query language (SQL) tools and performance tuning tools/techniques.

Functional Responsibilities:

Designs and constructs relational databases for data warehousing. Develops data modeling and is responsible for data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation. Coordinates new data development ensuring consistency and integration with existing warehouse structure. Reviews business requests for data and data usage, researches data sources for new and better data feeds. Assists in continuous improvement efforts in enhancing performance and providing increased functionality. Maintains data dictionaries and supports business applications development as required.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Five years of data architect experience as described above may be substituted in lieu of a college degree.

2. Commercial Job Title: Mid-Level Data Architect

Minimum/General Experience:

Three to five or more years of experience in database analysis and data modeling in a relational database management systems (RDBMS) environment. Experience using RDBMS structured query language (SQL) tools and performance tuning tools/techniques.

Functional Responsibilities:

Designs and constructs relational databases for data warehousing. Develops data modeling and is responsible for data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation. Coordinates new data development ensuring consistency and integration with existing warehouse structure. Reviews business requests for data and data usage, researches data sources for new and better data feeds. Assists in continuous improvement efforts in enhancing performance and providing increased functionality. Maintains data dictionaries and supports business applications development as required. May provide guidance and direction for junior data architects.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Five years of data architect experience as described above may be substituted in lieu of a college degree.

3. Commercial Job Title: Senior Data Architect

Minimum/General Experience:

Five to eight or more years of experience in database analysis and data modeling in a relational database management systems (RDBMS) environment. Experience using RDBMS structured query language (SQL) tools and performance tuning tools/techniques.

Functional Responsibilities:

Designs and constructs relational databases for data warehousing. Develops data modeling and is responsible for data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation. Coordinates new data development ensuring consistency and integration with existing warehouse structure. Reviews business requests for data and data usage, researches data sources for new and better data feeds. Assists in continuous improvement efforts in enhancing performance and providing increased functionality. Maintains data dictionaries and supports business applications development as required. Provides guidance and supervision to junior and mid-level data architects as needed. May lead data architecture/warehousing or database design projects.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree.
Note: Eight years of data architect experience as described above may be substituted in lieu of a college degree.

4. Commercial Job Title: Junior Database Administrator

General/Specialized Experience:

One to three or more years in the administration, implementation, and support of relational database management systems (RDBMS). Experience using RDBMS structured query language (SQL) tools and performance tuning tools/techniques.

Functional Responsibilities:

Administers and controls the activities related to data planning and development and the establishment of policies and procedures pertaining to its management, security, maintenance, and utilization. Sets and monitors standards. Advises management on database concepts and functional capabilities. Responsible for the support and maintenance of the RDBMS, including planned hardware and software upgrades, performance tuning, capacity planning, database backup and recovery/restart, and general support/maintenance tasks. Supports application developers by reviewing SQL queries for optimization and tuning, creating development/test database environments, and maintaining the data dictionaries. Monitors database performance and recommends improvements.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree.
Note: Five years of database administration experience as described above may be substituted in lieu of a college degree.

5. Commercial Job Title: Mid-Level Database Administrator

General/Specialized Experience:

Three to five or more years in the administration, implementation, and support of relational database management systems (RDBMS). Experience using RDBMS structured query language (SQL) tools and performance tuning tools/techniques.

Functional Responsibilities:

Administers and controls the activities related to data planning and development and the establishment of policies and procedures pertaining to its management, security, maintenance, and utilization. Sets and monitors standards. Advises management on database concepts and functional capabilities. Responsible for the support and maintenance of the RDBMS, including planned hardware and software upgrades, performance tuning, capacity planning, database backup and recovery/restart, and general support/maintenance tasks. Supports application developers by reviewing SQL queries for optimization and tuning, creating development/test database environments, and maintaining the data dictionaries. Monitors database performance and recommends improvements. May provide guidance and direction to junior database administrators.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree.
Note: Five years of database administration experience as described above may be substituted in lieu of a college degree.

6. Commercial Job Title: Senior Database Administrator**General/Specialized Experience:**

Five to eight or more years in the administration, implementation, and support of relational database management systems (RDBMS). Experience using RDBMS structured query language (SQL) tools and performance tuning tools/techniques.

Functional Responsibilities:

Administers and controls the activities related to data planning and development and the establishment of policies and procedures pertaining to its management, security, maintenance, and utilization. Sets and monitors standards. Advises management on database concepts and functional capabilities.

Responsible for the support and maintenance of the RDBMS, including planned hardware and software upgrades, performance tuning, capacity planning, database backup and recovery/restart, and general support/maintenance tasks. Supports application developers by reviewing SQL queries for optimization and tuning, creating development/test database environments, and maintaining the data dictionaries.

Monitors database performance and recommends improvements. Provides guidance and supervision to junior and mid-level database administrators as needed. May lead database administration, installation, and/or upgrade projects.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree.
Note: Eight years of senior database administration experience as described above may be substituted in lieu of a college degree.

7. Commercial Job Title: Junior Database Analyst**Minimum/General Experience:**

One to three or more years of experience in database analysis and data modeling in a relational database management systems (RDBMS) environment. Experience using RDBMS structured query language (SQL) tools and performance tuning tools/techniques.

Functional Responsibilities:

Evaluates and designs existing or proposed systems to access large-scale business applications databases. Analyzes database requirements of existing and/or new business applications. Prepares detailed specifications and flowcharts and coordinates installation of new or revised systems. Monitors application databases for performance. Implements new procedures, etc., to ensure optimal performance.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree.
Note: Five years of data analyst experience as described above may be substituted in lieu of a college degree.

8. Commercial Job Title: Mid-Level Database Analyst

Minimum/General Experience:

Three to five or more years of experience in database analysis and data modeling in a relational database management systems (RDBMS) environment. Experience using RDBMS structured query language (SQL) tools and performance tuning tools/techniques.

Functional Responsibilities:

Evaluates and designs existing or proposed systems to access large-scale business applications databases. Analyzes database requirements of existing and/or new business applications. Prepares detailed specifications and flowcharts and coordinates installation of new or revised systems. Monitors application databases for performance. Implements new procedures, etc., to ensure optimal performance. May provide guidance and direction for junior data analysts.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Five years of data analyst experience as described above may be substituted in lieu of a college degree.

9. Commercial Job Title: Senior Database Analyst**Minimum/General Experience:**

Five to eight or more years of experience in database analysis and data modeling in a relational database management systems (RDBMS) environment. Experience using RDBMS structured query language (SQL) tools and performance tuning tools/techniques.

Functional Responsibilities:

Evaluates and designs existing or proposed systems to access large-scale business applications databases. Analyzes database requirements of existing and/or new business applications. Prepares detailed specifications and flowcharts and coordinates installation of new or revised systems. Monitors application databases for performance. Implements new procedures, etc., to ensure optimal performance. Provides guidance and supervision to junior and mid-level data analysts as needed. May lead data analysis/warehousing or database design projects.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Eight years of data architect experience as described above may be substituted in lieu of a college degree.

10. Commercial Job Title: Junior Desktop Support Analyst**Minimum/General Experience:**

One to three or more years of information technology (IT) experience, including working with PC-based operating systems. Experience providing support for telecommunications and networking systems, electronic mail systems, commercial off-the-shelf (COTS) office automation software packages, and collaborative/workgroup systems. Experience working on a help desk is desired. Must demonstrate good communications skills and a positive, service-oriented attitude.

Functional Responsibilities:

Installs personal computer hardware and peripheral components, such as monitors, keyboards, printers and disk drives. Loads and verifies correct operation of such as operating system, word processing and spreadsheet programs. Provides training and technical assistance to users. Identifies and resolves hardware, software, and operator problems, makes minor repairs, or refers to service personnel. Provides remote (telephone or on-line) as well as in-person technical support to users. Support areas include electronic mail, network and local area network (LAN) issues, standard Windows desktop and

commercial off-the-shelf (COTS) office automation software packages, and other applications developed under this contract or any predecessors. Serves as the initial point of contact for troubleshooting network applications and hardware/software problems, including peripheral equipment such as local/remote printers, modems, and other devices.

Minimum Education:

A Bachelor's degree in Computer Science or a related engineering or liberal arts degree. Note: Six (6) years of desktop support analyst experience may be substituted in lieu of a college degree.

11. Commercial Job Title: Mid-Level Desktop Support Analyst

Minimum/General Experience:

Three to five or more years of information technology (IT) experience, including working with PC-based operating systems. Experience providing support for telecommunications and networking systems, electronic mail systems, commercial off-the-shelf (COTS) office automation software packages, and collaborative/workgroup systems. Experience working on a help desk is desired. Must demonstrate good communications skills and a positive, service-oriented attitude.

Functional Responsibilities:

Installs personal computer hardware and peripheral components, such as monitors, keyboards, printers and disk drives. Loads and verifies correct operation of such as operating system, word processing and spreadsheet programs. Provides training and technical assistance to users. Identifies and resolves hardware, software, and operator problems, makes minor repairs, or refers to service personnel. Provides remote (telephone or on-line) as well as in-person technical support to users. Support areas include electronic mail, network and local area network (LAN) issues, standard Windows desktop and commercial off-the-shelf (COTS) office automation software packages, and other applications developed under this contract or any predecessors. Serves as the initial point of contact for troubleshooting network applications and hardware/software problems, including peripheral equipment such as local/remote printers, modems, and other devices. May provide guidance and direction for junior support analysts.

Minimum Education:

A Bachelor's degree in Computer Science or a related engineering or liberal arts degree. Note: Six (6) years of desktop support analyst experience may be substituted in lieu of a college degree.

12. Commercial Job Title: Senior Desktop Support Analyst

Minimum/General Experience:

Five to eight or more years of information technology (IT) experience, including working with PC-based operating systems. Experience providing support for telecommunications and networking systems, electronic mail systems, commercial off-the-shelf (COTS) office automation software packages, and collaborative/workgroup systems. Experience working on a help desk is desired. Must demonstrate good communications skills and a positive, service-oriented attitude.

Functional Responsibilities:

Installs personal computer hardware and peripheral components, such as monitors, keyboards, printers and disk drives. Loads and verifies correct operation of such as operating system, word processing and spreadsheet programs. Provides training and technical assistance to users. Identifies and resolves hardware, software, and operator problems, makes minor repairs, or refers to service personnel. Provides remote (telephone or on-line) as well as in-person technical support to users. Support areas include electronic mail, network and local area network (LAN) issues, standard Windows desktop and commercial off-the-shelf (COTS) office automation software packages, and other applications developed under this contract or any predecessors. Serves as the initial point of contact for troubleshooting network applications and hardware/software problems, including peripheral equipment such as local/remote

printers, modems, and other devices. Provides guidance and supervision to junior and mid-level desktop support analysts as needed. May lead technology/infrastructure projects in involving end-user computing.

Minimum Education:

A Bachelor's degree in Computer Science or a related engineering or liberal arts degree. Note: Eight years of desktop support analyst experience may be substituted in lieu of a college degree.

13. Commercial Job Title: Junior IT Analyst

Minimum/General Experience:

One to three years or more of experience analyzing and documenting existing information technology (IT) organizational/business processes and procedures; designing new processes/procedures; developing business requirements documents and developing systems design specifications.

Functional Responsibilities:

Analyzes and designs IT business applications to meet business process initiatives. Evaluates existing business applications to identify areas of improvement; identifies IT program enhancements and modifications. Creates and reviews prototypes, creates required documentation, tests and debugs, and investigates and corrects IT program related problems. Uses computer-based and manual workflow analysis tools to study organizational IT business processes, information flows, production methods, inventory controls, and other processes/procedures. Documents findings and recommends new procedures, systems, and organizational changes. Capable of documenting test cases and performing functional testing. May develop and/or maintain system documentation, procedure manuals, and perform user training.

Minimum Education:

A Bachelor's degree in Management, Management Information Systems, Business Administration, Engineering, or a related engineering, business, or liberal arts degree. Note: Three years of business analysis experience as described above may be substituted in lieu of a college degree.

14. Commercial Job Title: Mid-Level IT Analyst

Minimum/General Experience:

Three to five years or more of experience analyzing and documenting existing information technology (IT) organizational/business processes and procedures; designing new IT processes/procedures; developing business requirements documents and developing systems design specifications.

Functional Responsibilities:

Analyzes and designs business applications to meet business process initiatives. Evaluates existing business applications to identify areas of improvement; identifies program enhancements and modifications. Creates and reviews prototypes, creates required documentation, tests, debugs, investigates and corrects program related problems. Uses computer-based and manual workflow analysis tools to study organizational business processes, information flows, production methods, inventory controls, and other processes/procedures. Documents findings and recommends new procedures, systems, and organizational changes. Capable of documenting test cases and performing functional testing. May develop and/or maintain system documentation and procedure manuals, and perform user training. May provide guidance and direction for junior business analysts.

Minimum Education:

A Bachelor's degree in Management, Management Information Systems, Business Administration, Engineering, or a related engineering, business, or liberal arts degree. Note: Five years of business analysis experience as described above may be substituted in lieu of a college degree.

15. Commercial Job Title: Senior IT Analyst**Minimum/General Experience:**

Five to eight or more years of experience analyzing and documenting existing information technology (IT) organizational/business processes and procedures; designing new processes/procedures and developing business requirements documents, and developing systems design specifications using a structured design and development methodology.

Functional Responsibilities:

Analyzes and designs IT business applications to meet business process initiatives. Evaluates existing business applications to identify areas of improvement; identifies program enhancements and modifications. Creates and reviews prototypes; creates required documentation, tests, debugs, investigates and corrects program-related problems. Uses computer-based and manual workflow analysis tools to study organizational business processes, information flows, production methods, inventory controls, and other processes/procedures. Documents findings and recommends new procedures, systems, and organizational changes. Capable of documenting test cases and performing functional testing. May develop and/or maintain system documentation and procedure manuals, and perform user training. Provides guidance and supervision to Junior and Mid-level IT Analysts as needed. May lead business analysis or design projects.

Minimum Education:

A Bachelor's or Master's degree in Management, Management Information Systems, Business Administration, Engineering, or a related engineering, business, or liberal arts degree. Note: Eight years of business analysis experience as described above may be substituted in lieu of a college degree.

16. Commercial Job Title: Junior Network Engineer**Minimum/General Experience:**

One to three or more years of experience in network design, implementation, and support.

Functional Responsibilities:

Installs, maintains and monitors the operation of the organization's local or wide area network systems. Evaluates vendor products in hardware, software, and telecommunications equipment. Develops network policies and standards and ensures adherence to security procedures. Analyzes, develops, and supports telecommunications networks supporting a wide range of applications, including voice, data, video, and/or wireless services. Develops designs and plans for the installation and maintenance of telecommunications systems from project inception to conclusion. Works closely with other information technology professionals to ensure proper implementation of network services and performs trouble ticket entry, service order fulfillment, and configuration management functions for network services. Performs other technical duties as assigned by the Senior Network Engineer.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Five years of network engineering experience as described above may be substituted in lieu of a college degree.

17. Commercial Job Title: Mid-Level Network Engineer**Minimum/General Experience:**

Three to five or more years of experience in network design, implementation, and support.

Functional Responsibilities:

Installs, maintains and monitors the operation of the organization's local or wide area network systems. Evaluates vendor products in hardware, software, and telecommunications equipment. Develops network policies and standards and ensures adherence to security procedures. Analyzes, develops, and supports telecommunications networks supporting a wide range of applications, including voice, data, video, and/or wireless services. Develops designs and plans for the installation and maintenance of telecommunications systems from project inception to conclusion. Works closely with other information technology professionals to ensure proper implementation of network services and performs trouble ticket entry, service order fulfillment, and configuration management functions for network services. Performs other technical duties as assigned by the Senior Network Engineer. May provide guidance and direction for junior network engineers.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Five years of network engineering experience as described above may be substituted in lieu of a college degree.

18. Commercial Job Title: Senior Network Engineer**Minimum/General Experience:**

Five to eight or more years of experience (including supervisory experience) in network design, implementation, and support.

Functional Responsibilities:

Manages the installation, maintenance, and monitoring of the operation of the organization's local or wide area network systems. Evaluates vendor products in hardware, software, and telecommunications equipment. Establishes network policies and standards and ensures adherence to security procedures. Analyzes, develops, and supports telecommunications networks supporting a wide range of applications, including voice, data, video, and/or wireless services. Develops designs and plans for the installation and maintenance of telecommunications systems from project inception to conclusion. Works closely with other information technology professionals to ensure proper implementation of network services and performs trouble ticket entry, service order fulfillment, and configuration management functions for network services. Provides technical leadership, strategic direction and guidance/supervision to junior and mid-level network engineers as needed. May lead network engineering projects.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Eight years of network engineering experience as described above may be substituted in lieu of a college degree.

19. Commercial Job Title: Junior Programmer Analyst**Minimum/General Experience:**

One to three or more years of experience working on mid to large-scale/enterprise applications development projects using a full software life cycle development methodology.

Functional Responsibilities:

Programs large-scale, transaction based business software applications. Must be proficient in one or more large-scale Relational Database Management systems, able to program in one or more third or fourth-generation development languages, and knowledgeable in existing enterprise development technologies. Analyzes current businesses processes and gathers requirements from end users. Develops detailed technical specifications and requirements. Performs programming and testing, including detailed technical documentation and test plans as required. Performs other technical duties as

assigned by the senior programmer analyst or project manager.

Minimum Education:

A Bachelor's degree in Management Information Systems, Computer Science, Engineering, or a related engineering, scientific, or liberal arts degree. Note: Five years of programmer analyst experience as described above may be substituted in lieu of a college degree.

20. Commercial Job Title: Mid-Level Programmer Analyst

Minimum/General Experience:

Three to five or more years of experience working on mid to large-scale/enterprise applications development projects using a full software life cycle development methodology.

Functional Responsibilities:

Programs large-scale, transaction based business software applications. Must be proficient in one or more large-scale Relational Database Management systems, able to program in one or more third or fourth-generation development languages, and knowledgeable in existing enterprise development technologies. Analyzes current businesses processes and gathers requirements from end users. Develops detailed technical specifications and requirements. Performs programming and testing, including detailed technical documentation and test plans as required. Performs other technical duties as assigned by the senior programmer analyst or project manager. May provide guidance and direction for junior programmer analysts.

Minimum Education:

A Bachelor's degree in Management Information Systems, Computer Science, Engineering, or a related engineering, scientific, or liberal arts degree. Note: Five years of programmer analyst experience as described above may be substituted in lieu of a college degree.

21. Commercial Job Title: Senior Programmer Analyst

Minimum/General Experience:

Five to eight or more years of experience working on mid to large-scale/enterprise applications development projects using a full software life cycle development methodology.

Functional Responsibilities:

Programs large-scale, transaction based business software applications. Must be proficient in one or more large-scale Relational Database Management systems, able to program in one or more third or fourth-generation development languages, and knowledgeable in existing enterprise development technologies. Analyzes current businesses processes and gathers requirements from end users. Develops detailed technical specifications and requirements. Performs programming and testing, including detailed technical documentation and test plans as required. Provides guidance and supervision to junior and mid-level programmer analysts as needed, and performs other technical duties as assigned by the project manager. May lead programming/analysis projects.

Minimum Education:

A Bachelor's degree in Management Information Systems, Computer Science, Engineering, or a related engineering, scientific, or liberal arts degree. Note: Eight years of programmer analyst experience as described above may be substituted in lieu of a college degree.

22. Commercial Job Title: Junior Project Manager

Minimum/General Experience:

One to three years or more of ADP experience, including three years of supervisory or management experience encompassing one to three different functional areas. Requires knowledge of and experience using specialized financial and project tracking software systems, in addition to commercial off-the-shelf (COTS) office automation software packages.

Functional Responsibilities:

Oversees one or more smaller or intermediate size projects (10-25 team members or more). Assembles project teams, assigns individual responsibilities, develops project schedules, and is responsible for determining and acquiring resources needed. Must be familiar with the entire scope and requirements of project(s), and serves as liaison between team members and functional area management requesting project. Prepares and maintains the project schedule, budget, and status reports using financial and project tracking software systems and commercial off-the-shelf (COTS) office automation software packages. Demonstrates technical and leadership skills in those areas addressed by the project/delivery order to be managed. Assists the Senior Project Manager/Program Manager as required with project management duties.

Minimum Education:

A Bachelor's degree in Management Information Systems, Computer Science, Engineering, or a related engineering, scientific, or liberal arts degree. Note: Five years of project management experience as described above may be substituted in lieu of a college degree.

23. Commercial Job Title: Mid-Level Project Manager**Minimum/General Experience:**

Three to five years or more of ADP experience, including three years of supervisory or management experience encompassing one to three different functional areas. Requires knowledge of and experience using specialized financial and project tracking software systems, in addition to commercial off-the-shelf (COTS) office automation software packages.

Functional Responsibilities:

Oversees one or more smaller or intermediate size projects (10-25 team members or more). Assembles project teams, assigns individual responsibilities, develops project schedules, and is responsible for determining and acquiring resources needed. Must be familiar with the entire scope and requirements of project(s), and serves as liaison between team members and functional area management requesting project. Prepares and maintains the project schedule, budget, and status reports using financial and project tracking software systems and commercial off-the-shelf (COTS) office automation software packages. Demonstrates technical and leadership skills in those areas addressed by the project/delivery order to be managed. Assists the Senior Project Manager/Program Manager as required with project management duties. May provide guidance and direction for junior project managers.

Minimum Education:

A Bachelor's degree in Management Information Systems, Computer Science, Engineering, or a related engineering, scientific, or liberal arts degree. Note: Five years of project management experience as described above may be substituted in lieu of a college degree.

24. Commercial Job Title: Senior Project Manager**Minimum/General Experience:**

Five to eight years or more of ADP experience, including six years of supervisory or management experience in multiple functional areas. Requires knowledge of and experience using specialized financial and project tracking software systems, in addition to commercial off-the-shelf (COTS) office

automation software packages.

Functional Responsibilities:

Oversees larger and more highly complex projects (25 team members or more). Assembles project teams, assigns individual responsibilities, develops project schedules, and is responsible for determining and acquiring resources needed. Must be familiar with the entire scope and requirements of project(s), and serves as liaison between team members and functional area management requesting project. Incumbents often possess highly specialized knowledge in one or more specific technologies. Prepares and maintains the project schedule, budget, and status reports using financial and project tracking software systems and commercial off-the-shelf (COTS) office automation software packages. Demonstrates technical and leadership skills in those areas addressed by the project/delivery order to be managed. Supervises junior and mid-level project managers as needed.

Minimum Education:

A Bachelor's degree in Management Information Systems, Computer Science, Engineering, or a related engineering, scientific, or liberal arts degree. Note: Eight years of project management experience as described above may be substituted in lieu of a college degree.

25. Commercial Job Title: Junior Quality Assurance Analyst

Minimum/General Experience:

One to three or more years of experience in software testing and a demonstrated knowledge of the software development life cycle. Familiarity with software/quality testing tools, techniques, and methodologies.

Functional Responsibilities:

Tests all internally developed software to ensure compliance with minimum company standards and requirements. Creates and maintains project test plans. Ensures that all internally developed software is free from defects and meets or exceeds end-user requirements. May be responsible for testing purchase third-party software and/or services to ensure that company standards and end-user requirements are met. May be certified as a Software Test Engineer (CSTE) or as a Quality Analyst (CQA). Uses automated testing tools to test new software functionality and perform regression tests on existing modules to help ensure overall system integrity. Participates in formal and informal reviews to determine quality and in the development of the project's overall software quality assurance (SQA) plan.

Minimum Education:

A Bachelor's degree in Computer Science or a related engineering or liberal arts degree. Note: Five years of quality assurance analyst experience may be substituted in lieu of a college degree.

26. Commercial Job Title: Mid-Level Quality Assurance Analyst

Minimum/General Experience:

Three to five or more years of experience in software testing and a demonstrated knowledge of the software development life cycle. Familiarity with software/quality testing tools, techniques, and methodologies.

Functional Responsibilities:

Tests all internally developed software to ensure compliance with minimum company standards and requirements. Creates and maintains project test plans. Ensures that all internally developed software is free from defects and meets or exceeds end-user requirements. May be responsible for testing purchase third-party software and/or services to ensure that company standards and end-user requirements are met. May be certified as a Software Test Engineer (CSTE) or as a Quality Analyst (CQA). Uses automated testing tools to test new software functionality and perform regression tests on existing

modules to help ensure overall system integrity. Participates in formal and informal reviews to determine quality and in the development of the project's overall software quality assurance (SQA) plan. May provide guidance and direction for junior QA analysts.

Minimum Education:

A Bachelor's degree in Computer Science or a related engineering or liberal arts degree. Note: Five years of quality assurance analyst experience may be substituted in lieu of a college degree.

27. Commercial Job Title: Senior Quality Assurance Analyst

Minimum/General Experience:

Five to eight or more years of experience in software testing and a demonstrated knowledge of the software development life cycle. Familiarity with software/quality testing tools, techniques, and methodologies.

Functional Responsibilities:

Tests all internally developed software to ensure compliance with minimum company standards and requirements. Creates and maintains project test plans. Ensures that all internally developed software is free from defects and meets or exceeds end-user requirements. May be responsible for testing purchase third-party software and/or services to ensure that company standards and end-user requirements are met. May be certified as a Software Test Engineer (CSTE) or as a Quality Analyst (CQA). Uses automated testing tools to test new software functionality and perform regression tests on existing modules to help ensure overall system integrity. Participates in formal and informal reviews to determine quality and in the development of the project's overall software quality assurance (SQA) plan. Provides guidance and supervision to junior and mid-level quality assurance analysts as needed. May lead quality projects.

Minimum Education:

A Bachelor's degree in Computer Science or a related engineering or liberal arts degree. Note: Eight years of quality assurance analyst experience may be substituted in lieu of a college degree.

28. Commercial Job Title: Junior Software Engineer

Minimum/General Experience:

One to three or more years of experience in software engineering/development and a demonstrated knowledge of the software development life cycle. Familiarity with software development tools, techniques, and methodologies.

Functional Responsibilities:

Provides functional and empirical analysis related to the design, development, and implementation of software operating systems for the company's products, including, but not limited to: utility software, development software, and diagnostic software. Participates in the development of test strategies, devices and systems.

Minimum Education:

A Bachelor's degree in Computer Science or a related engineering or liberal arts degree. Note: Five years of software engineering experience may be substituted in lieu of a college degree.

29. Commercial Job Title: Mid-Level Software Engineer

Minimum/General Experience:

Three to five or more years of experience in software engineering/development and a demonstrated knowledge of the software development life cycle. Familiarity with software development tools, techniques, and methodologies.

Functional Responsibilities:

Provides functional and empirical analysis related to the design, development, and implementation of software operating systems for the company's products, including, but not limited to: utility software, development software, and diagnostic software. Participates in the development of test strategies, devices and systems. May provide guidance and direction for junior software engineers.

Minimum Education:

A Bachelor's degree in Computer Science or a related engineering or liberal arts degree. Note: Five years of software engineering experience may be substituted in lieu of a college degree.

30. Commercial Job Title: Senior Software Engineer

Minimum/General Experience:

Five to eight or more years of experience in software engineering/development and a demonstrated knowledge of the software development life cycle. Familiarity with software development tools, techniques, and methodologies.

Functional Responsibilities:

Provides functional and empirical analysis related to the design, development, and implementation of software operating systems for the company's products, including, but not limited to: utility software, development software, and diagnostic software. Participates in the development of test strategies, devices and systems. Provides guidance and supervision to junior and mid-level software engineers as needed. May lead software or systems engineering projects.

Minimum Education:

A Bachelor's degree in Computer Science or a related engineering or liberal arts degree. Note: Eight years of software engineering experience may be substituted in lieu of a college degree.

31. Commercial Job Title: Junior System Administrator

Minimum/General Experience:

One to three or more years of experience in systems engineering and administration. Expertise with performance monitoring tools and capacity planning is required.

Functional Responsibilities:

Installs and maintains operating systems and related software to ensure stable performance. Evaluates system specifications, input/output processes, and working parameters for hardware/software compatibility. Troubleshoots networking and operating systems problems. Develops backup and recovery strategy and performs regular backups. Responsible for evaluating, designing, and implementing hardware and systems software solutions to support business applications development. Monitors system performance and usage and ensures that key performance parameters are within acceptable levels. Works closely with database administrators and network engineers to ensure that the integrity and quality of the overall system is maintained.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Five years of system administration experience as described above may be substituted in lieu of a college degree.

32. Commercial Job Title: Mid-Level System Administrator

Minimum/General Experience:

Three to five or more years of experience in systems engineering and administration. Expertise with performance monitoring tools and capacity planning is required.

Functional Responsibilities:

Installs and maintains operating systems and related software to ensure stable performance. Evaluates system specifications, input/output processes, and working parameters for hardware/software compatibility. Troubleshoots networking and operating systems problems. Develops backup and recovery strategy and performs regular backups. Responsible for evaluating, designing, and implementing hardware and systems software solutions to support business applications development. Monitors system performance and usage and ensures that key performance parameters are within acceptable levels. Works closely with database administrators and network engineers to ensure that the integrity and quality of the overall system is maintained. May provide guidance and supervision for junior system administrators.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Five years of system administration experience as described above may be substituted in lieu of a college degree.

33. Commercial Job Title: Senior System Administrator

Minimum/General Experience:

Five to eight or more years of experience in systems engineering and administration. Expertise with performance monitoring tools and capacity planning is required.

Functional Responsibilities:

Installs and maintains operating systems and related software to ensure stable performance. Evaluates system specifications, input/output processes, and working parameters for hardware/software compatibility. Troubleshoots networking and operating systems problems. Develops backup and recovery strategy and performs regular backups. Responsible for evaluating, designing, and implementing hardware and systems software solutions to support business applications development. Monitors system performance and usage and ensures that key performance parameters are within acceptable levels. Works closely with database administrators and network engineers to ensure that the integrity and quality of the overall system is maintained. Provides technical leadership, strategic direction and guidance/supervision to junior and mid-level system administrators as needed. May lead system administration projects.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Eight years of system administration experience as described above may be substituted in lieu of a college degree.

34. Commercial Job Title: Junior Technical Writer

Minimum/General Experience:

One to three or more years of experience in writing, design, editing, and preparing business and technical documentation. Experience with and thorough knowledge of Department of Defense (DoD), Federal

Information Processing (FIP), Government Printing Office (GPO), or commercial documentation standards as appropriate. Experience with processing new or special project materials. Experience in materials verification through consultation with subject matter specialists/experts or independent research. Experience in managing copy preparation through production.

Functional Responsibilities:

Responsible for preparing new and/or maintaining existing documentation (includes programming, systems and operations documentation, user manuals and help screens, and/or other online help documentation. Works with all levels of management, technical personnel, authors, and subject matter experts to define documentation content, guidelines, specifications, and development schedules. Prepares required documentation in an appropriate format. Supports configuration management and quality assurance standards, and may determine compliance levels. Reviews and analyzes the data and user requirements to ensure that documentation is clear, concise, and valid. Ensures that documents follow the appropriate style guide and may develop project-specific style guide supplements. May participate in system testing and acceptance.

Minimum Education:

A Bachelor's degree in Communications, English, or a related engineering, scientific, or liberal arts degree. Note: Five years of technical writing experience as described above may be substituted in lieu of a college degree.

35. Commercial Job Title: Mid-Level Technical Writer

Minimum/General Experience:

Three to five or more years of experience in writing, design, editing, and preparing business and technical documentation. Experience with and thorough knowledge of Department of Defense (DoD), Federal Information Processing (FIP), Government Printing Office (GPO), or commercial documentation standards as appropriate. Experience with processing new or special project materials. Experience in materials verification through consultation with subject matter specialists/experts or independent research. Experience in managing copy preparation through production.

Functional Responsibilities:

Responsible for preparing new and/or maintaining existing documentation (includes programming, systems and operations documentation, user manuals and help screens, and/or other online help documentation. Works with all levels of management, technical personnel, authors, and subject matter experts to define documentation content, guidelines, specifications, and development schedules. Prepares required documentation in an appropriate format. Supports configuration management and quality assurance standards, and may determine compliance levels. Reviews and analyzes the data and user requirements to ensure that documentation is clear, concise, and valid. Ensures that documents follow the appropriate style guide and may develop project-specific style guide supplements. May participate in system testing and acceptance. Provides guidance and direction for junior technical writers.

Minimum Education:

A Bachelor's degree in Communications, English, or a related engineering, scientific, or liberal arts degree. Note: Five years of technical writing experience as described above may be substituted in lieu of a college degree.

36. Commercial Job Title: Senior Technical Writer

Minimum/General Experience:

Five to eight or more years of experience in writing, design, editing, and preparing business and technical documentation, including supervisory experience. Experience with and thorough knowledge of Department of Defense (DoD), Federal Information Processing (FIP), Government Printing Office (GPO),

or commercial documentation standards as appropriate. Experience with processing new or special project materials. Experience in materials verification through consultation with subject matter specialists/experts or independent research. Experience in managing copy preparation through production.

Functional Responsibilities:

Supervises the activities of assigned Documentation Specialists and Clerks. Advises subordinates on all technical problems and administrative procedures. Prioritizes current documentation projects. May act in an editorial capacity in some organizations. Responsible for preparing new and/or maintaining existing documentation (includes programming, systems and operations documentation, user manuals and help screens, and/or other online help documentation. Works with all levels of management, technical personnel, authors, and subject matter experts to define documentation content, guidelines, specifications, and development schedules. Prepares required documentation in an appropriate format. Supports configuration management and quality assurance standards, and may determine compliance levels. Reviews and analyzes the data and user requirements to ensure that documentation is clear, concise, and valid. Ensures that documents follow the appropriate style guide and may develop project-specific style guide supplements. May participate in system testing and acceptance. Provides guidance and supervision to junior and mid-level technical writers as needed. May lead technical writing/documentation projects.

Minimum Education:A Bachelor's degree in Communications, English, or a related engineering, scientific, or liberal arts degree. Note: Eight years of senior technical writing experience may be substituted in lieu of a college degree.

37. Commercial Job Title: Junior Telecommunications Engineer

Minimum/General Experience:

One to three or more years of experience in telecommunications engineering, design, implementation, and support.

Functional Responsibilities:

Evaluates designs and maintains existing or proposed data telecommunication systems. Analyzes the needs of the users and recommends solutions to the hardware and/or software systems. Prepares detailed specifications and flowcharts for implementation of new internal programs or modifications to vendor software. Coordinates installation of hardware. Monitors the operation of data telecommunications systems and services of vendors.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree. Note: Five years of telecommunications engineering experience as described above may be substituted in lieu of a college degree.

38. Commercial Job Title: Mid-Level Telecommunications Engineer

Minimum/General Experience:

One to three or more years of experience in telecommunications engineering, design, implementation, and support.

Functional Responsibilities:

Evaluates designs and maintains existing or proposed data telecommunication systems. Analyzes the needs of the users and recommends solutions to the hardware and/or software systems. Prepares detailed specifications and flowcharts for implementation of new internal programs or modifications to vendor software. Coordinates installation of hardware. Monitors the operation of data telecommunications systems and services of vendors. May provide guidance and supervision of junior

telecommunications engineers.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree.

Note: Five years of telecommunications engineering experience as described above may be substituted in lieu of a college degree.

39. Commercial Job Title: Senior Telecommunications Engineer

Minimum/General Experience:

Five to eight or more years of experience in telecommunications engineering, design, implementation, and support.

Functional Responsibilities:

Evaluates designs and maintains existing or proposed data telecommunication systems. Analyzes the needs of the users and recommends solutions to the hardware and/or software systems. Prepares detailed specifications and flowcharts for implementation of new internal programs or modifications to vendor software. Coordinates installation of hardware. Monitors the operation of data telecommunications systems and services of vendors. Provides guidance and supervision to junior and mid-level telecommunications engineers as needed. May lead telecommunications or network engineering projects.

Minimum Education:

A Bachelor's degree in Computer Science, Engineering, or a related engineering or scientific degree.

Note: Eight years of network engineering experience as described above may be substituted in lieu of a college degree.