

STATE OF WISCONSIN
CLASSIFICATION SPECIFICATIONS

INFORMATION SYSTEMS (IS)
ENTERPRISE TECHNICAL SERVICES CLASSIFICATIONS

I. INTRODUCTION

A. Purpose of This Classification Specification

This classification is the basic authority under Wis. Admin. Code ER 2.04 for making classification decisions relative to present and future professional positions, which are the principal authority on the applications and feasibility for employing new technology for the State of Wisconsin Enterprise. Positions perform professional duties for the majority of time related to one or more of the classifications within the IS Enterprise Technical Services occupational area. There are four classification levels within this one classification specification, and they are: IS Enterprise Technical Services Professional, Senior, Specialist and Consultant/ Administrator.

Classification decisions must be based on the “best fit” of the duties within the existing classification structure. The “best fit” is determined by the majority (i.e., more than 50%) of the work assigned to and performed by the position when compared to the class concepts and definition of this specification or through other methods of position analysis. Position analysis defines the nature and character of the work through the use of any or all of the following: definition statements; listing of areas of specialization; representative examples of work performed; allocation patterns of representative positions; job evaluation guide charts, standards or factors; statements of inclusion and exclusion; licensure or certification requirements; and other such information necessary to facilitate the assignment of positions to the appropriate classification.

B. How to Use This Classification Specification

This classification specification includes professional IS Enterprise Technical Services positions at the Professional, Senior, Specialist, and Consultant/Administrator levels, which are identified in Section II of this specification. The IS Enterprise Technical Services classifications includes numerous allocation patterns or job types.

Section II.A. defines the duties performed by positions appropriately included in the IS Enterprise Technical Services classification Use this section to determine the correct job family classification. Then, use sections II.B. and II.C. to determine the appropriate classification level within that job family classification for the position: Professional, Senior, Specialist or Consultant/Administrator.

For classification purposes, the majority of duties assigned to a position **must** meet level **and** classification definition.

C. Inclusions

This classification encompasses only those professional positions performing Information Systems (IS) duties for the majority of time which impact on the State Enterprise. Positions in

this classification are located in the State of Wisconsin, Department of Administration and perform enterprise-level IS work identified in Section II under Definitions. The Department of Administration is charged with all aspects of the operation of the state's mainframe computer utility and the network through which customer agencies access to Info Tech services. The Department of Administration provides information technology planning, development of statewide systems, and management (including identification and implementation) of standards for enterprise-wide information technology tools, products, functions and systems. These positions must meet the level definition in Section II of this specification. Positions in this classification are responsible for enterprise-wide IS services as described by the definition section.

D. Exclusions

Excluded from these classifications are the following types of positions:

1. Supervisor positions as defined in Wis. Stats. 111.81(19), and as administered and interpreted by the Wisconsin Employment Relations Commission.
2. Confidential positions as defined in Wis. Stats. 111.81(7), and as administered and interpreted by the Wisconsin Employment Relations Commission.
3. Positions which are not engaged for the majority of time in "professional employee" work as defined in Wis. Stats. 111.81(15)(a) or (b), and as administered and interpreted by Wisconsin Employment Relations Commission.
4. Positions which are not engaged in enterprise-level IS work for a majority of time.
5. Positions which are not located in the Department of Administration.
6. Clerical, paraprofessional or professional positions which utilize computer systems in a business area, specialized program or reporting area and which are concerned with the manipulation of data contained in the system, and with responsibilities including program policy development and/or implementation, inputting of data into the system, correcting or modifying data, generating program reports and statistics, evaluating the effectiveness of the system, and providing information and technical assistance to users of the program system and liaison with IS professional staff. The primary purpose of these positions and the majority of the assigned duties are not the development or maintenance of the computer system.
7. IS (IS) Technician positions which spend the majority of time (more than 50%) engaged in any combination of the following activities: operating and monitoring a computer and/or teleprocessing network; routine computer programming and debugging; controlling data by coordinating and executing computerized system production runs; operating peripheral equipment; installing, maintaining, repairing and servicing computer hardware; installing software and upgrades and assisting with troubleshooting software and hardware problems; providing routine technical assistance; performing technical related work in the day-to-day maintenance of the LAN or WAN; completing data processing production for major, complex, integrated systems; or providing first level technical problem determination and resolution, and related job duties.
7. Positions which do not perform IS work for the State of Wisconsin Enterprise.

8. All other positions which are more appropriately identified by other classification specifications.

E. Entrance Into These Classifications

Employees enter positions within this classification series by competition. Progression to the IS Enterprise Technical Services Senior level will occur through reclassification. A progression series means a classification grouping whereby the class specifications specifically identify an entry and full IS Enterprise Technical Services performance senior level. The full performance senior level within a progression series means the classification level that any employee could reasonably be expected to achieve with satisfactory performance of increasingly complex duties or the attainment of specified training, education, or experience.

An employee may have his/her senior level position considered for reclassification from the IS Enterprise Technical Services Senior classification to the IS Enterprise Technical Services Specialist classification. All other employees will enter positions within this classification series by competition.

A position assigned to the IS Enterprise Technical Services Consultant/Administrator classification is the Enterprise principal technical authority in the referenced IS area with respect to multi-agency issues and applications. When circumstances permit on a case-by-case basis, movement to the Consultant/Administrator level may also be by reclassification.

F. Definition of Information Systems Terms

To assist in the evaluation of positions for inclusion in this and other Information Systems classifications, definitions of IS related terms are provided in a document titled "Information Systems/Technology Definitions" which is incorporated herein by reference as though fully set forth. This document should be used with the classification specifications which have Information Systems and Information Technology as part of the class title.

II. DEFINITIONS

For classification purposes, a position must meet the level **and** the classification definition.

A. **Technical Job Family**

The Technical Services Job Family covers those positions responsible for confidentiality, integrity and availability of systems through the planning, analysis, development, implementation, maintenance, and enhancements and support of systems, programs, policies, procedures and tools. Positions in this family are also responsible for the planning and coordination of the installation, testing, operation, troubleshooting and maintenance and use of large-scale hardware and software systems. Also, jobs cover the planning, installation, configuration, testing, implementation and management of the systems environment. Position types include, systems engineers, systems programmers, security officers, customer service providers, technical writers, training and help desk professionals, as well as other technical experts. Staff occupying positions in this family have the experience to serve the technology needs of the enterprise, agency business areas as well as extra and inter-agency requirements.

Positions which spend the majority of their time (50% or more) on one or more of the following duties are appropriately included in the IS Enterprise Technical Services job family classifications:

1. Assist in design (higher levels do the design) of processor and storage systems.
2. Install, configure, tune and troubleshoot server and desktop operating systems and other enterprise system software (virus, Email, etc).
3. Research, test and recommend new systems software and hardware.
4. Maintain server directories and access structures.
5. Develop server backup and recovery policies and procedures, implement and verify implementation.
6. Administer disk space and other system resources.
7. Develop policies and procedures to ensure information systems reliability and accessibility, and to prevent and defend against unauthorized access.
8. Participate in the development, analysis, and refinement of systems requirements.
9. Conduct security risk and vulnerability assessment of planned and installed information systems.
10. Develop information systems contingency plans and disaster recovery procedures.
11. Develop and implement programs to ensure that users are aware of, understand, and adhere to security and other enterprise IT standards, policies and procedures.
12. Participate in network and systems design to ensure implementation of appropriate information security policies, and assist in the gathering, analysis, and preservation of evidence used in the prosecution of computer crimes.
13. Determine overall Internet technical architecture and design.
14. Monitor web server functionality, security, and integrity.
15. Review, test and integrate Internet activities.
16. Collect and analyze Internet statistics.
17. Evaluate new Internet applications.
18. Provide technical advice to Internet content providers.
19. Troubleshoot and resolve technical problems.
20. Research, evaluate and provide feedback on problematic issues, trends and patterns.
21. Develop and maintain problem tracking and resolution systems and information.
22. Install, configure, tune, troubleshoot and maintain hardware and software.
23. Manage and control IT assets, including financial management, contract management, and system change management.
24. Provide technical training to customers.
25. Establish metrics to measure and evaluate systems performance and usage.
26. Plan and schedule the installation of new or modified hardware/software.
27. Manage accounts, passwords, and access to servers and other equipment.
28. Monitor the performance, capacity, load balances, availability, serviceability, and recoverability of installed systems and make any required adjustments.
29. Provide agency end user support for hardware and/or software.
30. Develop technical documentation for technical staff and end users.
31. Manage complex IT projects.
32. Support end user tools on the enterprise level. Provide expertise to all levels of users and lead departmental user groups. Plan for and assist end users with version upgrades and software implementations.
33. Research, test, recommend and support tools and facilities used to help other IS professionals.

Positions appropriately classified in the IS Enterprise Technical Services job family classifications may perform some of the following duties, but would not spend the majority of their time on one or more of these duties:

1. Understand information technology principles and techniques as they relate to the evaluation of business programs and operations.
2. Develop and maintain business applications.
3. Design networks or change PC configurations so several PCs can network in a small office.
4. Develop, create, or populate data (base) structures.
5. Authorize access to computer resources.
6. Function as end user project coordinator (business needs).
7. Perform end user system administration (add/deletes).
8. Use IT hardware and software to perform business functions.
9. Participate in building or review of IT facilities as a business representative.
10. Use IT policy, standards, guidelines, or procedures in the day to day operations.
11. Perform low-level IT troubleshooting or problem detection.
12. Use “off-the-shelf” applications and/or non-professional development tools to manage data and/or develop applications used in one’s own job or local business area.

B. Level

IS ENTERPRISE PROFESSIONAL

This classification is used as an entry progressing to a development level for professional IS positions. Work is performed under close progressing to limited supervision. Although this is the entry developmental level for this series, knowledge of fundamental IS concepts, principles and practices must have been acquired before appointment into this classification; the focus is on learning the procedures, practices, techniques and technology for the assigned specialized area; and assignments are narrow in scope. As the employee progresses, s/he continues to develop knowledge of the specialized area and the associated IS concepts, principles, practices, and techniques.

IS ENTERPRISE SENIOR

Positions at this level work under general supervision. The technical work performed by a position at this level may be reviewed by the position's assigned supervisor for agreement with the agency's established technical direction, policies and standards. This is the full performance level, and it is the level that an employee in this series can reasonably expect to attain. An employee at this level has acquired a broad knowledge of general IS concepts, principles, practices and techniques **and** broad knowledge of the job family and classification to which the position is assigned. Positions at this level may lead positions at the Professional and Senior level in the completion of projects and work assignments. Positions at this level may support the activities of IS Specialists, Consultant/Administrators and may work under the day-to-day direction of IS Specialists, Consultant/Administrators.

IS ENTERPRISE SPECIALIST

Positions at this advanced level work under general review with objectives and priorities established by overall work unit directives. There is little review of technical recommendations and solutions by a supervisor. Positions at this level will implement technical policies, standards

and procedures, which impact on the enterprise IS functions. The employee possesses and applies extensive, comprehensive knowledge of IS architectures as well as IS concepts, principles and practices as applied in the specialized enterprise functional area. The employee independently resolves conflicts and problems through the application of general policies and IS policies and standards. The majority of work assignments are difficult and complex and focus on IS as defined under the definition section for the technical services job family. Positions in this classification **must** interact with multiple agency and/or campus business managers and IS customers as well as other professional IS managers and staff in the completion of assigned duties.

IS ENTERPRISE CONSULTANT/ADMINISTRATOR

Positions at this level work under broad policy guidance derived from the management policy on Information Technology. Positions at this level coordinate and develop standards for the enterprise technologies to achieve the goals of this guidance. A position covered by this specification is the Enterprise principal technical authority in the referenced IS area with respect to multi-agency issues and applications. Work performed by a position in one of the classifications must focus, for a majority of the time, on the IS area of expertise. Technical review is based on effectiveness in planning, implementing, and supporting multi-agency technologies. A position at this level must provide direction, guidance and consultation on IS technical issues specific to the area of Expertise to multi-agency teams which may be at all position levels. Actions by a position at this level result in the establishment of technical policies, parameters and standards pursuant to the management policy on Information Technology. Positions covered by this specification must provide direction on issues which have impact and implications statewide. Positions at this level will lead and coordinate studies, projects and advisory groups, which span multiple agencies and/or campuses.

C. Classification Definitions

IS ENTERPRISE TECHNICAL SERVICES PROFESSIONAL

This classification is used as an entry progressing to a development level for professional IS Enterprise Technical Services positions. Work is performed under close progressing to limited supervision. Positions spend the majority of their time performing any combination of the following duties:

- Perform diagnostics and troubleshooting to fix application software problems.
- Assist in implementing software including assessment of customer needs, developing work processes and writing procedures.
- Develop and coordinate information system training on specific supported hardware and software
- Develop, write and edit technical manuals and procedures.
- Coordinate writing of technical procedures and standards by IS staff.
- Answer questions and resolve problems related to hardware, desk top software, applications and systems software, and connectivity.
- Log requests for help and refer calls.
- Analyze determine the impact of reported problems on agency/campus hardware, software and production services.
- Install and maintain vendor-provided systems (includes operating systems) software to support agency-wide desktop configurations.
- Perform diagnostics and trouble shooting for supported systems software.

- Provide technical hardware, applications and systems software support primarily for personal/microcomputers, but also for workstations, and distributed applications.
- Resolve printer connectivity issues.
- Conduct assessments of customer needs.
- Identify possible applications for microcomputers, and potentially, other computer systems.
- Provide problem resolution and training to microcomputer and other customers.
- Provide for or direct customers in the installation and maintenance of microcomputers and other systems.
- Assess current and future IS customer training needs.
- Deliver specialized IS training covering a variety of subjects within IS, e.g., applications and systems software, data communications, databases, and hardware.
- Apply knowledge of adult learning techniques and adult learning styles to adult learning situations.
- Support the agency/campus storage complex to meet established schedules.
- Support agency / campus storage complex to meet established schedules.
- Perform storage system problem determination.
- Assist with implementation of data storage subsystems.
- Assist and train customers in data storage functions.
- Perform data recovery.
- Assist Database administrator in database recovery.

IS ENTERPRISE TECHNICAL SERVICES SENIOR

Positions in this classification perform professional IS work related to the support and coordination of the hardware and systems and applications software. For a majority of time positions in this classification perform work related to the installation, maintenance and problem resolution of computer platforms, systems (including operating systems) software and applications software. Senior level positions spend the majority of their time performing any combination of the following duties:

- Assist applications staff in the use of development software tools.
- Train applications staff in the use of development software tools and methodologies or other aspects of the applications development architecture as it relates to the overall technology environment.
- Implement standards and procedures for the provision of IS customer technical services activities.
- Coordinate the provision of a variety of customer technical services to ensure an agency wide standardized approach.
- Develop and implement standards and procedures for problem/change resolution.
- Manage all aspects of changes including procedures, software, hardware, applications to ensure smooth transition and minimal impact on agency/campus production.
- Install and maintain vendor-provided systems (includes operating systems) software to support agency-wide complex automated systems.
- Install and maintain utilities and software packages to support production in a variety of environments.
- Assess and recommend hardware/software configurations, procedures, and technical standards to be used by applications development and operations staff.
- Work with Data Services staff on changes and standards for production databases and coordinate changes to production procedures, software, and hardware.

- Complete cost and feasibility studies for proposed microcomputer and other acquisitions.
- Develop specialized IS training covering a variety of subjects within IS, e.g., applications and systems software, data communications, databases, and hardware.
- Coordinate the delivery of training with other IS staff.
- Evaluate vendor provided training and recommend as required.
- Assist with the technical analysis supporting data management, file conversions, file organization methods, system implementation, and data recovery procedures for optimum system performance.
- Monitor levels of service and support “service level agreements” to ensure that deadlines are met.
- Participate in system design meetings to develop objectives and requirements of new systems or maintenance to existing systems.
- Analyze and implement mainframe system procedures to ensure the most efficient processing method is utilized.
- Recommend automation techniques to eliminate manual procedures.
- Analyze contention conflicts and determine priorities to resolve contention problems.
- Assist IS Technical Services Specialists and/or Consultants with their responsibilities.

IS ENTERPRISE TECHNICAL SERVICES SPECIALIST

Positions in this classification perform advanced professional IS work supporting enterprise hardware and operating systems and applications support software. For a majority of time, positions in this classification perform work related to the installation, maintenance and problem resolution of computer platforms, operating systems software and applications support software across multiple platforms and multiple agencies. This classification includes the following representative positions or job types:

IS Enterprise Application Support Specialist - Positions perform advanced IS work on major administrative applications (e.g. State Accounting, State Personnel/Payroll, State Procurement), with highly complex subsystems, with immediate impact or potential impact on all state agencies, boards, institutions, and campuses; coordinate the delivery of statewide application services to customer agencies; lead development and delivery of training programs and application support programs for customer agencies; lead the development of accurate, comprehensive technical and end-user documentation for large and major statewide administrative systems; and provide technical direction on use of statewide applications systems and supporting systems software across multiple platforms.

IS Enterprise Customer Service Specialist - Positions coordinate the delivery of technical IS services to multiple agencies/campus customers across the enterprise; provide consultation on enterprise policies, practices, and procedures related to technology application; coordinate the development and execution of service level agreements with multiple agencies/campus IT managers and program division administrators and business managers; lead projects with representation from multiple agencies/campus to develop procedures and practices to manage IS needs throughout the enterprise; and develop and implement enterprise-wide systems and practices to provide customer advocacy and communication.

IS Enterprise Customer Training Specialist - Positions coordinate the delivery of technical IS training to multiple agencies/campus customers. For the majority of the time, positions perform work related to developing, negotiating, procuring, monitoring

and providing alternatives for technical hardware or software training for IS staff across the enterprise.

IS Enterprise Security Specialist - Positions implement, maintain and administer the security policies, standards, procedures, and administration tools which impact on computers, networks, software and data for the enterprise, and work ensures that accesses to state-retained electronic data and computer and network facilities are appropriately controlled and monitored. Positions implement and maintain security administration tools and procedures which support all enterprise requirements, and serve on enterprise security projects and coordinate support through IS specialists or other IS consultants.

IS Enterprise Systems Specialist - Positions evaluate, install, maintain and tune complex hardware and operating system software and applications support software; work with multiple agency staff to ensure support for agency applications and ensure service levels are met; and research and resolve complex systems software problems.

IS Enterprise Technical Project Leader Specialist - Positions lead several phases of a significant technical project involving multiple agencies under the direction of a project manager; require frequent contact with managers from multiple agencies as customers of the projects; plan and budget work flow and product deliveries; and coordinate project completion with representatives from multiple agencies.

IS ENTERPRISE TECHNICAL SERVICES CONSULTANT/ADMINISTRATOR

Positions in this classification perform consultant professional IS work related to the technical support of the hardware and systems and applications support software for the state's computer utility. Positions in this classification are the primary authority on technical installations, maintenance and problem resolution for the state's Information Technology Services computer platforms, operating systems software and applications support software. This classification includes the following representative positions or job types:

IS Enterprise Customer Service Consultant - Positions direct IS enterprise specialists and coordinate teams to complete projects for delivery of technical IS services to multiple agencies/campus customers; negotiate timelines, products and other project concerns with top management positions in multiple agencies/ campuses; define, research and select tools, techniques and methodologies to be used by multiple agencies/campuses for technology development enterprise wide; and evaluate new products and recommend new or revised standards and guidelines.

IS Enterprise Technical Consultant - Positions are the enterprise key contact and primary authority for the resolution of questions and problems related to the enterprise technical support of hardware, applications support software and operating systems software; provide expertise for multiple platforms and software products which impact all agencies/campuses; and lead enterprise technical support efforts including coordination of IS Enterprise Consultants and private sector contract IT staff. Positions are the statewide expert in all aspects of technical support for specific enterprise operating systems software environments or applications support environments.

IS Enterprise Technical Project Manager - Positions direct and coordinate inter-agency teams working on technical project development in support of multiple agencies; manage all phases of assigned systems development projects; plan and budget for work flow,

agency application system interfaces and product deliveries; manage human and fiscal resources; negotiate timelines, products and other project concerns with top management positions in several customer agencies; oversee completion of tasks and provide status and completion reports to management; and administer complex vendor contracts which are project related.

III. QUALIFICATIONS

The qualifications required for these positions will be determined at the time of recruitment. Such determinations will be made based on an analysis of the goals and worker activities performed by an identification of the education, training, work or other life experience which would provide reasonable assurance that the knowledge and skills required upon appointment have been acquired.

IV. ADMINISTRATIVE INFORMATION

These classifications were created as a result of the Information Systems Survey and the abolishing of the Management Information Specialist 1 through 7 series. The classifications created more accurately represent the actual duties of the positions in the survey. The IS classifications were collapsed effective December 31, 2000 and announced in Bulletin CLR/SC-124.

This classification was modified effective June 28, 2015 and announced in Bulletin OSER-0396-CC/SC to update the definition language and add the Professional and Senior levels.

WAM
CSH/DM
14273