



# ENTERPRISE SOLUTIONS ADMINISTRATOR I, II & III

#### **BASIC FUNCTION**

Under general supervision, oversee processes related to training, content creation, configuration, authorization and deployment of enterprise asset, system and software management for district devices and related applications; order, track, configure and troubleshoot hardware and software, operating systems, databases and applications for a variety of mobile and desktop devices and enterprise applications, databases, learning management systems and applications; serve as a liaison to, coordinate and train stakeholders, vendors, internal and external staff and end-users to design, build or format devices, applications, software and systems.

## **REPRESENTATIVE DUTIES**

The classification specification does not describe all duties performed by all incumbents within the class. This summary provides examples of typical tasks performed in this classification.

- Design, develop, evaluate, build, modify, test and configure enterprise software, systems, databases, devices, applications, products and patches to integrate into networked systems; work with manufacturers and vendors, of hardware, software and application products, district IT Support Representatives and other project stakeholders for installations, deployments and troubleshooting. "E"
- Manage and integrate devices into district network using mobile device management (MDM) products/services and other software or applications and facilitate appropriate user or group profile access, permissions and configuration; research and review new applications, software and updates and approve for use on district devices. "*E*"
- Develop training, classes and documentation to train users or other trainers about use of enterprise software, systems, devices, and application technology; test and document configurations and processes and train internal partners on support or implementation strategies. "*E*"
- Manage content for, support, troubleshoot and optimize district enterprise software, databases, systems, devices, and applications including hardware and software configuration, for large and small scale replication and training purposes; document, communicate and provide training on solutions and configurations to super-users, end-user with a variety of technology literacy and to vendors or district employees responsible for replication. "E"
- Responsible for device tracking, inventory management and power management using MDM program such as Absolute Manage; automate processes to integrate devices to the district network, image devices and upload settings or other updates to appropriate registered devices. "*E*"
- Capture asset lifecycle data from requisition, purchase and assignment, to expire and decommission and ensure that device activations and deactivations are performed and are in compliance with district policies; participate in/and or lead composition, tracking and enforcement of district device usage and management policies and maintain records and databases containing information regarding licenses, warranties, and service agreements for user hardware, software and applications. "E"
- Implement and track district's IT Theft/Loss program, and enforce asset management, policies, procedures and technical controls; remotely manage, lock and wipe lost, or stolen hardware, initiate insurance claims, coordinate claim with theft management, vendors and law enforcement and replace lost, stolen or broken devices. "E"
- Monitor district software, databases and applications including district enterprise resource planning, mobile device
  management, content and learning management system logs and other for usage and issues, to gauge overall
  system health; generate asset inventory and status reports and advise management of unusual trends or problems
  and recommend appropriate corrective action. "E"

HUMAN RESOURCES PARTNERS WITH DISTRICT LEADERSHIP TO RECRUIT, DEVELOP, AND SUPPORT A CULTURALLY DIVERSE WORKFORCE DEDICATED TO THE HIGHEST STANDARDS OF EQUITY AND ACHIEVEMENT THAT CREATES AN ENVIRONMENT OF EMPOWERMENT AND SUCCESS FOR OUR STUDENTS, EMPLOYEES, AND THE COMMUNITIES WE SERVE.

- Participate in obtaining bids and creating requests for proposals to assure technical requirements and content needs are met and that devices will properly integrate with district's enterprise software, applications and other related systems; maintain collaborative relationship with vendors, software manufacturers and IT purchasing. "E"
- Research, evaluate and recommend new technologies, upgrades, adjustments or enhancements enterprise software, systems, devices, and applications for future district needs to create a 21st century learning and business operations environment. *"E"*
- Keep up to date with developments in MDM, content creation and management, device infrastructure, enterprise resource planning and management systems and emerging technologies and identify industry trends for education and business settings; understand how and recommend applications and devices to support the clients' curriculum, business, and learning goals. "E"
- Participate in research, procurement, configuration and deployment of and training for devices, device bundles and related applications to meet project objectives and end-users' needs within proposed budget and schedule. "E"
- Collaborate in/lead project planning teams and work with end-users and key district personnel, to define project scope, objectives and deliverables and to develop, evaluate, and implement plans, for projects related to enterprise software, systems, devices, applications and their management; participate in, lead, identify, monitor and perform support activities and services for successful completion of projects. "E"
- Attend various meetings to discuss critical decisions and their impact on users, enterprise devices, software and systems and advise administration on status of projects and problems impeding completion. "E"
- Monitor, improve, refine, and document and provide training on capabilities and procedures surrounding MDM, learning management, enterprise resource planning, and other district content management systems, distribution of applications data and configuration settings. "E"
- Write or modify, test, deploy and document automated deployment scripts or script logic across multiple operating systems and devices; automate, implement and audit integration, system upgrades, setting modification and application or software installations and upgrades across district devices and platforms to support both classroom and business operations. "E"
- Plan and execute upgrades and patches for all software, applications and supporting tools; push patches, updates, and other enterprise software and applications using On-premises and Cloud-based solutions; plan, create, manage and deploy application, security, configuration, power and device management settings and group policies. "*E*"
- Respond to escalated support incidents or service requests related to enterprise system functionality, connectivity or integration into district network. "E"
- Research, troubleshoot, test and work with vendors to find long term solutions for reoccurring issues to ensure problem resolution; develop and document action plan for resolution, and communicate solution to team for implementation of solution. "E"
- Demonstrate a commitment to the Portland Public Schools Equity Initiative by developing a thorough knowledge and application of the district Racial Educational Equity Policy and other board policies; participate in staff development, in-services and trainings related to diversity, equity and inclusion in the workplace and in K – 12 education; model appropriate behaviors; develop, recommend and implement improvements to educational business practices with awareness and understanding of their impact in a racially and culturally diverse community. "E"
- Develop and maintain professional skills through ongoing training and career development, including self-study, classroom training, and industry seminars and workshops; lead, attend and participate in a variety of meetings, in-service trainings, conferences and seminars relevant to network and data systems administration. *"E"*
- Perform related duties as assigned.

Note: At the end of some of the duty statements there is an italicized "E", which identifies essential duties required of the classification. This is strictly for use in compliance with the Americans with Disabilities Act.

## DISTINGUISHING CHARACTERISTICS OF THE CLASS

All classifications in this series are responsible for the integration, monitoring, tracking and training on enterprise software, systems, devices, and applications and the end user experience within the PPS network infrastructure. Enterprise Solutions Administrators may specialize in a specific area such as mobile or desktop device management, enterprise resource planning, learning management, training, hardware, software or application configuration, or content or asset management, or may work in multiple areas of enterprise administration; all provide technical expertise and information regarding assigned functions. The levels are differentiated by the scope of work performed,

technical focus, the levels of complexity in troubleshooting and correcting problems and leadership over projects and input into cross-functional teams and activities related to technologies' support and functionality.

The Enterprise Solutions Administrator I is the primary level technical classification in the series. Employees work under general supervision and follow defined processes to maintain services and provide training to users. Employees provide routine training and system support and are required to have a basic technical background and understanding of programming languages and multiple device operating systems and platforms and will develop overall expertise in enterprise system management to ensure district system services meet end-user needs. Upon successful completion of not less than two (2) years of active participation in system support and training for devices, the full scope of work involved in integration, hardware, software and application testing and upgrades, and experience in project management, employees in this classification who have gained sufficient knowledge of the broader scope of more complex elements of the professional level, may advance, with the confirmation of duties and recommendation of department leadership, to the Enterprise Solutions Administrator II classification.

The Enterprise Solutions Administrator II is the professional level in the classification series. Employees in this classification work under general supervision to perform the full scope of software, systems, devices and/or application administrator duties. Employees in this classification lead projects, share knowledge and expertise regarding device integration and hardware, enterprise software and application configuration, research and resolve issues, implement, document solutions or applications, train the highest level of system users including providing train-the-trainer sessions, serve as liaison with technical vendors and participate in researching and recommending new devices, software or applications.

The Enterprise Solutions Administrator III is the advanced level in the classification series. The focus of this position moves beyond project based assignments, training and responding to user needs to a strategic scope seeking out new technologies, and leading district adoption of new technologies and the advancement and upgrade of existing business and classroom enterprise systems and related policies. Employees in this classification resolve the most highly complex technical problems that are escalated beyond the expertise of professional level enterprise management staff. They may plan, develop and present formal documentation and hands-on training to develop and enhance the expertise of entry- and professional-level staff and may serve in a lead role, providing work direction and guidance to technical support staff.

The Enterprise Solutions Administrator classification series differs from other Information Technology classification series by its primary focus on the application and middleware or services tiers of a variety of enterprise business, operations, or instructional systems; employees in this classification typically focus on the client or user's experience of the system, often working directly with advanced subject matter experts and developers/configurators of the systems, devices and related hardware, software, applications and access and often work on multiple systems.

The Enterprise Solutions Administrator classification specifically differs from the Infrastructure Administrator series based on the Infrastructure Administrator's primary focus on back-end, servers, networks, systems and infrastructure which hosts or platforms these application systems. The classification also differs from the Student Information System Support classification series based on the Student Information System Support classification's exclusive focus on Student Information Systems.

## EMPLOYMENT STANDARDS

## Knowledge of:

Enterprise level mobile device management application systems such as Absolute Manage.

Methods and techniques of system analysis, industry standards and best practices for asset management.

Mobile and desktop device management (MDM) programs and configuration.

Deployment, support, and upgrade life-cycles of enterprise applications, specifically ERP applications.

Management of ERP and other enterprise applications and system such as Oracle PeopleSoft, Lawson or Dynamics from a technical application and data tier perspective.

Methods to manage and update complex user created, or 3<sup>rd</sup> party provided content in both learning and content management environments.

Theft and loss reporting and investigation processes.

Principles of asset management and IT Asset Management (ITAM) tools.

Project management fundamentals and best practices; scheduling, tracking and reporting techniques and tools.

Strategic planning and project management methodology including Waterfall and Agile methodologies, specifically Scrum; methodologies for proactively leading technological advancements.

Effective negotiation, partnership building techniques; interpersonal skills, using tact, patience and courtesy.

Operation, capabilities and limitations of a variety of mobile, laptop, desktop and other enterprise devices, peripherals, platforms, programming languages and operating systems; hardware and mobile device architecture for multiple platforms including PC, Apple and Android.

Administration and configuration of end-user accounts and applications; system management and settings, routing protocols, database programing and group policy objects.

On-premises and Cloud-based solutions for software and application upload processes.

Programing languages, including visual basic, SQL, and scripting, their applications and uses.

Record keeping preparation and documentation techniques.

Training techniques and methodology and different learning styles including adult learning theory and, one-on-one and group facilitation and presentation techniques; basic components of developing a training solution.

Effective customer service skills using tact, patience and courtesy.

Children Internet Protection Act (CIPA) and other applicable laws, codes, rules and regulations.

Microsoft Office Suite software applications.

Oral and written communication techniques.

#### Ability to:

Create loss reports and purchase or use internal inventory to appropriately replace customer devices.

Work with investigators and law enforcement regarding theft or loss of property.

Apply Agile principles to project development and problem solving.

Develop and implement long term strategic plans and project management standards; research, test, evaluate, recommend and install new and emerging technologies, system upgrades or process improvements.

Maintain current knowledge of technological advances in the field and learn and transition to new technology.

Create requests for proposals, and participate in vendor selection and material procurement process.

Collaborate with customers, analyze the needs of a specific project or situation accurately to identify and adopt an effective course of action; elicit input/feedback to asses project needs and modifications.

Operate, manage remotely, perform technical troubleshooting and diagnose performance problems for multiple devices, platforms, servers, operating systems and applications.

Think critically about a problem, approach from multiple perspectives and adopt effective course of action.

Write patches, create group policies and resolve configuration and performance issues; Use command line interface/arguments, work within servers, directories, print servers and file services and create templates and scripts. Provide direct technical and process support to advanced users, developers, product owners, and functional leads in a variety of business critical and classroom facing support circumstances.

Use both on-premises, silent and cloud-based, over-the-air (OTA) installations and solutions to push patches, software, applications or updates across various district devices and enterprise systems including application and operating system specific upgrade methodologies.

Implement a technical solution across different platforms using different delivery mechanisms.

Lift, move, reposition and connect light to moderately heavy equipment components according to safety regulations. Serve as a technical resource and assure proper levels of technical support for end-users.

Create and present proposals, develop user training documents and classes and deliver formal and informal training for end-users and trainers with a wide range of technical literacy.

Create clear, concise and accurate technical documentation of processes, inventory, projects and plans; write and revise manuals and user guides.

## **Education and Training:**

For all levels in this classification series is typically obtained through the completion of an Associate's degree in computer science, management information systems or closely related field and the following:

## Experience:

The Enterprise Solutions Administrator I requires one (1) year of experience in a technical support position or three (3) years of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or one (1) year of satisfactory experience as a Technical Support Representative II or

The Enterprise Solutions Administrator II requires three (3) years of experience in a specific infrastructure area such as networks or systems, or in multiple areas of IT infrastructure with demonstrated experience building systems, configuring and troubleshooting devices, applications or enterprise software or mobile device management programs; or two (2) years of experience as an Enterprise Solutions Administrator I with Portland Public Schools is required.

The Enterprise Solutions Administrator III requires five (5) years of experience as an administrator of complex enterprise IT systems with multiple hardware systems, devices and operating systems, as well as working with vendors and leading project, training, mentoring junior-level staff and supporting and troubleshooting infrastructure or three (3) years of satisfactory experience as an Enterprise Solutions Administrator II with Portland Public Schools.

Experience working in a public K-12 school district or public agency serving and supporting a richly diverse community is highly desirable.

A Bachelor's degree in one of the identified fields may substitute for a maximum of two (2) years of the required experience.

Additional directly related, verifiable work experience may substitute for the required degree on a year-for-year basis.

Any other combination of education, training and experience which demonstrates the candidate is likely to possess the skill, knowledge, ability and trait characteristics essential for this classification may be considered.

#### Special Requirements:

Some positions in these classifications require the use of a personal automobile and possession of a valid driver's license.

May respond to issues that occur during off-hours.

#### **WORKING CONDITIONS**

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Persons with certain disabilities may be capable of performing the essential duties of this class with or without reasonable accommodation, depending on the nature of the disability.

**Work Environment:** Work is performed primarily in a standard office environment, data centers and on school campuses with frequent interruptions.

Hazards: Exposure to loud noise for long periods of time in data center; potential contact situations.

**Physical Demands:** Primary functions require sufficient physical ability and mobility to work in an office and school setting and to routinely drive to and from District facilities; dexterity of hands and fingers to operate a computer keyboard, soldering gun, screwdriver and other standard tools, office and test equipment; sitting, standing and walking for extended periods of time; crawling, kneeling, bending at the waist; lifting, pushing, pulling and carrying cables, office equipment, computers and peripheral equipment, supplies and materials weighing up to 50 pounds; repetitive hand movement and fine coordination to use a computer keyboard; hearing and speaking to exchange information in person and on the telephone; seeing to read, identify small parts, prepare and assure the accuracy of documents.

FLSA: ESA I: Non-Exempt; ESA II and ESA III: Exempt Bargaining Unit: N/A Salary Grade: ESA I-27; ESA II-32; ESA III-37 Approval Date: December 6, 2016

Portland Public Schools recognizes the diversity and worth of all individuals and groups and their roles in society. The District is committed to equal opportunity and nondiscrimination in all its educational and employment activities. The District prohibits discrimination based on race; national or ethnic origin; color; sex; religion; age; sexual orientation; gender expression or identity; pregnancy; marital status; familial status; economic status or source of income; mental or physical disability or perceived disability; or military service. Board of Education Policy 1.80.020-P