Systems Programmer (1455)
Task List (2016)

1. Evaluates, generates, installs, implements, configures, modifies, and ensures proper working function of systems provided by vendors, including, but not limited to: computer and network systems, database, security, transaction monitors, virtualized and cloud infrastructure, storage, and information systems.

2. Applies project management principles and techniques to assignments, including, but not limited to: determining the scope and extent of projects; determining resources required to complete projects; coordinating resources, including vendors, City staff, City Departments, government agencies; acting as lead throughout project implementation; and providing maintenance and support when needed.

3. Develops and ensures proper working function of technical, functional, and operational documentation used by users, systems, operations and programming personnel, such as, operating system, network diagrams, dataflow, and network operating procedures in order to keep up-to-date documentation of the system and infrastructure.

4. Performs complex systems work such as performance tuning, capacity planning, and application integration with modern or legacy systems in order to ensure proper operation.

5. Integrates various hardware and software platforms or components by using various technologies and/or approaches such as service oriented architecture (e.g., web services), database connectivity, databus, and open service protocols for inter-operability.

6. Develops and implements disaster recovery and business continuity plans to ensure continuous availability of critical systems.

7. Evaluates, installs, configures, monitors, and ensures proper working functioning of systems that provide security to the network, applications, and systems.

8. Design, implement, and manage back-up recovery systems, policies, and procedures including back-up and restore validation on premise and cloud-based in order to prevent data loss and to ensure business continuity.

9. Reviews, analyzes, and correlates security related data and reports to respond to security incidents including incident handling in order to minimize risk from cyber threats.

10. Research, design, and implement system security best practices and consult develop, and recommend security policies and procedures including but not

limited to system configuration, system hardening, patch and version management, identity management, advanced persistent threats, intrusion detection and prevention.

11. Design, install, and ensure proper working function of data center and server facilities including rack infrastructure, power management, environmental management, cable management, and physical security in order to properly support and manage data centers.

12. Reviews and analyzes traces, system dumps, and logs to determine various problems related to hardware, software, security, performance, and network.

13. Tests and evaluates hardware and software in order to identify coherent solutions with existing infrastructure and perform comparative configuration analysis, tuning, capacity planning and long-range hardware and software planning.

14. Writes narrative reports using technical data and provides these reports to management in order to present recommendations on various topics such as new systems, optimizing existing systems, and security.

15. Provides consultation, training and guidance to other technical employees in the use of systems, database, storage, network, and security software and hardware.

16. Supervises or serves as a technical lead to technical staff engaged in systems design, implementation, configuration, and management.

17. Meets and consults with vendors, consultants and contractors to keep current with new technology, solutions, and implementation.

18. Makes oral presentations and conducts technical training to all City levels (e.g., City officials, managers, supervisors, users, staff) for various purposes including the introduction of new systems, presenting technical alternatives, providing cybersecurity awareness, identifying shortcomings of existing systems, and obtaining budget approval.