City of Portland Job Code: Multiple

SAP ARCHITECT

FLSA Status: Exempt Nonrepresented

GENERAL PURPOSE

To serve as the architect and key technical lead on a specific SAP technical area, as specified in the assigned specialty; designs new methods; provides SAP expertise; manages implementation projects; integrates technical specialty with other areas; contributes to strategic planning.

SUPERVISION RECEIVED AND EXERCISED

Receives administrative direction from project or system management.

May exercise direct supervision over supervisory, professional, technical and clerical staff.

DISTINGUISHING CHARACTERISTICS

Positions at this level have technical expertise in an SAP technical area, as specified in the assigned specialty. This class is distinguished from the Principal Information Systems Analyst by the expertise in a specific SAP technical area and the requirement to integrate that expertise with other technical areas. It is distinguished from the Information Systems Manager series by the number and nature of the groups supervised by the IS Manager series.

EXAMPLES OF WORK--(Any one position may not include all of the duties listed nor do the listed examples include all tasks which may be found in positions of this class.)

- 1. Provides technical expertise to install, maintain and upgrade SAP technologies in a production environment.
- 2. Conceives and designs SAP architecture to meet the City's long term technological needs.
- 3. Integrates knowledge of technical specialty with other technical fields; synthesizes and recommends solutions with broad-scale impact.
- 4. Leads the daily monitoring and management of complex SAP landscapes.
- 5. Manages quality assurance and testing processes.
- 6. Evaluates performance of assigned SAP technical/functional area; designs new methods and procedures for accomplishing work.

SAP Architect Page 1 of 6

- 7. Problem solves and builds consensus with all levels of management, customers and vendors; negotiates project priorities and outcomes; prepares and presents technological strategic plans for assigned specialty;
- 8. Leads technical team on a complex project; assists with selection, training and evaluation of assigned personnel; plans, prioritizes, delegates and reviews the work of assigned staff; establishes schedules and methods for achieving project goals and objectives; reviews work products, makes corrections and coordinates staff training and development efforts as appropriate.
- 9. Attends and participates in professional group meetings; stays current on new trends and innovations.
- 10. Performs related duties and responsibilities as required.

MINIMUM QUALIFICATIONS

Knowledge of:

- Broad theoretical and technical knowledge of SAP.
- Principles and practices of system architecture, analysis, design and development.
- Principles and practices of information systems project development, administration and management.
- Information systems technology trends, history and applications.
- Methods and techniques of evaluating business needs and developing information systems solutions.
- Principles of supervision, training and performance evaluation.
- Pertinent Federal, State and local laws, codes and regulations.
- Principles and practices of computer programming and systems analysis.
- Principles and practices of system testing, analysis and security administration.
- Principles of database administration.
- Advanced principles and practices of information systems.
- Advanced principles of hardware and software configuration and troubleshooting.
- Advanced knowledge of database systems, relational and other structures, and system architecture.
- Advanced methods and techniques used in the installation, trouble shooting, upgrading and problem resolution of information systems.
- Advanced methods and techniques of software programming and software installation.
- Advanced principles of software configuration and troubleshooting.

Ability to:

- Analyze and assess the technological needs of City Bureaus
- Plan, organize and manage SAP design and implementation activities.
- Serve as a project manager on large systems programming projects
- Determine solutions to user needs

SAP Architect Page 2 of 6

- Recommend appropriate technology to meet customer needs
- Communicate complex technological requirements to audiences of with varying levels of technical expertise, verbally and in writing.
- Apply complex technical principles and concepts to develop business solutions.
- Plan, organize, direct and coordinate the work a project team with varying levels of staff
- Establish and maintain effective working relationships with those contacted in the course of work.
- Provide 24x7 hour support for mission critical systems and software
- Effectively communicate and interact with both functional and technical personnel in solving complex business and technical problems.
- Ability to lead and complete tasks within critical timelines and work well in a high-energy environment.
- Install, test and configure hardware and software applications and programs.
- Troubleshoot hardware and software application problems
- Design, configure and test system software.
- Perform highly advanced programming and database management duties.
- Perform highly complex systems analysis duties.

SPECIALTIES:

Positions in this class are assigned to one of the following specialties: SAP BASIS (SBAS), SAP XI/PI (SXI), or SAP BUSINESS INTELLIGENCE (SBI)

Classification History:

Adopted: June 06, 2007

June 2009 - Change Job Class number from 7517 to 30000621 (SBAS), due to system change.

June 2009 - Change Job Class number from 7517 to 30000622 (SXI), due to system change.

June 2009 - Change Job Class number from 7517 to 30000623 (SBI), due to system change.

30000621 – SAP BASIS Architect Specialty (SBAS)

Summary:

SAP BASIS Architects are the technical experts in the SAP operating system. Positions assigned to this specialty: install, maintain and upgrade SAP system technologies in a production environment; apply support packages, software patches/fixes and system refreshes; provide Oracle database administration; and perform related duties.

Overall functions are described above in the base class. Additional duty and knowledge requirements specific to this specialty are outlined below.

Examples of Work:

- 1. Maintains and upgrades SAP system technologies in a productions environment
- 2. Leads the daily monitoring and management of complex SAP landscapes, utilizing SAP tools such as Solution Manager.
- 3. Applies SAP support packages, software patches and system refreshes.
- 4. Proactively researches and identifies applications patches and upgrades.

SAP Architect Page 3 of 6

- 5. Ensures optimal database performance through monitoring, tuning, and applying Oracle patches; leads Oracle database administration.
- 6. Maintains security profile roles utilizing Profile Generator
- 7. Administers and trouble shoots J2EE/Java
- 8. Administers SAP Portal security
- 9. Performs daily/weekly SAP system checks
- 10. Provides advanced level technical support
- 11. Develops and documents scripts and operating procedures
- 12. Maintains and updates the SAP Enterprise Portal
- 13. Maintains and updates XI/PI
- 14. Provides BASIS administration for SAP BW/BI (Business Warehouse/Business Intelligence)
- 15. Provides transport management
- 16. Ensures the operational run books are accurate and maintained

Knowledge, Skills, and Abilities (in addition to those described in the base class):

- Knowledge of SAP systems landscapes consisting of mySAP, BW/BI, XI/PI, Portal and Solution Manager.
- Knowledge of SAP Correction and Transport System (CTS).
- Knowledge of SAP administration standards, policies and procedures.
- Knowledge of Operating systems such as IBM AIX, Windows Server and Linux.
- Knowledge of Storage Area Networks
- Knowledge of Oracle database administration.
- Knowledge of processes and procedures necessary to apply support packages, and add-ons and upgrades.
- Ability to design, test, deploy and support complex SAP system landscapes.
- Ability to administer high performance computing environments.
- Ability to address issues related to the implementation of third party interfaces to SAP.
- Ability to drive efforts to design and document complex SAP technology strategies in support of Enterprise Initiatives.
- Ability to develop and document SAP and related technology architectural standards in conjunction with Technology and Architecture Area.

30000622 – SAP XI/PI Architect Specialty (SXI)

Summary:

SAP XI/PI Architects are the technical experts in the integration between SAP and non-SAP systems. Positions assigned to this specialty: design, size, develop and implement SAP XI/PI solutions in a heterogeneous environment; provides expertise in the development and configuration of SAP XI/PI solutions; performs full life-cycle SAP XI/PI implementations.

Overall functions are described above in the base class. Additional duty and knowledge requirements specific to this specialty are outlined below.

Examples of Work:

1. Analyzes integration requirements; determines modifications or new development needs

SAP Architect Page 4 of 6

- 2. Performs full life cycle SAP XI/PI implementations integrating both SAP and non-SAP systems using various technical and COTS applications adapters.
- 3. Provides expertise in the development and configuration of SAP XI/PI solutions; works closely with customers to ensure critical business needs are met.
- 4. Develops and implements program systems
- 5. Develops, maintains and enforces data and message management standards and procedures
- 6. Develops standards for maintaining data and message integrity and security
- 7. Develops strategies for data recovery
- 8. Provides production development support; troubleshoots problems related to SAP XI/PI interfaces and programs; develops documentation for user manuals; tests document applications.
- 9. Develops and implements large or complex computer integration applications; designs, configures and tests systems software; debugs or troubleshoots software problems.

Knowledge, Skills, and Abilities (In addition to those described in the base class):

- Knowledge of SAP XI/PI architecture, principles and practices.
- Knowledge of integration methodology and concepts such as EAI in the areas of Message Brokers, Messaging Middleware, Workflow.
- Expert knowledge of integration protocols such as such as ftp, http, SOAP, ODBC, JMS, JDBC
- Knowledge of principles and practices of ABAP and/or JAVA computer programming technologies.
- Knowledge of advanced methods and techniques of system integration design, development, test and deployment.
- Knowledge of advanced principles and practices of integration systems programming.
- Knowledge of advanced principles of software configuration and troubleshooting in a production integration environment.
- Knowledge of advanced knowledge of database systems, relational and other structures, and system architecture.
- Ability to perform full life cycle SAP XI/PI implementations integrating both SAP and non-SAP systems
- Ability to document implementation methodology for SAP XI/PI within NetWeaver 2004s.
- Ability to understand detailed functional requirements and architect technical solutions based on available XI/PI interfaces

30000623 – SAP Business Intelligence Architect Specialty (SBI)

Summary:

SAP Business Intelligence Architects are the technical experts in the SAP Business Warehouse development. Positions assigned to this specialty design enterprise solutions related to Business Intelligence involving complex business process definitions, modeling and reporting for SAP Business Warehouse development.

Overall functions are described above in the base class. Additional duty and knowledge requirements specific to this specialty are outlined below.

SAP Architect Page 5 of 6

Examples of Work:

- 1. Designs enterprise solutions related to Business Intelligence involving complex business process definitions, modeling and reporting for SAP Business Warehouse development.
- 2. Leads SAP Business Analysts to define reporting requirements, convert them to technical specifications, assess them against standard business content, determine the required Business Warehouse design, create and load BW targets and deliver reports.
- 3. Develops, maintains and enforces data management standards and procedures; develops standards for maintaining data integrity and security; develops strategies for data recovery.
- 4. Designs queries to support Business Intelligence objectives using various SAP technologies.
- 5. Designs large and complex BW/BI solutions; designs, configures and tests system software; debugs or troubleshoots problems.
- 6. Troubleshoots complex problems related to BW programs and activities; develops documentation for user manuals; tests document applications.

Knowledge, Skills, and Abilities (in addition to those described in the base class):

- Knowledge of SAP Netweaver (mySAP) platform
- Knowledge of SAP BI Analytics / BW and performance management solutions (KPI / balance score card, Visual Composer).
- Knowledge of ETL principles, practices, methods and techniques.
- Knowledge of Report requirements definition, technical specification documentation
- Knowledge of XML, XML for Analysis (XMLA), OLE DB for OLAP (ODBO), Common Warehouse Metadata Interchange (CWMI), business application programming interface (BAPI), the ABAP programming language, Java 2 Platform Enterprise Edition (J2EE), and JDBC interfaces
- Knowledge of SAP Data architecture, modeling, OLAP, Info Cubes, Info Providers.
- Knowledge of principles and practices of ABAP and/or Java programming.
- Knowledge of principles of database administration.
- Advanced knowledge of database systems, relational and other structures, and system architecture.
- Ability to translate business strategies and requirements into technical strategies and apply them to the architectural models to create achievable system design for business solutions.
- Ability to lead teams through technical specifications, development, and testing in support of BW/BI application software integration projects.
- Ability to design and develop custom information providers, time-dependent and independent master data/hierarchies.
- Ability to lead SAP BW/BI data modeling, data staging, data extraction, and logical/physical database design.
- Ability to design and tune complex queries.
- Ability to perform complex data cleansing, aggregation, transformation and validation of data to ensure accuracy and consistency.
- Ability to perform the most advanced programming and database management duties.
- Ability to troubleshoot and solve complex software and data problems

SAP Architect Page 6 of 6