

POSITION SUMMARY

Under the general supervision of the Development and Quality Management Section Chief, this position provides expert-level Integration Practice leadership and is the agency technical expert in the development and implementation of integrations between highly complex business applications and systems existing both on-premise at ETF and in the cloud, both COTS and custom, and has technical accountability and responsibility for ETF's integration layers and surrounding services. This position will ensure all ETF systems communicate seamlessly and securely, orchestrating workflows between disparate systems so they operate as a single ecosystem. In addition, this position serves as a project and technical decision maker and first-level authority for creating new integrations and managing existing integrations.

This position is responsible for overseeing the technical implementation and operation of our integration layer and integration platform-as-a-service. This includes defining policies, standards, and procedures for our integration practice and determining what technical approaches to use and when. This position will direct the implementation of integration mechanisms such as Application Programming Interfaces (API), micro-services, messaging systems, batch processing and file transfers, and message publishers and consumers. This position defines guidelines, standards, and best practices for designing, building, monitoring, and maintaining these integrations in accordance and compliance with overall ETF standards. This position also leads teams, directs and defines processes and performs work related to all phases of the integration development life cycle, including analyzing and documenting business processes, planning, requirements elicitation, design, system development, testing, implementation, maintenance activities, and production support.

This position manages all phases of assigned integration development projects, plans, and budgets for integration deliveries, and manages human and fiscal resources needed to accomplish them. This includes effectively negotiating timelines, products and other project concerns with top management positions including ETF leadership, the Division of Management Services Administrator, the Chief Information Officer, and other BITS Management. This position will also provide status and completion reports to management. Project teams may be composed of various functional level IS staff, contractors, business area managers, project vendors, and test team members.

This position will provide expertise and consultation to ensure ETF meets project requirements, goals, and milestones with a high level of quality and timeliness, including both internal projects and those with external vendors. This includes partnering with the Office of Enterprise Initiatives (OEI), Data Management Bureau, ETF business areas, and external business partners and users. Within the Bureau of Information Technology Services (BITS), this position will work directly with staff including DBAs, the middleware team, and technical support staff as needed to meet project goals.

This position coordinates with the Agile Development & Solution Delivery Coordinator lead worker to ensure development practices within the integration layer follow agency standards and procedures, and will also coordinate in the agile delivery and maintenance of integration solutions.

This position is responsible for defining the overall approach and standards for implementing unit testing related to integrations, working with the Quality Assurance lead in defining test automation standards, and participates in defining, implementing, and supporting DevOps practices and tools in the agency. The position is responsible for training new members of the team on technical tools for integration and ETF Bureau of Information Technology Services (BITS) standards for their use.

GOALS AND ACTIVITIES

50% GOAL A: Development, management, and oversight of the technical aspects of ETF's application integration practice, including leadership and guidance on the creation, enhancement, implementation, and support of integrations between all on-premise and cloud-based applications in use by ETF

Worker

Activity

- A.1 Function as the agency expert on application integration activities, ensuring the agency's best of breed application approach operates as a connected overall system through both real-time and batch-oriented data and workflow orchestration.
- A.2 Develop agency policies, standards, and procedures needed to implement and manage enterprise application integrations.
- A.3 Coordinate and lead teams working on integration projects both within ETF and in coordination with external vendors.
- A.4 Develop and maintain standard approaches to eliciting and documenting the business and technical requirements needed to define and build application integrations.
- A.5 Develop and maintain standard integration approaches based on technical and business requirements, including the appropriate technical mechanisms like APIs, event-based messaging, batch processes, EDI file transfers, etc.
- A.6 Incorporate information security policies, principles and practices into integration development requirements and implementation processes.
- A.7 Negotiate timelines, products, and other project concerns with management positions, including Division Administrators and Department Heads.
- A.8 Collaborate and coordinate with the Agile Development & Solution Delivery Coordinator lead worker to ensure integration solutions comply with Agile development, delivery, and maintenance standards.
- A.9 Define the overall approach and standards for implementing unit testing related to integrations and work with the Quality Assurance lead in defining test automation standards.

40% GOAL B: Implementation, development, and maintenance of ETF's integration platform and associated services

Worker

Activity

- B.1 Direct the design and implementation of integrations and ancillary services across agency software applications.
- B.2 Provide technical oversight, review, and approval of development and integration work delivered by ETF development staff, vendors, and partners, including detailed, expert code review for quality assurance and architectural integrity.
- B.3 Provide expert level software development services, including architectural design and implementation of integration components.
- B.4 Provide consultation to other professional IS development staff or stakeholders on appropriate uses of agency integration technologies and their potential deployment across business units.

- B.5 Coordinate teams working on two or more systems development projects **or** a single project with multiple aspects from inception to completion.
- B.6 Coordinate with the Data Management Bureau on integrations with platforms owned/managed by that bureau.
- B.7 Plan and budget for technical work milestones and product deliveries.
- B.8 Manage human and fiscal resources for assigned projects.

10% GOAL C: Participation in IT team leadership and tactical planning and performance of special assignments, consultation, training, support, and employee development.

Worker
Activity

- C.1 Research and prepare special reports or documents as requested.
- C.2 Participate in IT planning activities.
- C.3 Represent management on task forces and committees to respond to state and agency needs, interacting with staff in other agencies as required.
- C.4 Orient new employees to integration development standards, procedures, policies, practices, and major application areas.
- C.5 Provide the integration development team with assistance, evaluate development team assignments, and output, and recommend training, as needed, to increase staff effectiveness and productivity.
- C.6 Meet with BITS management and staff to evaluate progression on tasks, identify and resolve issues, and plan for future projects and initiatives.
- C.7 Research and evaluate new tools and technologies.
- C.8 Maintain knowledge of state-of-the-art integration development processes and modern technologies utilizing web resources, online training, books, internal documents, training sessions, peer contacts, communities of practice, and workshops.
- C.9 Train and mentor other developers in integration technologies and best practices.
- C.10 Additional duties as assigned.

Knowledge, Skills and Abilities

1. Expert, advanced-level knowledge and experience in integration development, analysis, and design, including API development.
2. Expert, advanced-level knowledge and experience in Authentication and Authorization approaches to API development.
3. Expert, advanced-level knowledge and experience in APIs and data security.
4. Expert, advanced-level knowledge and experience implementing API Gateways.
5. Expert knowledge of the Java programming language.
6. Expert knowledge of SQL and relational database concepts.
7. Expert knowledge of Integration Platform as a Service tools such as MuleSoft, Dell Boomi, etc.
8. Expert knowledge of microservices architectures.
9. Expert knowledge of API development using REST, JSON, and/or XML.
10. Expert knowledge of DevOps principles.
11. Knowledge of message queue approaches.
12. Expert knowledge and skill with scrum/agile methodologies.
13. Expert knowledge of API development life cycle processes.
14. Knowledge of application test methodologies and procedures.
15. Expert knowledge of application documentation methods.
16. Knowledge of good security practices for all phases of application development.
17. Knowledge of ETL and batch development practices and support.
18. Expert knowledge of project management, facilitation, and negotiation principles.
19. Ability to strategize, anticipate industry disruptions, and plan for future state.
20. Ability to help in the development of strategic and operational project plans.
21. Excellent verbal and written communication skills.
22. Strong leadership skills.
23. Excellent interpersonal skills to successfully elicit information from business users and facilitate meetings and discussions with users and technical teams.
24. Ability to develop and maintain a work climate that encourages cooperation and teamwork.
25. Expert ability to identify, manage, and resolve problems.
26. Effective time management, organization, and prioritization skills.
27. Demonstrated ability to analyze facts and apply sound judgement in decision making.
28. Ability to take the initiative to assertively represent business needs, to stand firm when necessary and to compromise when possible, to diplomatically challenge assumptions, and to make recommendations to business and technical staff, both internal and external, at all levels.