

# HR-XML Consortium

## 3.2.1 Recruiting

### Specification

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## Recruiting Specification Overview

HR-XML Consortium's very first standards project focused on the problem of sharing information about position openings and candidates among HR and recruiting systems. The project produced a specification branded as "Staffing Exchange Protocol" (SEP). The "SEP" brand is no longer used in the Version 3.X library. However, the underlying schemas -- though significantly revamped -- are carried forward.

The key recruiting schemas are:

**PositionOpening.** Contains details about a position opening, including requirements for the position as well as administrative information, such as how to apply.

Note: A "position opening" is primarily intended to fulfill job advertising use cases. The `StaffingOrder` noun is parallel in many ways to `PositionOpening`, but has been designed specifically to support staffing requisition use cases. The `PositionCompetencyModel` noun is yet another representation of a "position," but is centered on describing the competency model that supports the position and does not cover the administrative, organizational, compensation, etc. details associated with the position. "Position" also is part of the meta model you'll find covered in nouns, such as `EPMParticipant`, `HRMasterData`, and `IndicativeData`.

**Candidate.** Defines a set of information about an applicant or prospective employee or resource. Like a resume, a Candidate document contains details about a person's education and professional experience. However, Candidate may include data that is not typically included on a Resume, such as remuneration requirements and various position preferences.

Many improvements have been made to the Candidate and PositionOpening schemas. One important change is that these schemas are much more parallel and share much more content with staffing specifications, such as `StaffingOrder` and `StaffingResource`. This is intended to make it much easier for staffing companies to apply both sets of specifications.

**SearchDocument.** Provide a way for one system, such as an ATS, to request matching documents for a query against another system, such as a Job Board or a Resume Bank. This schema would allow a more programmatic and tighter integration between these systems and to facilitate data exchange.

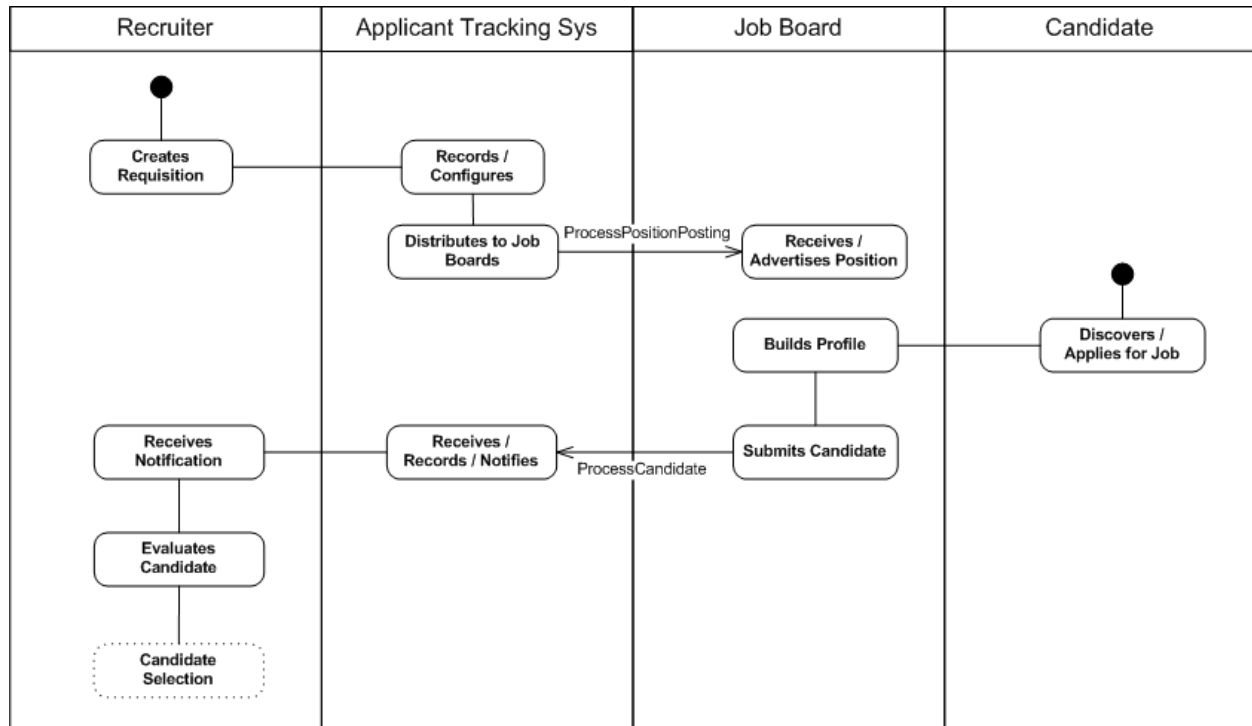
## Actors

The recruiting industry continues to evolve and new categories of service providers continue to emerge. Below are just a few of the major categories of system actors potentially involved in collaborations supported by the HR-XML Recruiting specification:

- **Recruiting System.** A system or service that provides capabilities such as hiring workflow management, position requisition creation and management, candidate intake and application portal services, applicant tracking, decision support, and integration services with external service providers. These systems most commonly are referred to as an "Applicant Tracking System". The system can be a module within a broader ERP suite or talent management system.
- **Contract Recruiter.** This is a party that will search for candidates to fill positions on behalf of a client employer. Contract recruiters sometimes are referred to as "headhunters".
- **Job Board.** Refers to a wide variety of web sites that offer job advertising for employers and job search services for job seekers. In regards to interactions with other roles during the screening process, the job board acts as a requester to the Wholesaler, Retailer and Aggregator. Not typically part of the CRA since they only store the status of the screening order.
- **Recruiting Process Outsourcer.** This is a full-service provider of recruitment services that functions as a resource for recruiting needs just as an internally operated recruiting function would. A Recruiting Process Outsourcer (RPO) usually has recruitment professionals as part of its offering as well as a hosted applicant tracking system.
- **Staffing Supplier.** A staffing supplier or "staffing agency" identifies and provides human resources to fill service requirements defined by a customer organization. Staffing companies typically maintain an employment relationship with the resources supplied to the customer. Typically, customers turn to staffing agencies to fill project-based, temporary, or so-called "contingent" staffing needs. Some customers also may use a resource's assignment under a staffing arrangement to evaluate the resource's fit for direct employment within the customer organization. Staffing suppliers typically assume legal and payroll tax obligations with respect to the resource whereas the customer merely pays the supplier a set rate (and possibly expenses) to the staffing supplier.
- **Resume Parser.** A resume parser is a tool that lexically parses and extracts information from resumes formatted in MS Word, HTML, PDF, or plain text. HR-XML is a common target format for resume parsers. Typically, a resume parsing web service takes a request with binary content embedded as binary64 data and returns a response formatted as an HR-XML Candidate document.

## Supported Processes

The diagram below shows the HR-XML PositionOpening and Candidate specifications used in the context of a typical recruiting scenario. Many other possible scenarios can be flexibly supported. Additional profiles may be developed to support specific processes. For example, a profile on using HR-XML's Candidate schema within resume parsing processes.



## Position Opening

### Overview

The PositionOpening noun is used to convey information about a position that an employer is seeking to fill. It is commonly used to communicate information to a job board or other provider offering job advertising or recruitment services.

The PositionOpening noun is capable of communicating formatted (e.g., text, HTML) position announcements as well as richly fielded descriptions that might facilitate matching processes.

### Triggers / Preconditions

Examples of events that could trigger the collaboration, include:

- **Approval to Fill Position.** Supervisory approvals often are required before a hiring manager and / or HR personnel may begin sourcing candidates (for example, posting a position opening). Hiring processes vary considerably. This approval may occur at the time the underlying budget for the position is approved or this may be a separate step that occurs after budgetary approval.
- **Termination of Position Incumbent.** The termination of someone in a budget position triggers a wide variety of exit processes (exit interviews, de-provisioning of systems, collection of access cards and employer property, etc.) and also usually triggers a requisition to fill the position left open.
- **Succession Planning.** Succession planning is the process of identifying, assessing, and developing suitable employees to fill key positions or forecasted resource needs. Succession planning can result in a number of near-term, mid-term, and long-term outcomes. For example, in the near-to-mid term, such planning might result in the creation of developmental plans for specific employees or a class of employees. Transfers, promotions, the approval of new positions and the creation and refinement of position competency models also are other possible outcomes from succession planning.

## Overview

HR-XML's Candidate noun enables communication of a rich set of information about a prospective employee or human resource. Candidate is a key entity used within many recruiting processes and relied upon by multiple trading partners in the course of the recruitment lifecycle. For example, a resume parsing service may receive an unstructured source of candidate information (a word processing or .pdf file, for example) and return information extracted and formatted using the Candidate noun. That Candidate document may in turn be submitted to a job board or to an employer job portal connected to an applicant tracking system. As each exchange takes place, additional information may be collected or value added. For example, a job board might give a candidate an opportunity to add and enhance profile information that was initially extracted from a resume. That job board might use the Candidate document to submit the prospective resource to an employer's applicant tracking system where the results of interviews, assessments, and screenings may further enrich and expand candidate data.

This document broadly describes how the HR-XML Candidate document is used. However, there are many possible contexts. Separate profiles may be developed for specific applications. For example, a resume parsing profile might set out constraints and patterns applicable to resume parsing operations.

## Triggers / Preconditions

The Candidate document is related to a wide variety of recruiting processes, some of which include:

- **Candidate Submission.** This occurs when a third-party recruiter ("head hunter") or staffing supplier submits a candidate to a client or other organization seeking to fill a resource need.
- **Candidate Application.** A candidate or job seeker applies for a job. The legal definition as to what constitutes job application varies by jurisdiction, but broadly speaking, application is recognized as occurring when: 1. the employer has acted to fill a particular position, 2. the individual has followed the employer's standard procedures for submitting applications, and 3. the individual has indicated an interest in the particular position.
- **Professional Profile Update.** As individuals change employers, move to new positions within their current employer, change contact information, or experience other changes relevant to their professional status, availability, interests, skills, etc., they may update their resume, CV, or other professional profile. This may be a document controlled by the individual or a profile hosted by a career, social networking, or other site. It might even be hosted on a site specific or internal to the individual's current employer.
- **Resume Information Extraction.** Resume information extraction or "resume parsing" are terms used to describe the lexical parsing of, and extraction of information from, resumes formatted in MS Word, HTML, PDF, or plain text. HR-XML is a common target format for resume parsers. Typically, a resume parsing web service takes a request with binary content embedded as binary64 data and returns a response formatted as an HR-XML Candidate document. Resume



parsing can take place at various stages within a recruitment process, but a common point at which parsing takes place is when a candidate first applies for a job and uploads a resume which is transparently parsed. The parsing results are used to pre-populate the application form.



### Overview

HR-XML's SearchDocument noun provides a way for one system, such as an ATS, to request matching candidates for a query against another system, such as a Job Board or a Resume Bank. This schema would allow a more programmatic and tighter integration between these systems and to facilitate data exchange. This workflow allows review of the results in the ATS and then requesting specific candidate details from the Job Board or Resume Bank.

This document broadly describes how the HR-XML SearchDocument document is used.

### Trigger / Preconditions

The following recruiting events may trigger a search process. Note that the SearchDocument is not limited to recruiting.

**Approval to Fill Position.** Supervisory approvals often are required before a hiring manager and / or HR personnel may begin sourcing candidates (for example, posting a position opening). Hiring processes vary considerably. This approval may occur at the time the underlying budget for the position is approved or this may be a separate step that occurs after budgetary approval.

**Project Commencement.** The commencement of a new project or anticipation of a project start can trigger the need to bring on board new resources - direct hires and/or temporary staff sourced through a staffing supplier. These projects might be relatively long lived (months or years) or in some cases very brief (an event of hours or days).

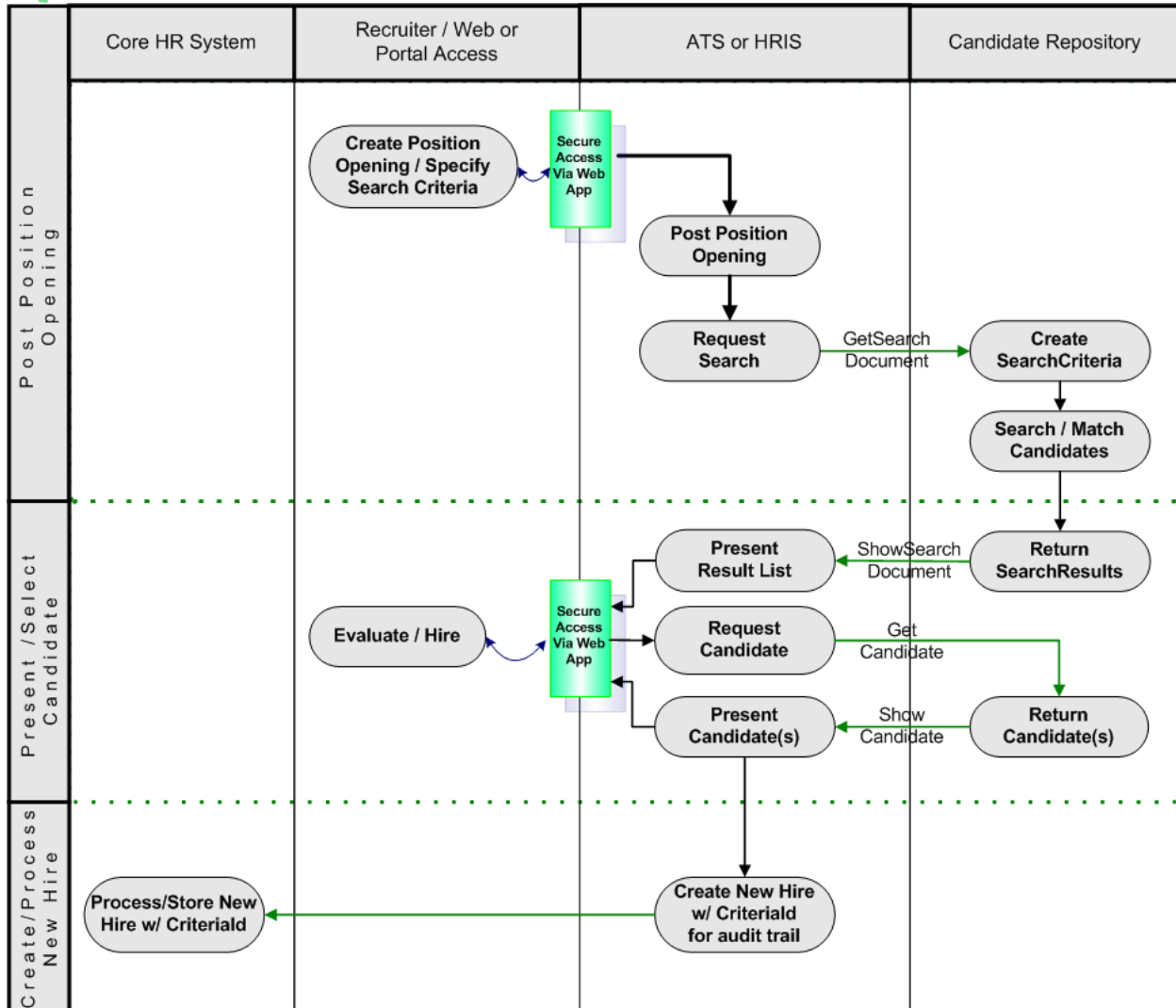
**Position Termination.** When a position is eliminated or a person is terminated from a position, the person may seek other employment. This may initiate a job search through company provided outplacement, individual search, or through a recruiter/headhunter.

### Supported Processes

#### Recruiter Searches for Candidates

An Applicant Tracking System (ATS) has implemented an integration with Candidate Repository (i.e. Job Board X) for launching a candidate search against a Position Opening.

In this scenario, recruiter activities (through search criteria and search results) are exchanged and stored by both systems. Alternatively, the recruiter may or may not have submitted a PositionOpening but simply submitted some search criteria (ad hoc search).



The scenario steps are as follows:

1. Recruiter creates Position Opening in the ATS
2. ATS launches search in Job Board by passing in required search criteria.
3. A search of the Job Board is executed.
4. Search results containing ranking results, candidate identifiers and candidate summary information are returned to the ATS.
5. The recruiter reviews the matching results and requests specific candidate details back from the Job Board.
6. Job Board returns requested Candidates
7. The recruiter reviews the candidates and the matching results.
8. Later, Recruiter accepts one or more candidates to move onto further steps of the recruiting process. Originating SearchResult and SearchCriteria are referenced.

### **Alternate Scenarios**

The SearchDocument noun is general and it could be used in other scenarios that search a separate system and return matching result list. An alternative use case would be a candidate searching for a position using a job matching service. The candidate gets a list of positions back from the job matching service and then decides to apply for specific position openings.

## Appendix A: Examples

Examples for each of these components can be found in the Instances folder.

### Position Opening

*ProcessPositionOpening-Example-1.xml*

*ProcessPositionOpening-Example-2.xml*

*ProcessPositionOpening-Example-3.xml*

*ProcessPositionOpening-Example-4.xml*

*ProcessPositionOpening-Example-5.xml*

*PositionOpening-Example-1.xml*

### Candidate

*ProcessCandidate-Example-1.xml*

*ProcessCandidate-Example-2.xml*

*ProcessCandidate-Example-3.xml*

*CandidateEuropass-Example-1.xml*

*CandidateEuropass-Example-2.xml*

*Candidate-Example-1.xml*

### Search Document

The following four examples describe the process where a Recruiter searches for a Candidate based on specific criteria. GetSearchDocument requests the first 100 records which meet the search criteria. The returned ShowSearchDocument includes the original search criteria, which may be stored for OFCCP compliance (US). The subsequent Get requests additional information on one of the Candidates.

*GetSearchDocumentCandidate-Example-1.xml*

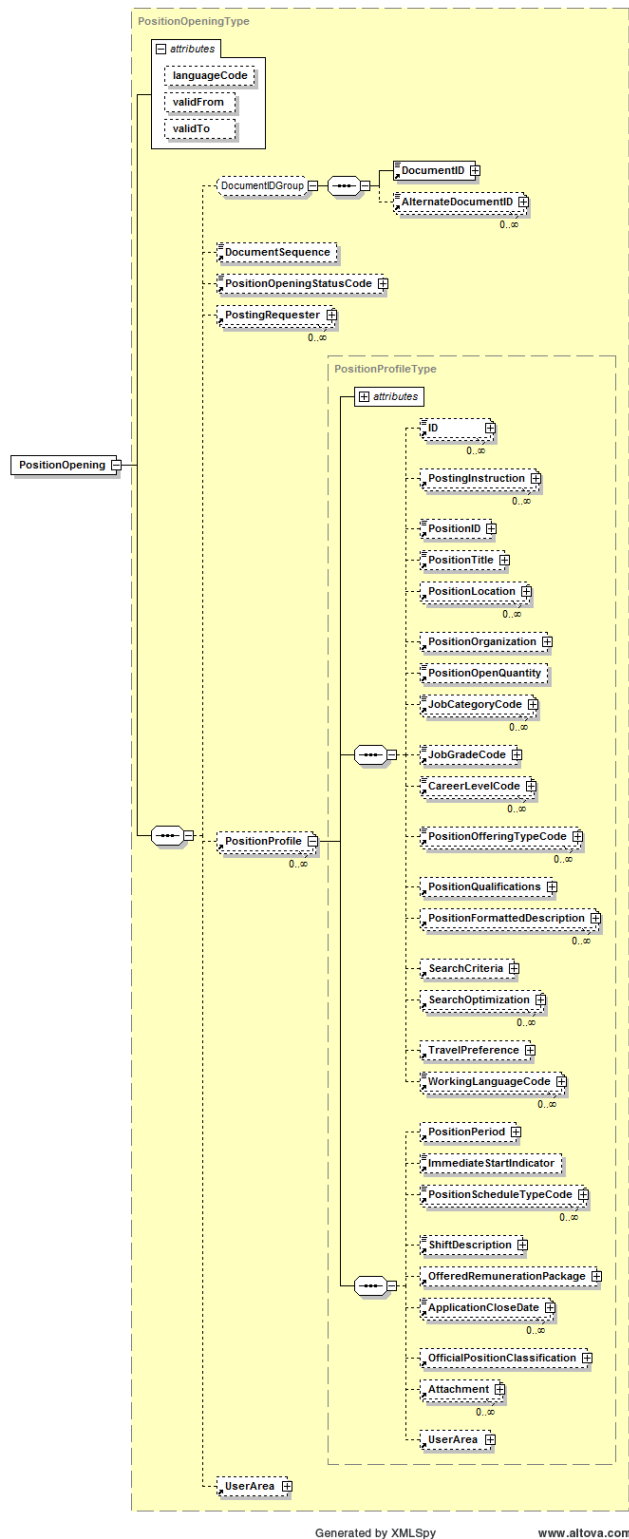
*ShowSearchDocumentCandidate-Example-1.xml*

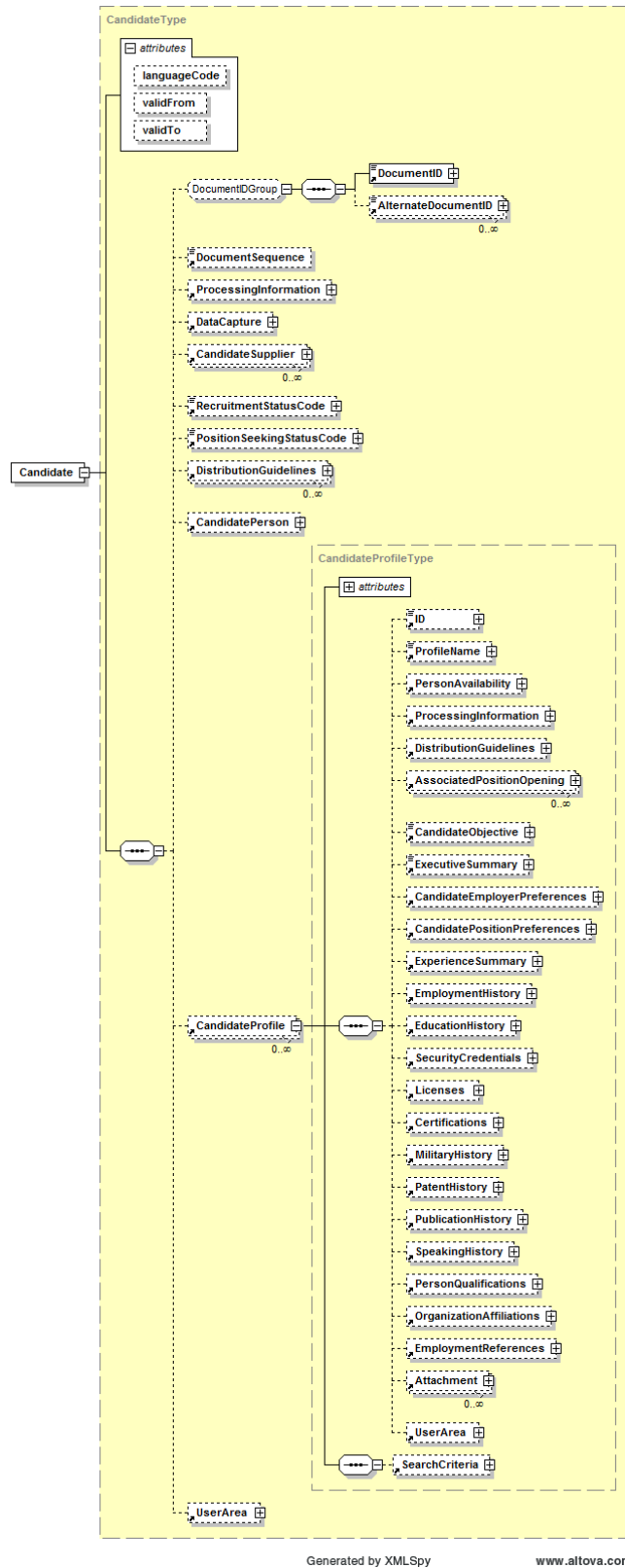
*GetCandidate-Example-1.xml*

*ShowCandidate-Example-1.xml*

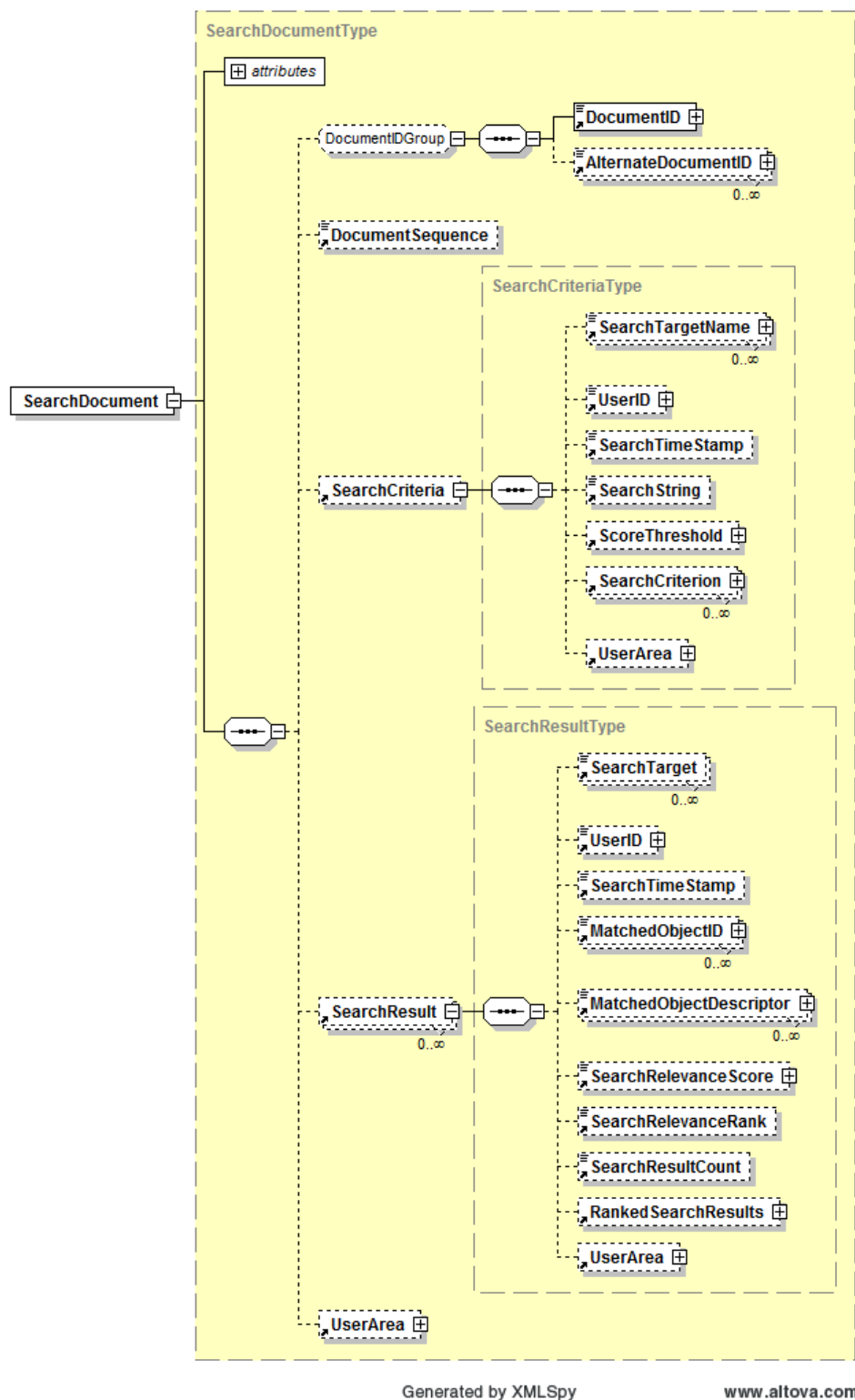
## Appendix B: Noun Layouts

### Position Opening





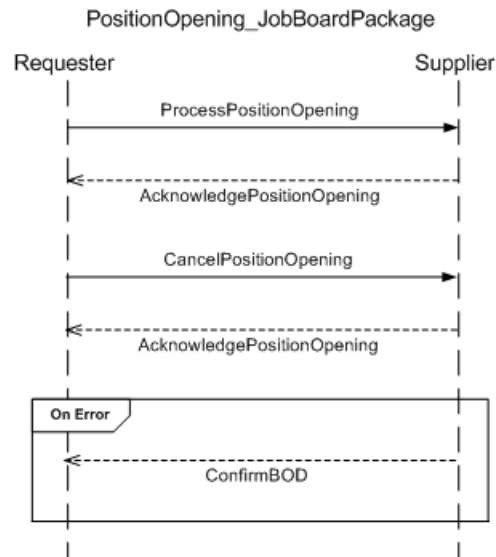
## Search Document



## Appendix C: Business Object Document Diagrams

### Position Opening

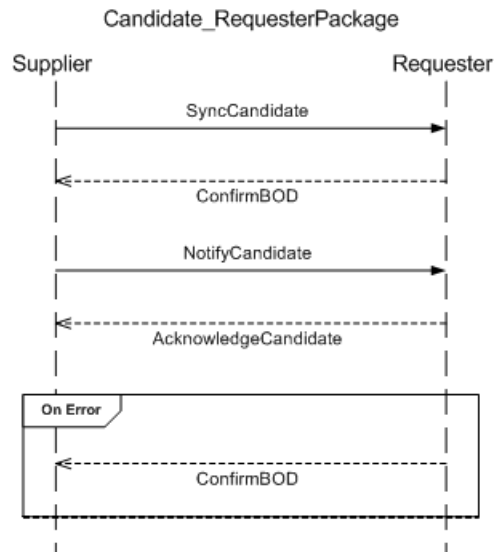
A service that a job board or similar system would host to handle requests relating to the processing of position openings.



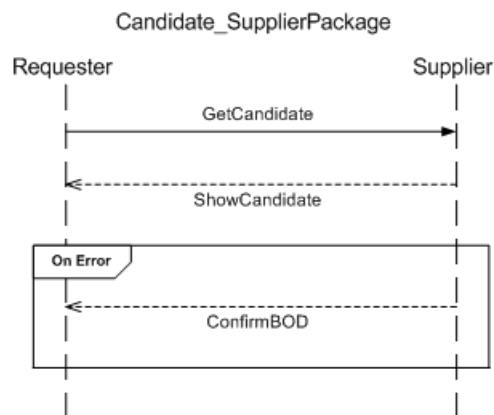


## Candidate

A service that an applicant tracking system or recruiting system would host to handle "Sync" and "Notify" operations with a candidate supplier, such as a job board.



A service that a job board or other candidate source would host to handle "read" requests for candidate data.



## Search Document

A service that a job board or other candidate source would host to handle "Get" and "Show" requests for candidate data.

SearchCandidate\_RequesterPackage

