# AtlasMap

The AtlasMap Team

Version 1.31-SNAPSHOT, 2017-10-12

# AtlasMap

1.	Introduction	2
2.	Terminology	3
3.	User Guide	5
	3.1. Prerequisites	5
	3.2. Maven Instructions	5
4.	Release Notes	6
	4.1. 2.0.0 Release	6

© 2017 The original authors.

# Chapter 1. Introduction

This is the AtlasMap documentation. Please standby, more to come soon.

## **Chapter 2. Terminology**

### AtlasMap terminology

Term	Definition	Example
AtlasMapping	The top-level mapping file containing the mapping instructions to execute at runtime	atlasmapping.xml, atlasmapping.json
Audit	An Audit is informational tracing data captured runtime execution in order to provide user feedback	Useful during testing cycles, or when user does not have direct access to the runtime logs
Collection	A data type used in conversion that repeats 0 or more times	Used to process Arrays and Lists
Data Source	The definition of an input or output data format within an AtlasMapping file	atlas:java, atlas:json, atlas:xml, etc
Field	The base type used to describe a data value used in a Mapping	JavaField, JsonField, XmlField, etc
Field Action	A function to perform on a given value of an input or output field	CurrentDate, Trim, SubString, etc
Field Type	Normalized convention to describe the type of data expected within the value of a field	String, Integer, Long, Number, Date Time, etc
Lookup Table	A cross reference table used at runtime to define a data conversion that varies based on the value of the input field	Used for mapping enumerations
Mapping	A grouping of input Field(s), output Field(s) and optionally Field Action(s) that defines the conversion to be performed at runtime within an AtlasMapping file	JavaField → JsonField, XmlField → JsonField + Uppercase, etc
Mapping Type	The specific type of conversion that should be performed at runtime	Map, Combine, Separate, Collection or Lookup
Validation	A Validation is a syntax check of a provide mapping file to ensure execution may proceeed	Useful during testing cycles, and at runtime to avoid complicated and misleading exception stack traces

#### AtlasMap Data Format terminology

Term	Definition	Example
Boxed Primitive	A type of primitive that have a 'null' value	Integer, Long, Boolean, etc
(Unboxed) Primitive	A type of primitive that cannot be 'null' and generally has a default initialized value	int, long, boolean, etc

Term	Definition	Example
Rooted	JSON documents that have a parent node identifying to contents of the JSON document	{ "Contact": { "firstName": "Yu", "lastName": "Darvish" } }
Unrooted	JSON documents that do not have a parent node identifying the contents of the JSON document	{ "firstName": "Yu", "lastName": "Darvish" }
Qualified	Xml elements and/or attributes that contain the namespace prefix	<ns1:contact <br="" ns1:firstname="Yu">ns1:lastName="Darvish" /&gt;</ns1:contact>
Unqualified	Xml elements and/or attributes that do not contain the namespace prefix	<contact <br="" firstname="Yu">lastName="Darvish" /&gt;</contact>

## Chapter 3. User Guide

The User Guide documents how programmers will use AtlasMap within their code projects.

## 3.1. Prerequisites

- Required: Java 1.8.0u91
- Recommended: Java 1.8.0u131 (especially for running within a container)

#### 3.2. Maven Instructions

Add the AtlasMap core runtime to the pom.xml

## **Chapter 4. Release Notes**

### 4.1. 2.0.0 Release

- All new modular runtime
- Supported data formats: Java, Json and Xml
- Support for auto-type detection
- Support for auto-type conversion
- Support for Field Actions
- Support for design-time and runtime mapping file Validation rules
- Support for tracking runtime Audits useful for design-time feedback
- Design Time: Support service
- Design Time: Java class inspection service
- Design Time: Xml Schema and Xml instance inspection service
- Design Time: Json instance inspection service