AtlasMap

The AtlasMap Team

Version 1.34-SNAPSHOT, 2018-04-05

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" /></ns1:contact> |
| Unqualified | Xml elements and/or attributes that do not contain the namespace prefix | <contact <br="" firstname="Yu">lastName="Darvish" /></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