# Schema

|  |  |
|---|---|
| title: | JADN Syntax |
| module: | oasis-open.org/openc2/v1.0/jadn |
| version: | 1.0 wd01 |
| description: | Syntax of a JSON Abstract Schema Notation (JADN) module. |
| exports: | Schema |

## 3.2 Structure Types

### 3.2.1 Schema

Definition of a JADN file

#### Schema (Record)

| ID | Name | Type | # | Description |
|---|---|---|---|---|
| 1 | meta | Meta | 1 | Information about the schema module |
| 2 | types | Type | 1..n | Type definitions |

### 3.2.2 Meta

Meta-information about this schema

#### Meta (Map)

| ID | Name | Type | # | Description |
|---|---|---|---|---|
| 1 | module | Uname | 1 | Module unique name |
| 2 | title | String | 0..1 | Title |
| 3 | version | String | 0..1 | Module version |
| 4 | description | String | 0..1 | Description |
| 5 | imports | Import | 0..n | Imported modules |
| 6 | exports | String | 0..n | Exported datatype names |

### 3.2.3 Import

Imported module id and unique name

#### Import (Array)

| ID | Type | # | Description |
|---|---|---|---|
| 1 | Nsid | 1 | Local ID used within this module to refer to the imported module |
| 2 | Uname | 1 | Unique name of imported module |

### 3.2.4 Type

#### Type (Array)

| ID | Type | # | Description |
|---|---|---|---|
| 1 | Identifier | 1 | Name of this datatype |
| 2 | JADN-Type | 1 | Base type |
| 3 | Option | 1..n | Type options |

| ID | Type | # | Description |
|---|---|---|---|
| 4 | String | 1 | Type description |
| 5 | JADN-Type | 1..n | List of fields (for compound types) |

### 3.2.5 JADN-Type

JADN-Type (Choice)

| ID | Name | Type | Description |
|---|---|---|---|
| 1 | Binary | Null | Octet sequence |
| 2 | Boolean | Null | True or False |
| 3 | Integer | Null | Whole number |
| 4 | Number | Null | Real number |
| 5 | Null | Null | Nothing |
| 6 | String | Null | Character sequence |
| 7 | Array | FullField | Ordered list of fields |
| 8 | ArrayOf | Null | Ordered list of fields of a specified type |
| 9 | Choice | FullField | One of a set of named fields |
| 10 | Enumerated | EnumField | One of a set of id:name pairs |
| 11 | Map | FullField | Unordered set of named fields |
| 12 | Record | FullField | Ordered list of named fields |

### 3.2.6 EnumField

Item definition for Enumerated types

EnumField (Array)

| ID | Type | # | Description |
|---|---|---|---|
| 1 | Integer | 1 | Item ID |
| 2 | String | 1 | Item name |
| 3 | String | 1 | Item description |

### 3.2.7 FullField

Field definition for other compound types

FullField (Array)

| ID | Type | # | Description |
|---|---|---|---|
| 1 | Integer | 1 | Field ID or ordinal position |
| 2 | Identifier | 1 | Field name |
| 3 | Identifier | 1 | Field type |
| 4 | Option | 0..n | Field options |
| 5 | String | 1 | Field description |

## 3.3 Primitive Types

| Name | Type | Description |
|---|---|---|
| Identifier | String | A string starting with an alpha char followed by zero or more alphanumeric / underscore / dash chars |
| Nsid | String | Namespace ID – a short identifier |
| Uname | String | Unique name of imported module |
| Option | String | Option string: 1st char = option id |