Schema

title: JADN Syntax
module: oasis-open.org/openc2/jadn/v1.0
patch: 0-csdpr02
description: Syntax of a JSON Abstract Data Notation (JADN) module.
exports: Schema, Uname

Schema (Record)

ID	Name	Type	#	Description
1	meta	Meta	1	Information about this schema module
2	types	Type	1..n	Types defined in this schema module

Meta (Map)

ID	Name	Type	#	Description
1	module	Uname	1	Schema unique name/version
2	patch	String	0..1	Patch version
3	title	String	0..1	Title
4	description	String	0..1	Description
5	imports	Import	0..n	Imported schema modules
6	exports	Identifier	0..n	Data types exported by this module
7	bounds	Bounds	0..1	Schema-wide upper bounds

Import (Array)

ID	Type	#	Description
1	Nsid	1	nsid -- A short local identifier (namespace id) used within this module to refer to the imported module
2	Uname	1	uname -- Unique name of imported module

Bounds (Array)

ID	Type	#	Description
1	Integer	1	max_msg -- Maximum serialized message size in octets or characters
2	Integer	1	max_str -- Maximum string length in characters
3	Integer	1	max_bin -- Maximum binary length in octets
4	Integer	1	max_fields -- Maximum number of elements in ArrayOf

Type (Array)

ID	Type	#	Description
1	Identifier	1	tname -- Name of this datatype
2	Enumerated.*	1	btype -- Base type. Enumerated value derived from list of JADN data types
3	Options	1	opts -- Type options
4	String	1	desc -- Description of this data type
5	JADN-Type	0..n	fields -- List of fields for compound types. Not present for primitive types

JADN-Type (Choice)

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

EnumField (Array)

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

FullField (Array)

ID	Type	#	Description
1	Integer	1	Field ID or ordinal position
2	Identifier	1	Field name
3	Identifier	1	Field type
4	Options	1	Field options
5	String	1	Field description

Identifier

Type Name	Base Type	Description
Identifier	String [0..32]	A string starting with an alpha char followed by zero or more alphanumeric / underscore / dash chars

Nsid

Type Name	Base Type	Description
Nsid	String [1..8]	Namespace ID – a short identifier

Uname

Type Name	Base Type	Description
Uname	String [1..100]	Unique name (e.g., of a schema) – typically a set of Identifiers separated by forward slashes

Options

Type Name	Base Type	Description
Options	ArrayOf(Option) [0..10]	Options list may be empty but may not be omitted

Option

Type Name	Base Type	Description
Option	String [1..100]	Option string: 1st char = option id