

Construct	Description	Syntax element	Type of \$value
Smart contract			
✘ SCDL version	Version of SCDL used; in this paper the version is 1.0	scdl_version : \$value	String
✘ Name	Expressive name of contract	name : \$value	String
✘ Contract version	Version of smart contract	version : \$value	String
□ URL latest version	Optional URL to latest descriptor	latest_URL: \$value	URL
□ Description	Free text description of contract	description : \$value	String
✘ Author	Developer name of contract	author : \$value	String
✘ Creation date	Date the descriptor was created	created_on : \$value	Date
□ Update date	Date the descriptor was updated	updated_on : \$value	Date
□ Lifecycle	Lifecycle state of contract	lifecycle : \$value	"ready" "destroyed"
□ SCL address	SCL address of possible smart contract gateway	scl : \$value	SCL address, see Section 3
✘ Blockchain type	Name of the blockchain platform	blockchain_type : \$value	"ethereum" "bitcoin" "fabric" "neo"
✘ Blockchain version	Version of the blockchain platform the contract runs on	blockchain_version : \$value	String
✘ Blockchain-internal address	Blockchain-internal address of smart contract, e.g., Ethereum accout	internal_address : \$value	String
□ Metadata link	Link to external metadata of contract, if available	metadata : \$value	URL
□ Code hash	SHA256 hash of contract code	hash : \$value	String
✘ State	Tells if the contract maintains internal state of not	is_stateful : \$value	Boolean
✘ Functions	List of functions provided by contract	functions : [Function, Function,...]	Array of Function
□ Events	List of events generated by contract	events : [Event, Event,...]	Array of Event
Function			
✘ Name	Contract-wide unique name of function	name : \$value	String
□ Description	Free text description of function	description : \$value	String
✘ Scope	Visibility of function	scope : \$value	"public" "private" "internal" "external"
✘ Side-effect	Tells whether the function as side-effects on state or not	has_side_effects : \$value	Boolean
□ Dispatcher	Name of dispatcher function to use for function invocation	dispatcher : \$value	String
□ Input parameters	List of input parameters	inputs : [Parameter, Parameter,...]	Array of Parameter
□ Output parameters	List of output parameters	outputs : [Parameter, Parameter,...]	Array of Parameter
□ Events generated	List of names of events generated by function	events : [String, String,...]	Array of String
Event			
✘ Name	Contract-wide unique event name	name : \$value	String
□ Description	Free text description of event	description : \$value	String
✘ Output parameters	List of output parameters	outputs : [Parameter, Parameter,...]	Array of Parameter
Parameter			
✘ Name	Unique parameter name	name : \$value	String
✘ Abstract type	Abstract, blockchain-independent data type of parameter	abs_type : \$value	String
□ Native type	Contract's programming language-native data type of parameter	nat_type : \$value	String
□ Index	Tells if parameter is indexed and therefore searchable	is_indexed : \$value	Boolean
✘ Mandatory element	□ Optional element		