

Key Attributes

- A. Interoperability
- B. Verifiable
- C. Secure (Tamper-proof)
- D. Scalable

Presentation

Two modes of presentation shall be made available to the document bearers

1. [QR code](#)
 - a. The QR code shall contain the following components:
 - i. A link to fetch the HealthCert
 - ii. Decryption key to decrypt HealthCert payload
 - iii. URL to perform verification of HealthCert
 - iv. Encryption shall be based performed using [oa-encrypt](#)
 - b. QR code shall be readable by any standard QR code reader (non-proprietary formatting)
2. Rendering of document on a Mobile App
Refer [here](#) for details.

Verification

The verifier shall attest the following datasets

1. ISSUER_IDENTITY

Checks and returns the identity of the issuer. Verify the identity of the issuer against a decentralised identity provider (ie DID, DNS, etc) or some centrally managed identity registry.

2. DOCUMENT_INTEGRITY

Checks the integrity of the document by digesting the content of the OA document and comparing it with the document's targetHash

3. DOCUMENT_STATUS

Checks that the document has been issued and that its issuance status is in good standing. Verify the issuance status against a record maintained externally, ie Records on a Blockchain or API endpoints.

Appendix A - Schema

```
{
  "id": "TEST001",
  "name": "HealthCert",
  "$template": {
    "name": "HealthCert_v1.0",
    "type": "EMBEDDED_RENDERER",
    "url": "https://render.openattestation.io"
  },
  "issuers": [
    {
      "name": "IssuerCompanyName",
      "documentStore": "0x0B209E53aaae5E9744d70509b74d66358df0bb27",
      "network": "ETHEREUM",
      "identityProof": {
        "type": "DNS-TXT",
        "location": "ropstore.openattestation.io"
      }
    }
  ],
  "fhirVersion": "4.0.1",
  "fhirBundle": {
    "resourceType": "Bundle",
    "type": "collection",
    "entry": [
      {
        "resourceType": "Patient",
        "extension": [
          {
            "url": "http://hl7.org/fhir/StructureDefinition/patient-nationality",
            "code": {
              "text": "SG"
            }
          }
        ]
      }
    ],
    "identifier": [
      {
        "type": "PPN",
        "value": "E7831177G"
      },
      {
        "type": {
          "text": "NRIC"
        },
        "value": "S9098989Z"
      }
    ]
  }
}
```

```
    ],
    "name": [
      {
        "text": "Tan Chen Chen"
      }
    ],
    "gender": "female",
    "birthDate": "1990-01-15"
  },
  {
    "resourceType": "Specimen",
    "type": {
      "coding": [
        {
          "system": "http://snomed.info/sct",
          "code": "258500001",
          "display": "Nasopharyngeal swab"
        }
      ]
    }
  },
  {
    "collection": {
      "collectedDateTime": "2020-09-27T06:15:00Z"
    }
  },
  {
    "resourceType": "Observation",
    "identifier": [
      {
        "value": "123456789",
        "type": "ACSN"
      }
    ],
    "code": {
      "coding": [
        {
          "system": "http://loinc.org",
          "code": "94531-1",
          "display": "Reverse transcription polymerase chain reaction (rRT-PCR)"
        }
      ]
    }
  },
  {
    "valueCodeableConcept": {
      "coding": [
        {
          "system": "http://snomed.info/sct",
          "code": "260385009",
          "display": "Negative"
        }
      ]
    }
  }
]
```

test"

```
    }
  ]
},
"effectiveDateTime": "2020-09-28T06:15:00Z",
"status": "final",
"performer": {
  "name": [
    {
      "text": "Dr Michael Lim"
    }
  ]
},
"qualification": [
  {
    "identifier": "MCR 123214",
    "issuer": "MOH"
  }
]
},
{
  "resourceType": "Organization",
  "name": "MacRitchie Medical Clinic",
  "type": "Licensed Healthcare Provider",
  "endpoint": {
    "address": "https://www.macritchieclinic.com.sg"
  },
  "contact": {
    "telecom": [
      {
        "system": "phone",
        "value": "+6563113111"
      }
    ],
    "address": {
      "type": "work",
      "use": "physical",
      "text": "MacRitchie Hospital Thomson Road Singapore 123000"
    }
  }
},
{
  "resourceType": "Organization",
  "name": "MacRitchie Laboratory",
  "type": "Accredited Laboratory",
  "contact": {
    "telecom": [
      {
        "system": "phone",
```

```
        "value": "+6562711188"  
      }  
    ],  
    "address": {  
      "type": "work",  
      "use": "physical",  
      "text": "2 Thomson Avenue 4 Singapore 098888"  
    }  
  }  
} ]  
}  
}
```