



TRUST
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FOUNDATION

Semantic Domain *(ISWG-S)* Weekly Meeting

12 January 2021

 THE **LINUX** FOUNDATION

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- › If you or your employer are not a member, we ask that you not participate in meetings by verbal contribution or otherwise take any action beyond observing.

Agenda

- › 1. Welcome (Paul—2.5 mins)
- › 2. Newcomer Introductions (Paul—2.5 mins)
- › 3. Task Force Updates (WG—5 mins)
- › 4. New group: *Inputs Domain Group* (Paul/Robert—2.5 mins)
- › 5. New task force: *Storage and Portability TF* (Paul/Christoph—2.5 mins)
- › 6. Demo: *FHIR-OCA* CLI Conversion Processing (John/Mukund—20 mins)
- › 7. Concept: Key Overlay (Open discussion led by Paul—20 mins)
- › 8. Logistics and miscellaneous (Paul—5 mins)
 - › a. News from the Operations Team
 - › b. Leadership positions
 - › c. Meeting schedule

Newcomer Introductions

(30 seconds!)

1. Name
2. Location / time zone
3. Affiliation(s)
4. One-sentence summary of your interest in Semantics (or **one particular semantics-related** issue you personally want to see solved)

Task Force/Focus Group Updates

(5 mins)

- Medical Information TF (Scott)
- ✓ FHIR FG (John/Mukund)
- Notice & Consent TF (Mark)
- Privacy & Risk TF (Jan)

New group:
Inputs Domain Group
(2.5 mins)

Presented by: P.Knowles/R.Mitwicky

<https://wiki.trustoverip.org/display/HOME/Inputs+Domain+Group>

Inputs Domain Group

The mission of the *Inputs group* (ISWG-I) is to define a decentralized key management infrastructure that provides self-certifying identifier issuance underpinned by cryptographic one-way functions for Internet-scale deployment.

The scope of this sub-group is to define specifications and best practices that bring cohesion to data entry processes and other *Inputs standards* throughout the ToIP stack, whether these standards are hosted at the Linux Foundation or external to it.

<https://wiki.trustoverip.org/display/HOME/Inputs+Domain+Group>

Inputs Domain Group

Created by Paul Knowles, last modified on Dec 20, 2020

- Introduction
- Scope
- Chairs / Leads
- Core Inputs Concepts
 - Key Event Receipt Infrastructure (KERI)
- Deliverables

Introduction

Data entry is defined as the process of inputting data into a computer using devices such as a keyboard, scanner, disk, sensor, or voice. In *data entry* requires a signing key in order to establish that inputted data has come from an authenticable source. In the *Model of Identifier States* characteristics of data entry are depicted in the northern hemispherical *Inputs domain*.

Inputs domain [active] / what is put in, taken in, or operated on by any process or system

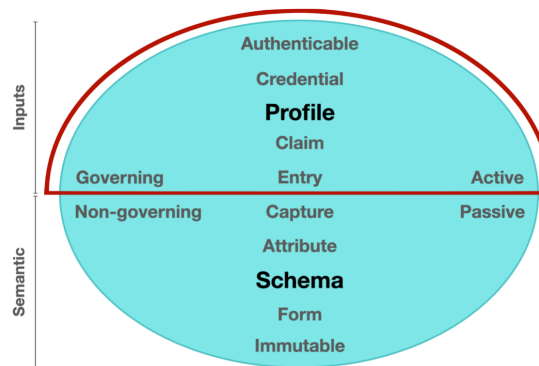


Figure 1. Model of Identifier States (Active state). A component diagram highlighting the Inputs domain within a balanced network model.

Kick-off meeting: **Wednesday, January 13th**
@ 09:00 US PT / 18.00 CET

New task force:
Storage and Portability TF
(2.5 mins)

Presented by: P.Knowles/C.Fabianek

<https://wiki.trustoverip.org/display/HOME/Storage+and+Portability+Task+Force>

Storage and Portability Task Force

The mission of the *Storage & Portability Task Force* (SPTF) is to facilitate the creation of specifications and best practices for the interoperability of decentralized storage and portability components within the context of end-to-end Dynamic Data Economy (DDE) data flows.

The scope of the SPTF will include all storage and portability component solutions (including data stores, hubs, containers and VCs) that are hosted at the Linux Foundation or external to it.

<https://wiki.trustoverip.org/display/HOME/Storage+and+Portability+Task+Force>

Storage and Portability Task Force

Created by Paul Knowles, last modified on Dec 29, 2020

Industry sector-agnostic

- Overview
- Mission and Scope
- Intellectual Property Rights (Copyright, Patent, Source Code)
- Conveners
- Chairs
- Interested Members (add your name and organization if you may be interested in joining this TF)
- Objectives
- Technical components
- Example use case
- Deliverables
- Proposed schedule
- Shared documents and links

Overview

Permanent and transient data stores will become an integral part of the [Dynamic Data Economy](#) (DDE), fostering user-cent access and safe and secure data sharing. In many instances, [Verifiable Credentials](#) (VCs) will be the payload authentication within transient containers. There will also be licensing and certification instances where VCs will be the only component payloads. With storage and portability solutions being developed within a number of open communities, there is a need to solutions are interoperable across a decentralized network.

Mission and Scope

The mission of the *Storage & Portability Task Force* (SPTF) is to facilitate the creation of specifications and best practices storage and portability components within the context of end-to-end Dynamic Data Economy (DDE) data flows. The scope portability component solutions (including data stores, hubs, containers and VCs) that are hosted at the Linux Foundation activities will include creating template Requests for Proposal (RFPs) and additional guidance to utility and service provide capacity. The SPTF may organize Focus Groups to escalate the development of certain storage and portability component the *Inputs and Semantics Working Group* (ISWG) members and in line with the overall mission of the ToIP Foundation..

Intellectual Property Rights (Copyright, Patent, Source Code)

This TF uses the same IPR licensing selections as the Inputs and Semantics WG:

- Copyright mode: [Creative Commons Attribution 4.0](#).
- Patent mode: W3C Mode (based on the [W3C Patent Policy](#)).

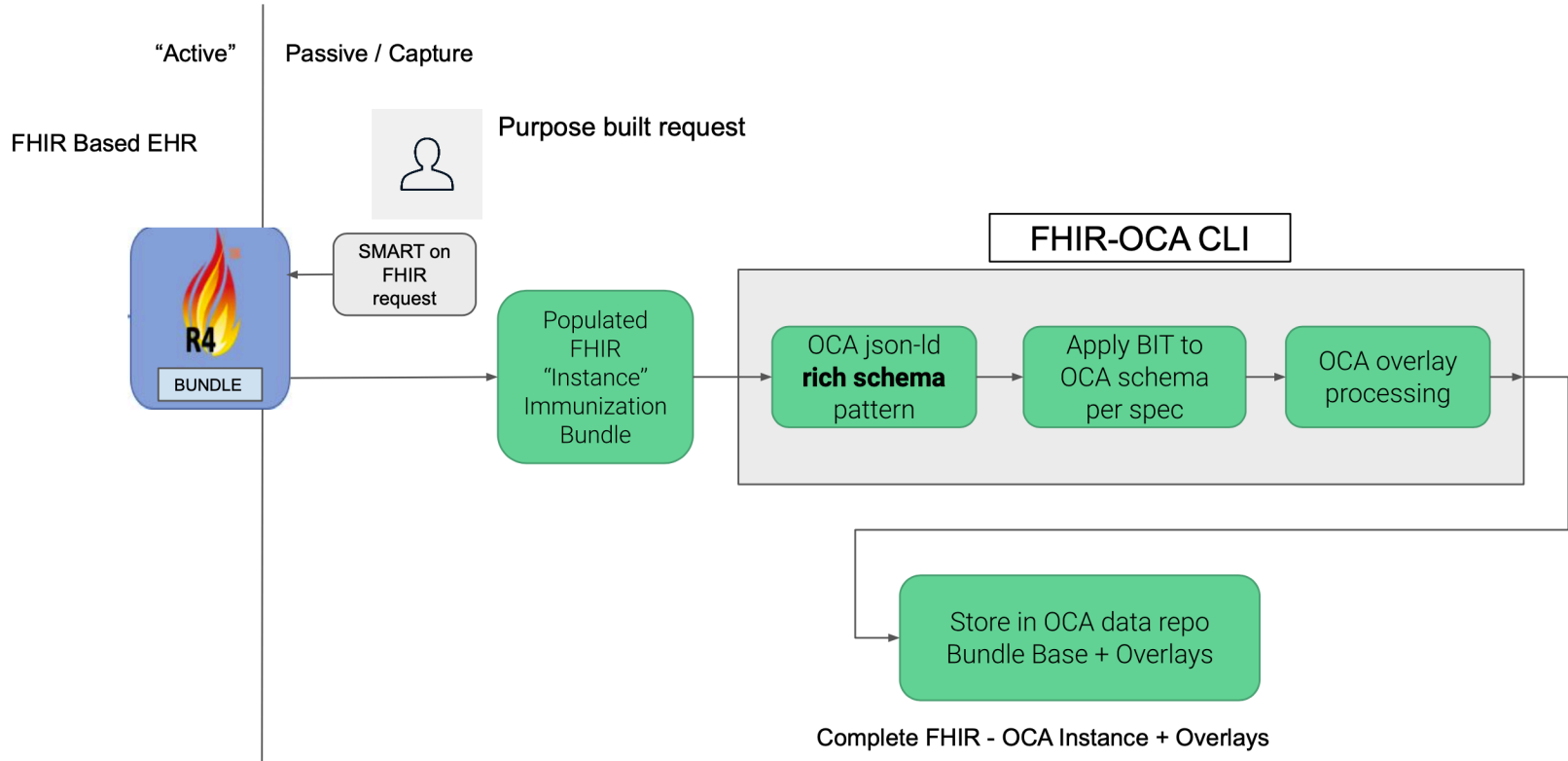
Kick-off meeting: **Monday, January 18th**
@ 09:00 US PT / 18.00 CET

Demo: *FHIR-OCA* CLI Conversion Processing (20 mins)

Presented by: J.Walker/M.Parthasarathy

<https://wiki.trustoverip.org/display/HOME/FHIR+Focus+Group>

Demo: FHIR-OCA CLI Conversion Processing



Concept: *Key Overlay* (20 mins)

Open discussion led by: P.Knowles

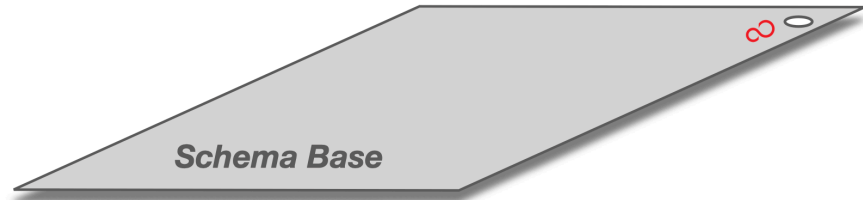
<https://oca.colossi.network>

Schema Base

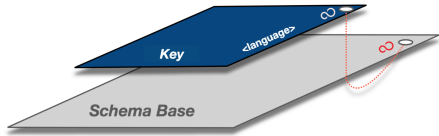
```
{
  "@context": "https://oca.tech/v1",
  "type": "spec/schema_base/1.0",
  "classification": "GICS:35202010",
  "issued_by": "did:example:ebfeb1f712ebc6f1c276e12ec21",
  "attributes": {
    "efxnizr391fc4": "string",
    "nfijh9i38ceSa": "string",
    "Mceo097d72bi1": "string",
    "Opwohq6v527vo": "string",
    "kno28gSr53nia": "dateTime",
    "93fdhj87bxzjs": "string"
  },
  "attr_blinding": [
    "efxnizr391fc4",
    "nfijh9i38ceSa",
    "Mceo097d72bi1",
    "kno28gSr53nia"
  ]
}
```

English language block and meta attribute names

PII flags



Concept: Key Overlay



Key overlays would enable true internationalisation of OCA schemas with all block and meta attribute names defined as index codes.

```
{
  "@context": "https://oca.tech/v1",
  "_100": "spec/overlay/key/1.0",
  "_101": "hl:5vLMW87oJu5wzQPDtQmD2PQ5auPBxneiMktW7Yck6hsH",
  "_102": "en-US",
  "_107": "did:example:ebfeb1f712ebc6f1c276e12ec21",
  "@key": {
    "_100": "object type",
    "_101": "schema base reference",
    "_102": "language",
    "_103": "character encoding (default)",
    "_104": "schema name",
    "_105": "schema description",
    "_106": "schema classification",
    "_107": "issued by",
    "_108": "issuer role",
    "_109": "purpose of data capture",
    "_200": "attributes",
    "_200-1": "core input type",
    "_200-2": "core storage format",
    "_201": "attribute flagging (ref. Blinding Identity Taxonomy)",
    "_202": "attribute formatting",
    "_202-1": "attribute type to be formatted",
    "_202-2": "attribute format to be formatted",
    "_203": "attribute parsing",
    "_203-1": "attribute type to be parsed",
    "_203-2": "attribute format to be parsed",
    "_204": "attribute character encoding",
    "_205": "attribute labels",
    "_206": "attribute categories",
    "_206-1": "category labels",
    "_206-2": "category attributes",
    "_207": "attribute pre-defined entries",
    "_208": "attribute information"
  }
}
```

English (United States)

```
{
  "@context": "https://oca.tech/v1",
  "_100": "spec/overlay/key/1.0",
  "_101": "hl:5vLMW87oJu5wzQPDtQmD2PQ5auPBxneiMktW7Yck6hsH",
  "_102": "zh-CN",
  "_107": "did:example:ebfeb1f712ebc6f1c276e12ec21",
  "@key": {
    "_100": "对象类型",
    "_101": "模式基础参考",
    "_102": "语言",
    "_103": "字符编码 (默认)",
    "_104": "模式名称",
    "_105": "模式描述",
    "_106": "模式分类",
    "_107": "发行人",
    "_108": "发行人角色",
    "_109": "数据采集的目的",
    "_200": "属性",
    "_200-1": "核心输入类型",
    "_200-2": "核心存储格式",
    "_201": "属性标记 (参考盲身份分类法)",
    "_202": "属性格式",
    "_202-1": "要格式化的属性类型",
    "_202-2": "要格式化的属性格式",
    "_203": "属性解析",
    "_203-1": "要解析的属性类型",
    "_203-2": "要解析的属性格式",
    "_204": "属性字符编码",
    "_205": "属性标签",
    "_206": "属性类别",
    "_206-1": "类别标签",
    "_206-2": "类别属性",
    "_207": "属性预定义条目",
    "_208": "属性信息"
  }
}
```

Chinese (PRC)

Schema Base (ref. "key overlay")

```
{
  "@context": "https://oca.tech/v1",
  "_100": "spec/schema_base/1.0",
  "_106": "GICS:35202010",
  "_107": "did:example:ebfeb1f712ebc6f1c276e12ec21",
  "_200": [
    "efxnizr39ifc4",
    "nfijh9i38ceSa",
    "Mceo097d72bi1",
    "Opwohq6v527vo",
    "kno28gSr53nia",
    "93fdhj87bxzjs"
  ],
  "_201": [
    "efxnizr39ifc4",
    "nfijh9i38ceSa",
    "Mceo097d72bi1",
    "kno28gSr53nia"
  ]
}
```

Type removed
(???)

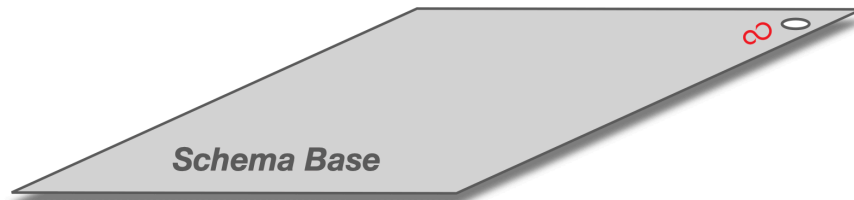
Key

English (United States)

"_100": "object type",
"_106": "schema classification",
"_107": "issued by",
"_200": "attributes",
"_201": "attribute flagging (ref. Blinding Identity Taxonomy)"

Chinese (PRC)

"_100": "对象类型",
"_106": "模式分类",
"_107": "发行人",
"_200": "属性",
"_201": "属性标记 (参考盲身份分类法)"



Meta Overlays (ref. "key overlay")

Key

English (United States)

"_100": "object type",
"_101": "schema base reference",
"_102": "language",
"_103": "character encoding (default)",
"_104": "schema name",
"_105": "schema description",
"_107": "issued by"

Chinese (PRC)

"_100": "对象类型"
"_101": "模式基础参考",
"_102": "语言",
"_103": "字符编码 (默认)",
"_104": "模式名称",
"_105": "模式描述",
"_107": "发行人"

English (United States)

```
{  
  "@context": "https://oca.tech/overlays/v1",  
  "_100": "spec/overlay/meta/1.0",  
  "_101": "h1:5vLMW87oJu5wzQPDtQmD2PQ5auPBxneiMKtW7Yck6hsH",  
  "_102": "en-US",  
  "_103": "utf-8",  
  "_104": "Demographics",  
  "_105": "Personal demographic data",  
  "_107": "did:example:ebfeb1f712ebc6f1c276e12ec21"  
}
```

Chinese (PRC)

```
{  
  "@context": "https://oca.tech/overlays/v1",  
  "_100": "spec/overlay/meta/1.0",  
  "_101": "h1:5vLMW87oJu5wzQPDtQmD2PQ5auPBxneiMKtW7Yck6hsH",  
  "_102": "zh-CN",  
  "_103": "utf-8",  
  "_104": "人口统计",  
  "_105": "个人人口统计数据",  
  "_107": "did:example:ebfeb1f712ebc6f1c276e12ec21"  
}
```

Label Overlays (ref. "key overlay")

English (United States)

Key

English (United States)

"_100": "object type",
"_101": "schema base reference",
"_102": "language",
"_107": "issued by",
"_108": "issuer role",
"_109": "purpose of data capture",
"_205": "attribute labels",
"_206": "attribute categories",
"_206-1": "category labels",
"_206-2": "category attributes"

English (United States)

"_100": "对象类型",
"_101": "模式基础参考",
"_102": "语言",
"_107": "发行人",
"_108": "发行人角色",
"_109": "数据采集的目的",
"_205": "属性标签",
"_206": "属性类别",
"_206-1": "类别标签",
"_206-2": "类别属性"

```
{
  "@context": "https://oca.tech/overlays/v1",
  "_100": "spec/overlay/label/1.0",
  "_101": "hl:5vLMW87oJu5wzQPDtQmD2PQ5auPBx",
  "_102": "en-US",
  "_107": "did:example:ebfeb1f712ebc6f1c276",
  "_108": "",
  "_109": "",
  "_205": {
    "efxnizr39ifc4": "Email",
    "nfijh9i38ceSa": "Given names",
    "Mceo097d72bi1": "Surname",
    "Opwohq6v527vo": "Preferred salutation",
    "kno28gSr53nia": "Date of birth",
    "93fdhj87bxzjs": "Sex"
  },
  "_206": [
    "_cat-1_"
  ],
  "_206-1": {
    "_cat-1_": "Personal"
  },
  "_206-2": {
    "_cat-1_": [
      "efxnizr39ifc4",
      "nfijh9i38ceSa",
      "Mceo097d72bi1",
      "Opwohq6v527vo",
      "kno28gSr53nia",
      "93fdhj87bxzjs"
    ]
  }
}
```

```
{
  "@context": "https://oca.tech/overlays/v1",
  "_100": "spec/overlay/label/1.0",
  "_101": "hl:5vLMW87oJu5wzQPDtQmD2PQ5auPBxneiMKtW7Yck6hsH",
  "_102": "zh-CN",
  "_107": "did:example:ebfeb1f712ebc6f1c276e12ec21",
  "_108": "",
  "_109": "",
  "_205": {
    "efxnizr39ifc4": "电子邮件",
    "nfijh9i38ceSa": "名",
    "Mceo097d72bi1": "姓",
    "Opwohq6v527vo": "首选称呼",
    "kno28gSr53nia": "出生日期",
    "93fdhj87bxzjs": "性别"
  },
  "_206": [
    "_cat-1_"
  ],
  "_206-1": {
    "_cat-1_": "个人"
  },
  "_206-2": {
    "_cat-1_": [
      "efxnizr39ifc4",
      "nfijh9i38ceSa",
      "Mceo097d72bi1",
      "Opwohq6v527vo",
      "kno28gSr53nia",
      "93fdhj87bxzjs"
    ]
  }
}
```

Entry Overlays (ref. "key overlay")

Key

English (United States)

"_100": "object type",
"_101": "schema base reference",
"_102": "language",
"_107": "issued by",
"_108": "issuer role",
"_109": "purpose of data capture",
"_207": "attribute pre-defined entries"

Chinese (PRC)

"_100": "对象类型"
"_101": "模式基础参考",
"_102": "语言",
"_107": "发行人",
"_108": "发行人角色",
"_109": "数据采集的目的",
"_207": "属性预定义条目"

English (United States)

```
{
  "@context": "https://oca.tech/overlays/v1",
  "_100": "spec/over",
  "_101": "h1:5vLMW8",
  "_102": "en-US",
  "_107": "did:exam",
  "_108": "",
  "_109": "",
  "_207": {
    "Opwohq6v527vo": [
      "Mr",
      "Mrs",
      "Ms",
      "Mstr"
    ],
    "93fdhj87bxzjs": [
      "Female",
      "Male"
    ]
  }
}
```

```
{
  "@context": "https://oca.tech/overlays/v1",
  "_100": "spec/overlay/entry/1.0",
  "_101": "h1:5vLMW87oJu5wzQPdtQmD2PQ5auPBxneiMKtW7Yck6hsH",
  "_102": "zh-CN",
  "_107": "did:example:ebfeb1f712ebc6f1c276e12ec21",
  "_108": "",
  "_109": "",
  "_207": {
    "Opwohq6v527vo": [
      "先生",
      "太太",
      "小姐",
      "主"
    ],
    "93fdhj87bxzjs": [
      "女",
      "男"
    ]
  }
}
```

Chinese (PRC)

Logistics and miscellaneous (5 mins)

<https://wiki.trustoverip.org/display/HOME/2021-01-12+Meeting>

News from the Operations Team

Nick Hayfack

(Inputs and Semantics WG representative on the ToIP Operations Team)

The purpose of the Operations Team is to create a small group of ToIP members who will share information on the workplans of our WGs, help ensure that draft deliverables are advancing as intended through the stages of the ToIP workflow, resolve any bottlenecks that arise around decision-making/approvals and discuss issues such as (for example) introducing firmer parameters for the creation of Taskforces under all WGs.

The Operations Team will not be directing or otherwise interfering with the development of content and deliverables in the WGs themselves.

ISWG Leadership positions

- › Inputs Group Chair
 - › **Robert Mitwicki**
- › Inputs Group Vice-chair
 - › **Sam Smith**
- › Semantics Group Chair
 - › **Paul Knowles** (*ISWG Lead*)
- › Semantics Group Vice-chair
 - › **John Wunderlich**
- › Volunteer via the meeting page at ...
 - › <https://wiki.trustoverip.org/display/HOME/2021-01-12+Meeting>

Meeting schedule

- › **Inputs Group** weekly meeting
 - › Wednesday, **January 13th** @ 09:00 US PT / 18.00 CET
 - › Zoom link: <https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMhJqL0ZQM3I3Zz>
- › **FHIR FG** bi-weekly meeting
 - › Thursday, **January 14th** @ 08:00 US PT / 17.00 CET
 - › Zoom link: <https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMhJqL0ZQM3I3Zz09>
- › **Storage & Portability TF** bi-weekly meeting
 - › Monday, **January 18th** @ 09:00 US PT / 18.00 CET
 - › Zoom link: <https://zoom.us/j/96177500988?pwd=cDVNS2JzN1YxYXhiUVprWlM0OGQxQT09>
- › **Semantics Group** weekly meeting
 - › Tuesday, **January 19th** @ 09:00 US PT / 18.00 CET
 - › Zoom link: <https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMhJqL0ZQM3I3Zz>
- › **Privacy & Risk TF** bi-weekly meeting
 - › Monday, **January 25th** @ 09:00 US PT / 18.00 CET
 - › Zoom link: <https://zoom.us/j/91264300414?pwd=RndaTGZxeUp0bWt2aUttVU1kZ1FrQT09>



Closing Q & A

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