

# 教育體系身分認證服務 IDP 介接規範

106 年 09 月 05 日 v1.0 版

109 年 01 月 30 日 v2.0 版

## 一、規格說明

本介接規範主要說明其標準欄位之規範格式、說明及使用範例，身分認證服務提供者（Identity Provider, IdP）應支援 OpenID Connect 1.0 與 OAuth 2.0 之標準規格，參考文件如下列表：

OpenID Connect 1.0	<a href="http://openid.net/specs/openid-connect-core-1_0.html">http://openid.net/specs/openid-connect-core-1_0.html</a>
OAuth 2.0	<a href="https://tools.ietf.org/html/rfc6749">https://tools.ietf.org/html/rfc6749</a>

## 二、標準欄位規範（claims, scopes）

### 1. openid (ID\_Token)

```
http://openid.net/specs/openid-connect-core-1_0.html#IDToken
```

範例：

```
{
  "sub": "f44e00d1-ce44-4513-9eb5-1ab1b4cdebd6",
  "aud": "ba3a199485df7b35c351fa6b73032863",
  "iss": "https://sso.edu.tw",
  "preferred_username": "khtesta",
  "email": "khtesta@mail.edu.tw",
  "exp": 1497844495,
  "iat": 1497840895,
  "nonce": "2uiUII93G1x3t2WXiO22nFk7KRFOhrGR_xu8xGaAY28",
  "open2_id": [
    "http://openid.kh.edu.tw/S9923779"
  ]
}
```

### 2. fullname (姓名)

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "title": "姓名",
  "description": "使用者的姓名",
  "type": "object",
  "properties": {
```

```
    "fullname": {
      "type": "string"
    },
    "required": [
      "fullname"
    ]
  }
```

範例：

```
{
  "fullname": "王小明"
}
```

### 3. email (電子郵件)

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "title": "電子郵件",
  "description": "使用者個人的教育部校園雲端電子郵件  
-(ID-Token)或備用電子郵件-(UserInfo)。",
  "type": "object",
  "properties": {
    "email": {
      "type": "string",
      "type": "array",
      "items": {
        "type": "string"
      }
    }
  },
  "required": [
    "email"
  ]
}
```

範例：

```
{
  "email": ["test@mail.edu.tw", "mymail@mail.ilc.edu.tw"]
}
```

#### 4. schoolid (單位代碼)

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "title": "單位代碼",
  "description": "教育部統計處所訂之各級學校代碼、教育部資訊及科技教育司所訂之縣市教育主管機關代碼及其縣市教育網路中心代碼。",
  "type": "object",
  "properties": {
    "schoolid": {
      "type": "string"
    },
    "comment": {
      "type": "string",
      "enum": [
        "研究所(博士班)", "研究所(碩士班)", "大學部",
        "進修部", "高中部", "國中部", "國小部", "分校", "分部"
      ]
    }
  },
  "required": [
    "schoolid"
  ]
}
```

範例：

```
{
  "schoolid": "123456"
}
```

#### 5. titles (單位職稱別)

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "title": "單位職稱別",
  "description": "使用者隸屬單位所賦予之複合職稱",
  "type": "array",
  "items": {
    "title": "單一單位職稱",
  }
}
```

```
"type": "object",
"properties": {
  "schoolid": {
    "description": "教育部學校代碼",
    "type": "string"
  },
  "titles": {
    "description": "職稱",
    "type": "array",
    "items": {
      "type": "string"
    }
  }
},
"required": [
  "schoolid",
  "titles"
]
}
```

範例：

```
[
  {
    "schoolid": "064725",
    "titles": [
      "組長",
      "教師"
    ]
  },
  {
    "schoolid": "064723",
    "titles": [
      "其他"
    ]
  }
]
```

## 6. classinfo (年級班級別)

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "title": "年級班級別",
  "description": "師生年班資訊欄位",
  "type": "array",
  "items": {
    "title": "單一年班資訊",
    "type": "object",
    "properties": {
      "schoolid": {
        "description": "教育部學校代碼",
        "type": "string"
      },
      "year": {
        "description": "學年度(3碼),長度不足者前置補0",
        "type": "string"
      },
      "semester": {
        "description": "學期(2碼),長度不足者前置補0",
        "type": "string"
      },
      "grade": {
        "description": "年級(2碼),長度不足者前置補0",
        "type": "string"
      },
      "classno": {
        "description": "班級(10碼),長度不足者前置補0",
        "type": "string"
      },
      "seatno": {
        "description": "座號(3碼),長度不足者前置補0",
        "type": "string"
      },
      "classtitle": {
        "description": "班級名稱",
        "type": "string"
      }
    }
  }
}
```

```

    },
    "required": [
        "schoolid",
        "grade",
        "classno",
        "seatno",
        "classtitle"
    ]
}
}

```

範例：

```

[
  {
    "schoolid": "064725",
    "year": "105",
    "semester": "02",
    "grade": "01",
    "classno": "0000000002",
    "seatno": "015",
    "classtitle": "電機一年乙班"
  },
  {
    "schoolid": "080308",
    "year": "105",
    "semester": "Ab12302ede02",
    "grade": "10",
    "classno": "0000000002",
    "seatno": "001",
    "classtitle": "臺大 JAVA 程式設計 B 高一孝班"
  }
]

```

## 7. relation (師生資料)

```

{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "title": "師生資料",
  "description": "師生關係資料欄位",
  "type": "array",

```

```
"items": {
  "title": "師生資料",
  "type": "object",
  "properties": {
    "schoolid": {
      "description": "教育部學校代碼",
      "type": "string"
    },
    "year": {
      "description": "學年度(3碼),長度不足者前置補0",
      "type": "string"
    },
    "semester": {
      "description": "學期(2碼),長度不足者前置補0",
      "type": "string"
    },
    "grade": {
      "description": "年級代碼(2碼),長度不足者前置補0",
      "type": "string"
    },
    "classno": {
      "description": "班級代碼(10碼),長度不足者前置補0",
      "type": "string"
    },
    "classtitle": {
      "description": "班級名稱,不得為空值",
      "type": "string"
    },
    "curriculum": {
      "description": "課程資料,不得為空值",
      "type": "array",
      "items": {
        "title": "教師授課資料",
        "type": "object",
        "properties": {
          "courseid": {
            "description": "課程代碼,不得為空值",
            "type": "string"
          }
        }
      }
    }
  }
}
```

```
    },
    "coursename": {
      "description": "課程名稱,不得為空值",
      "type": "string"
    },
    "students": {
      "description": "課程學生",
      "type": "array",
      "items": {
        "uuid": {
          "description": "學生唯一代碼",
          "type": "string"
        }
      }
    }
  },
  "required": [
    "schoolid",
    "year",
    "semester",
    "grade",
    "classno",
    "classtitle",
    "curriculum",
    "courseid",
    "coursename",
    "students",
    "uuid"
  ]
}
}
```

範例：

[



```

{
  "schoolid": "014637",
  "year": "108",
  "semester": "02",
  "grade": "05",
  "classno": "0000000003",
  "classtitle": "五年三班",
  "curriculum": [
    {
      "courseid": "nature-z-3",
      "coursename": "自然",
      "students": [
        {
          "uuid": "00112233-4455-6677-8899-aabbccddeeff"
        },
        {
          "uuid": "00112233-4455-6677-8899-aabbccddeeff"
        }
      ]
    }
  ]
},
{
  "schoolid": "014637",
  "year": "108",
  "semester": "02",
  "grade": "05",
  "classno": "0000000005",
  "classtitle": "五年五班",
  "curriculum": [
    {
      "courseid": "nature-z-4",
      "coursename": "自然",
      "students": [
        {
          "uuid": "00112233-4455-6677-8899-aabbccddeeff"
        },
        {

```

```

        "uuid": "00112233-4455-6677-8899-aabbccddeeff"
    }
]
}
]
},
{
    "schoolid": "014601",
    "year": "108",
    "semester": "02",
    "grade": "06",
    "classno": "0000000005",
    "classtitle": "六年五班",
    "curriculum": [
        {
            "courseid": "information-z-1",
            "coursename": "資訊",
            "students": [
                {
                    "uuid": "00112233-4455-6677-8899-aabbccddeeff"
                },
                {
                    "uuid": "00112233-4455-6677-8899-aabbccddeeff"
                }
            ]
        }
    ]
}
]
}
]

```

### 三、強制加密欄位 (scopes)

guid (使用者識別碼)

```

{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "title": "身分證字號 SHA256 字串",
    "description": "大寫英文字串之身分證字號經過 SHA256 編碼  
後的 16 進位大寫英文字串",
}

```

```
"type": "object",
"properties": {
  "guid": {
    "type": "string"
  }
},
"required": [
  "guid"
]
}
```

範例：

```
{
  "guid":
  "92D4FE71EAAE036FF7209B87CB36A74200DC64A1FB792BEEBFC
  DF622D838DBBF"
}
```

#### 四、客制化角色欄位規範 (scopes)

educloudroles (教育雲應用系統)

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "title": "教育雲應用系統角色別",
  "description": "使用者在教育雲應用系統上的角色 (縣市管理者、單位管理者、教師、學生、家長、其他)",
  "type": "object",
  "properties": {
    "type": "object",
    "usage": {
      "description": "用途",
      "type": "string"
    },
  },
  "roles": {
    "description": "個人角色別",
    "type": [
      "array",
      "array"
    ],
  },
}
```

```
"items": {
  "properties": {
    "appname": {
      "description": "應用系統名稱",
      "type": "string"
    },
    "schoolid": {
      "description": "教育部學校代碼",
      "type": "string"
    },
    "titles": {
      "description": "角色別",
      "items": {
        "type": "string"
      },
      "type": "array"
    }
  },
  "type": "object"
}
}
```

範例：

```
{
  "usage": "教育雲",
  "roles": [
    {
      "appname": "edumail",
      "schoolid": "553612",
      "titles": [
        "學生"
      ]
    }
  ]
}
```

五、縣市代碼表

縣市別	縣市教育 主管機關代碼	縣市教育 網路中心代碼	認證服務網址
教育部	009999	009998	<a href="https://moe.sso.edu.tw">https://moe.sso.edu.tw</a>
新北市	019999	019998	<a href="https://ntpc.sso.edu.tw">https://ntpc.sso.edu.tw</a>
宜蘭縣	029999	029998	<a href="https://ilc.sso.edu.tw">https://ilc.sso.edu.tw</a>
桃園市	039999	039998	<a href="https://tyc.sso.edu.tw">https://tyc.sso.edu.tw</a>
新竹縣	049999	049998	<a href="https://hcc.sso.edu.tw">https://hcc.sso.edu.tw</a>
苗栗縣	059999	059998	<a href="https://mlc.sso.edu.tw">https://mlc.sso.edu.tw</a>
彰化縣	079999	079998	<a href="https://chc.sso.edu.tw">https://chc.sso.edu.tw</a>
南投縣	089999	089998	<a href="https://ntct.sso.edu.tw">https://ntct.sso.edu.tw</a>
雲林縣	099999	099998	<a href="https://ylc.sso.edu.tw">https://ylc.sso.edu.tw</a>
嘉義縣	109999	109998	<a href="https://cyc.sso.edu.tw">https://cyc.sso.edu.tw</a>
屏東縣	139999	139998	<a href="https://ptc.sso.edu.tw">https://ptc.sso.edu.tw</a>
臺東縣	149999	149998	<a href="https://ttct.sso.edu.tw">https://ttct.sso.edu.tw</a>
花蓮縣	159999	159998	<a href="https://hlc.sso.edu.tw">https://hlc.sso.edu.tw</a>
澎湖縣	169999	169998	<a href="https://phc.sso.edu.tw">https://phc.sso.edu.tw</a>
基隆市	179999	179998	<a href="https://kl.sso.edu.tw">https://kl.sso.edu.tw</a>
新竹市	189999	189998	<a href="https://hc.sso.edu.tw">https://hc.sso.edu.tw</a>
嘉義市	209999	209998	<a href="https://openid.cy.edu.tw">https://openid.cy.edu.tw</a>
臺北市	309999	309998	<a href="https://tp.sso.edu.tw">https://tp.sso.edu.tw</a>
高雄市	649999	649998	<a href="https://kh.sso.edu.tw">https://kh.sso.edu.tw</a>
臺中市	669999	669998	<a href="https://tc.sso.edu.tw">https://tc.sso.edu.tw</a>
臺南市	679999	679998	<a href="https://openid.tn.edu.tw">https://openid.tn.edu.tw</a>
金門縣	719999	719998	<a href="https://oauth.km.edu.tw">https://oauth.km.edu.tw</a>
連江縣	729999	729998	<a href="https://matsu.sso.edu.tw">https://matsu.sso.edu.tw</a>