

使用 iris-fhir-client 应用程序创建患者和患者观察

Published on InterSystems Developer Community (<https://community.intersystems.com>)

文章

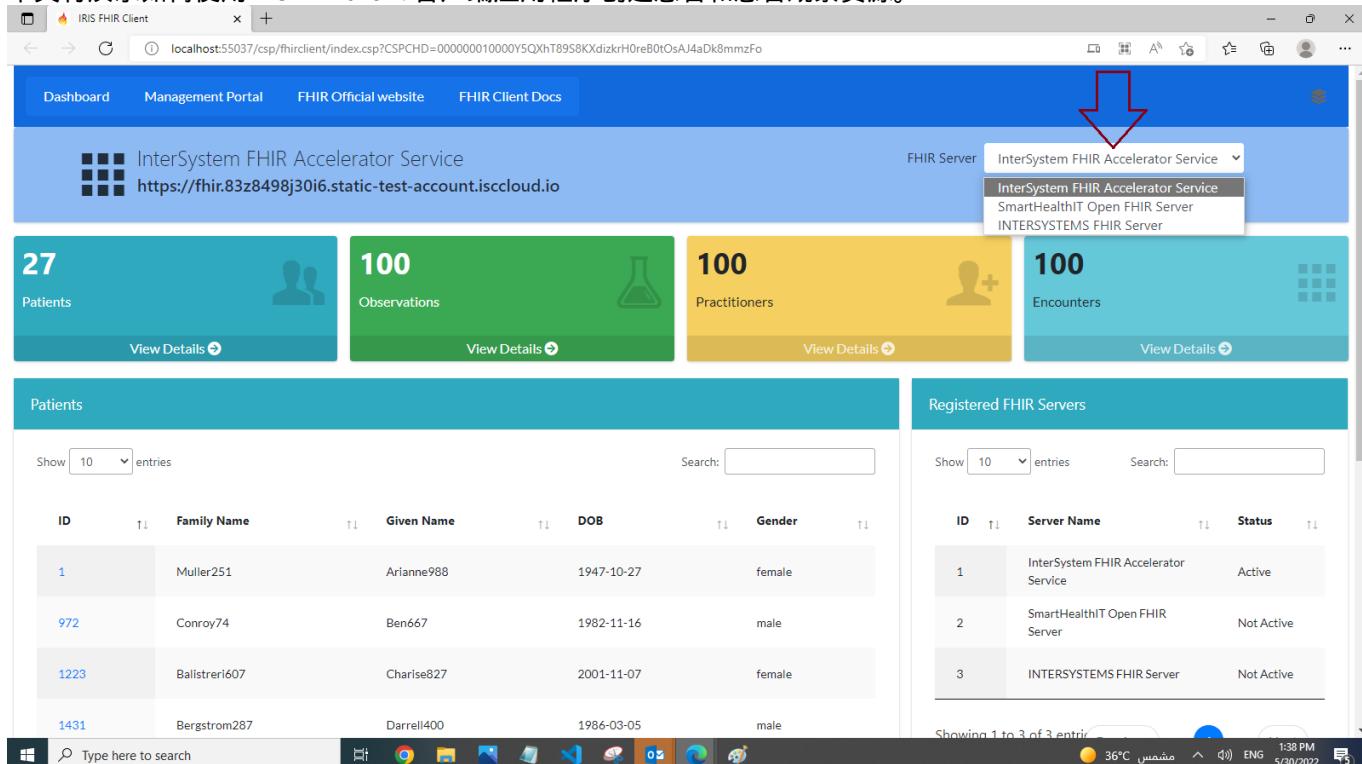
[Muhammad Waseem](#) · 八月 11, 2022 阅读大约需 3 分钟

[Open Exchange](#)

使用 iris-fhir-client 应用程序创建患者和患者观察

Hi 社区，

本文将演示如何使用 iris-fhir-client 客户端应用程序创建患者和患者观察资源。



The screenshot shows the IRIS FHIR Client application running in a browser. The dashboard displays four main resource counts: 27 Patients (blue card), 100 Observations (green card), 100 Practitioners (yellow card), and 100 Encounters (teal card). Below the dashboard, there are two tables. The left table, titled 'Patients', lists five patient entries with columns for ID, Family Name, Given Name, DOB, and Gender. The right table, titled 'Registered FHIR Servers', lists three servers with columns for ID, Server Name, and Status. The bottom of the screen shows the Windows taskbar with various pinned icons and the system tray indicating the date and time.

建议在开始阅读本文之前可以先读一下我的 [第一篇](#) 关于这个应用程序的文章和观看 [Youtube 视频](#)。

让我们开始吧：

1-创建患者资源

下面 dc.FhirClient 的 CreatePatient() 函数可用于创建患者资源

```
ClassMethod CreatePatient(givenName As %String, familyName As %String, birthDate As %String, gender As %String)
```

函数需要 giveName , failyName , birthDate 和性别来创建患者资源

下面的命令将创建病人

```
do ##class(dc.FhirClient).CreatePatient("PatientGN","PatientFN","2000-06-01","male")
```

使用 iris-fhir-client 应用程序创建患者和患者观察

Published on InterSystems Developer Community (<https://community.intersystems.com>)

```
USER>do ##class(dc.FhirClient).CreatePatient("PatientGN","PatientFN","2000-06-01","male")
Patient Created Successfully
```

下面是 irisfhirclient.py 文件中的 python 函数，它将创建患者：

```
import json
from fhirpy import SyncFHIRClient
from tabulate import tabulate
from fhirpy.base.searchset import Raw
import requests

def CreatePatient(givenName,familyName,birthDate,gender,url,api_key):
    headers = {"Content-Type":contentType,"x-api-key":api_key}
    client = SyncFHIRClient(url = url, extra_headers=headers)

    patient = client.resource("Patient")
    patient['name'] = [
        {
            'given': [givenName],
            'family': familyName,
            'use': 'official'
        }
    ]

    patient['birthDate'] = birthDate
    patient['gender'] = gender
    try:
        patient.save()
    except Exception as e:
        print("Error while creating Patient:" +str(e))
        return
    print("Patient Created Successfully")
```

2- 创建患者观察资源

让我们针对我们新创建的患者资源创建观察

以下 dc.FhirClient 的 CreateObservation() 函数可用于创建患者观察

```
ClassMethod CreateObservation(patientId As %String, loincCode As %String, ObrCategory As %String, ObrValue As %Integer, ObrUOM As %String, effectiveDate As %String)
```

参数

- patientId 是患者的 ID
- LoincCode 是Loinc Code，详情可查 [这里](#)
- ObrCategory 是观察类别，详情可查 [这里](#)
- ObrValue 是观察值
- ObrUOM 是观察单元
- EffectiveDate

以下命令将创建患者生命体征观察

```
do ##class(dc.FhirClient).CreateObservation("8111","8310-5","vital-
```

使用 iris-fhir-client 应用程序创建患者和患者观察

Published on InterSystems Developer Community (<https://community.intersystems.com>)

```
signs",96.8,"degF","2022-01-22")
```

```
USER>do ##class(dc.FhirClient).CreateObservation("8111","8310-5","vital-signs",96.8,"degF","2022-01-22")
Patient Observation Created Successfully
这是我们列出患者的观察结果
```

```
do ##class(dc.FhirClient).GetPatientResources("Observation","8111")
```

```
USER>do ##class(dc.FhirClient).GetPatientResources("Observation","8111")
ID Category Code Value UOM Date Patient
-----
8114 vital-signs 8310-5 96.8 degF 2022-01-22 Patient/8111
```

下面是 fhirclient.py 文件中的 python 函数，它将创建患者：

```
import json
from fhirpy import SyncFHIRClient
from tabulate import tabulate
from fhirpy.base.searchset import Raw
import requests

#####
def CreateObservation
(patientId,loincCode,ObrCategory,ObrValue,ObrUOM,effectiveDate,url,api_key):
    headers = {"Content-Type":contentType,"x-api-key":api_key}
    client = SyncFHIRClient(url = url, extra_headers=headers)
    observation = client.resource(
        'Observation',
        status='preliminary',
        category=[{
            'coding': [
                {
                    'system': 'http://hl7.org/fhir/observation-category',
                    'code': ObrCategory
                }
            ]
        },
        code={
            'coding': [
                {
                    'system': 'http://loinc.org',
                    'code': loincCode
                }
            ]
        }
    )
    observation['effectiveDateTime'] = effectiveDate

    observation['valueQuantity'] = {
        'system': 'http://unitsofmeasure.org',
        'value': ObrValue,
        'code': ObrUOM
    }

#####
patient = client.resources('Patient').search(_id=patientId).first()
observation['subject'] = patient.to_reference()

try:
    observation.save()
except Exception as e:
    print("Error while creating observation :" + str(e))
```

使用 iris-fhir-client 应用程序创建患者和患者观察

Published on InterSystems Developer Community (<https://community.intersystems.com>)

```
    return  
    print("Patient Observation Created Successfully")
```

谢谢！

[##嵌入式 Python #FHIR #InterSystems IRIS for Health](#)
[在 InterSystems Open Exchange 上检查相关应用程序](#)

源

URL:<https://cn.community.intersystems.com/post/%E4%BD%BF%E7%94%A8-iris-fhir-client-%E5%BA%94%E7%94%A8%E7%A8%8B%E5%BA%8F%E5%88%9B%E5%BB%BA%E6%82%A3%E8%80%85%E5%92%8C%E6%82%A3%E8%80%85%E8%A7%82%E5%AF%9F>