

Automating Patient Data from OLS to SimRT

Erik Fura

Medical physicist

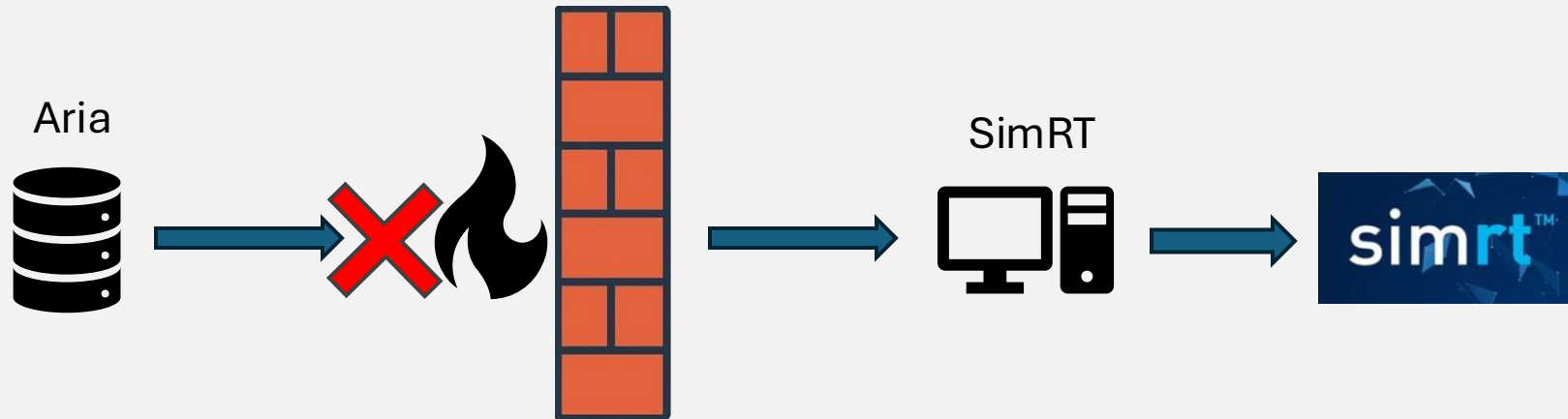
Västerås Central Hospital

The challenge

- Patient data could not be automatically imported
- I won't accept that



The challenge



Workflow



Download
data

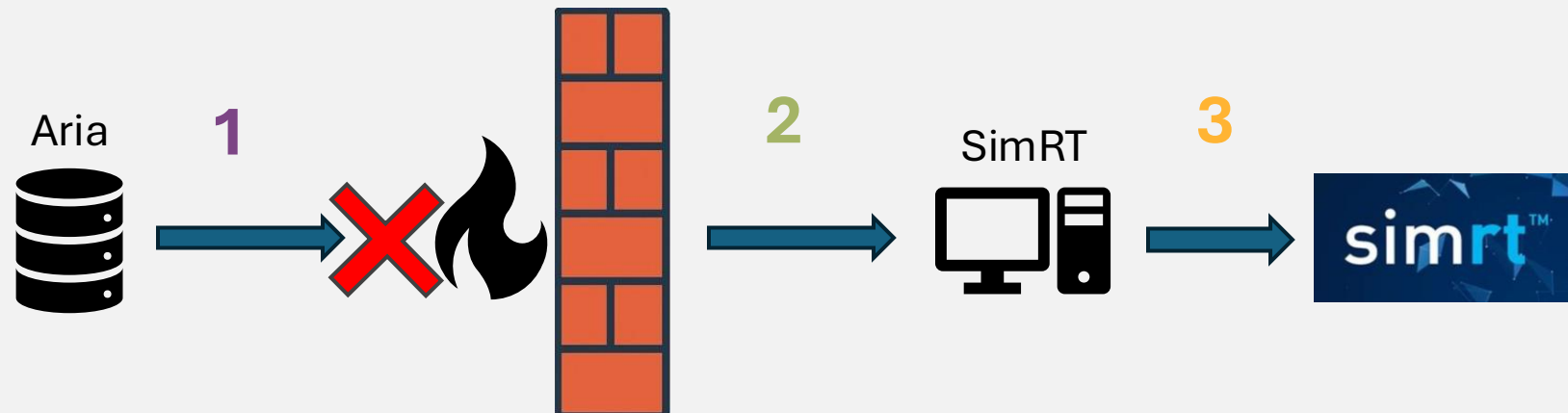
Get the patient data out from our OIS

Transfer data

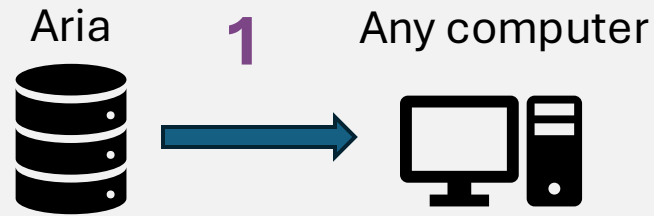
Move the data from network of our OIS to SimRT workstation

Import data

Import the patient data into the SimRT software



- How do we get the data from the OIS?



- SQL queries
- Can be done on any computer connected to the OIS network

Download data

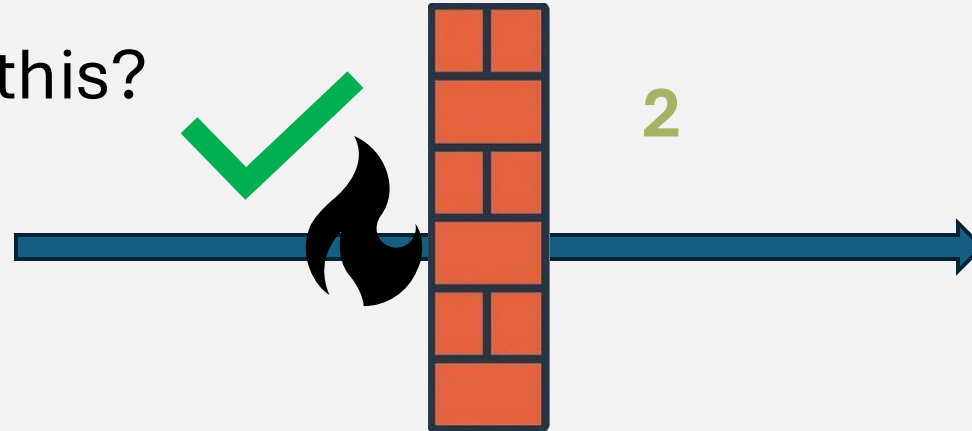


```
47  public static DataTable GetScheduledSimPatientsOnCT(string startDate, string endDate)
48  {
49      Connect();
50      DataTable datatable = AriaInterface.Query(@"SELECT DISTINCT
51          Patient.PatientId
52      FROM
53          ScheduledActivity WITH (NOLOCK),
54          Activity WITH (NOLOCK),
55          ActivityInstance WITH (NOLOCK),
56          Patient WITH (NOLOCK),
57          ResourceActivity WITH (NOLOCK),
58          Machine WITH (NOLOCK)
59      WHERE
60          (Patient.PatientId LIKE '%19%' OR
61          Patient.PatientId LIKE '%20%') AND
62          ScheduledActivity.PatientSer = Patient.PatientSer AND
63          ActivityInstance.ActivityInstanceSer = ScheduledActivity.ActivityInstanceSer AND
64          ScheduledActivity.ScheduledStartTime BETWEEN '' + startDate + @'' AND '' + endDate + @'' AND
65          ScheduledActivity.ScheduledActivitySer = ResourceActivity.ScheduledActivitySer AND
66          ResourceActivity.ResourceSer = Machine.ResourceSer AND
67          Machine.MachineId LIKE 'CT Canon' AND
68          Activity.ActivitySer = ActivityInstance.ActivitySer AND
69          (Activity.ActivityCode = 'DIB DT' OR
70          Activity.ActivityCode = '4D DT')
71      ");
```

Transfer patient data



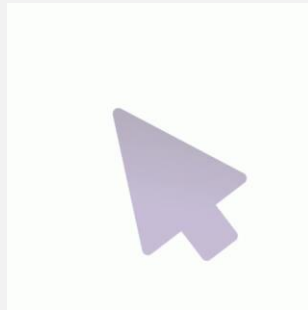
How do we accomplish this?



SimRT is not connected to the OIS network

Needed confirmation from both Varian and VisionRT

- Quick and dirty solution



- Record positions and have the script click for you
- Should work with the standard monitor provided by VisionRT



Finished product

AutoSim (by Erik Fura)

Patienter på CTn idag

- ☒ 1960-02-13
- ☒ 1971-03-08
- ☒ 1974-04-15

Lägg till patient

ID:

Lägg till

Boka

AutoSim (by Erik Fura)

Patienter på CTn idag

- ☒ 1960-02-13
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- ☒ 1974-04-15

Lägg till patient

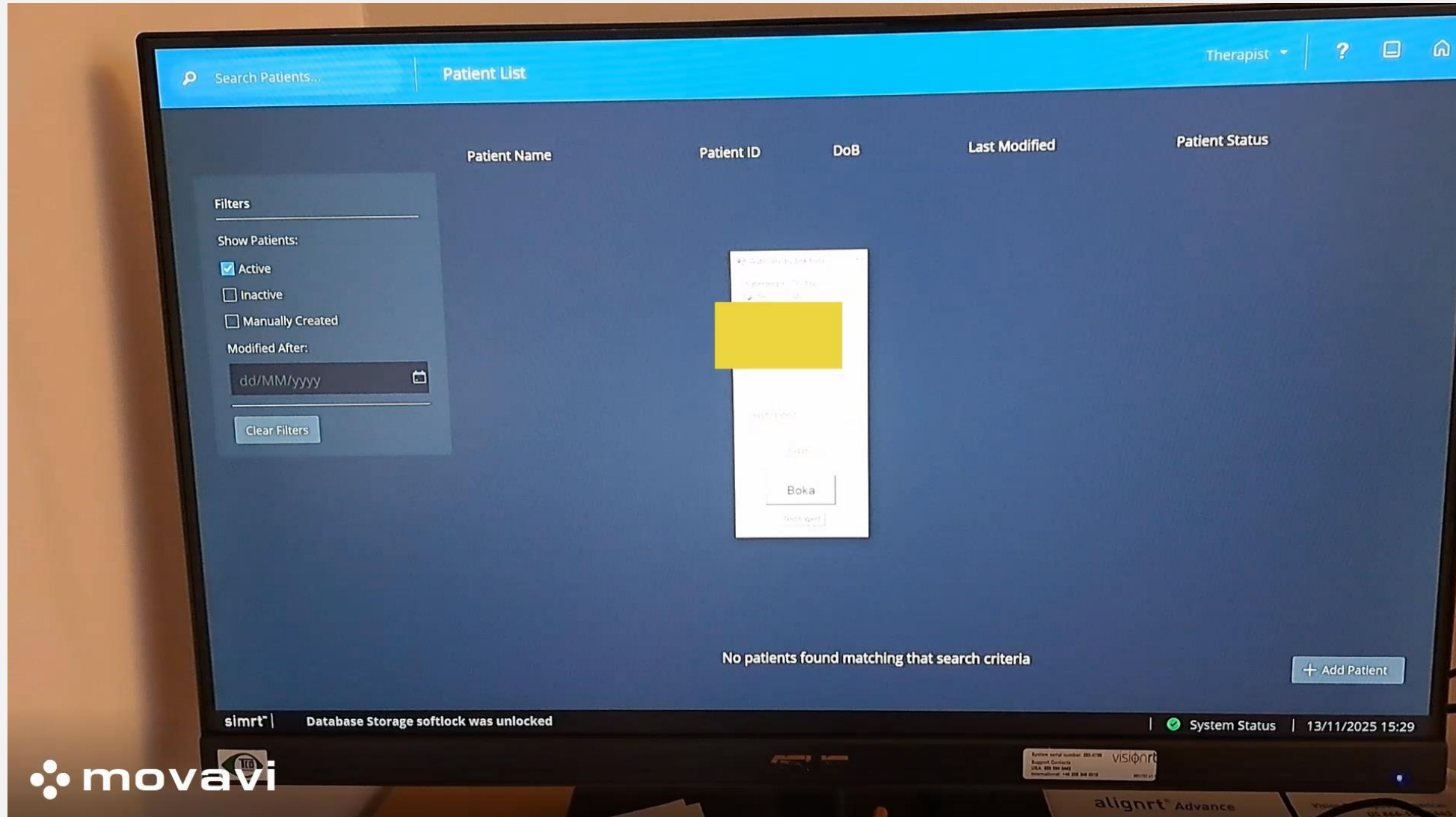
ID:

Lägg till

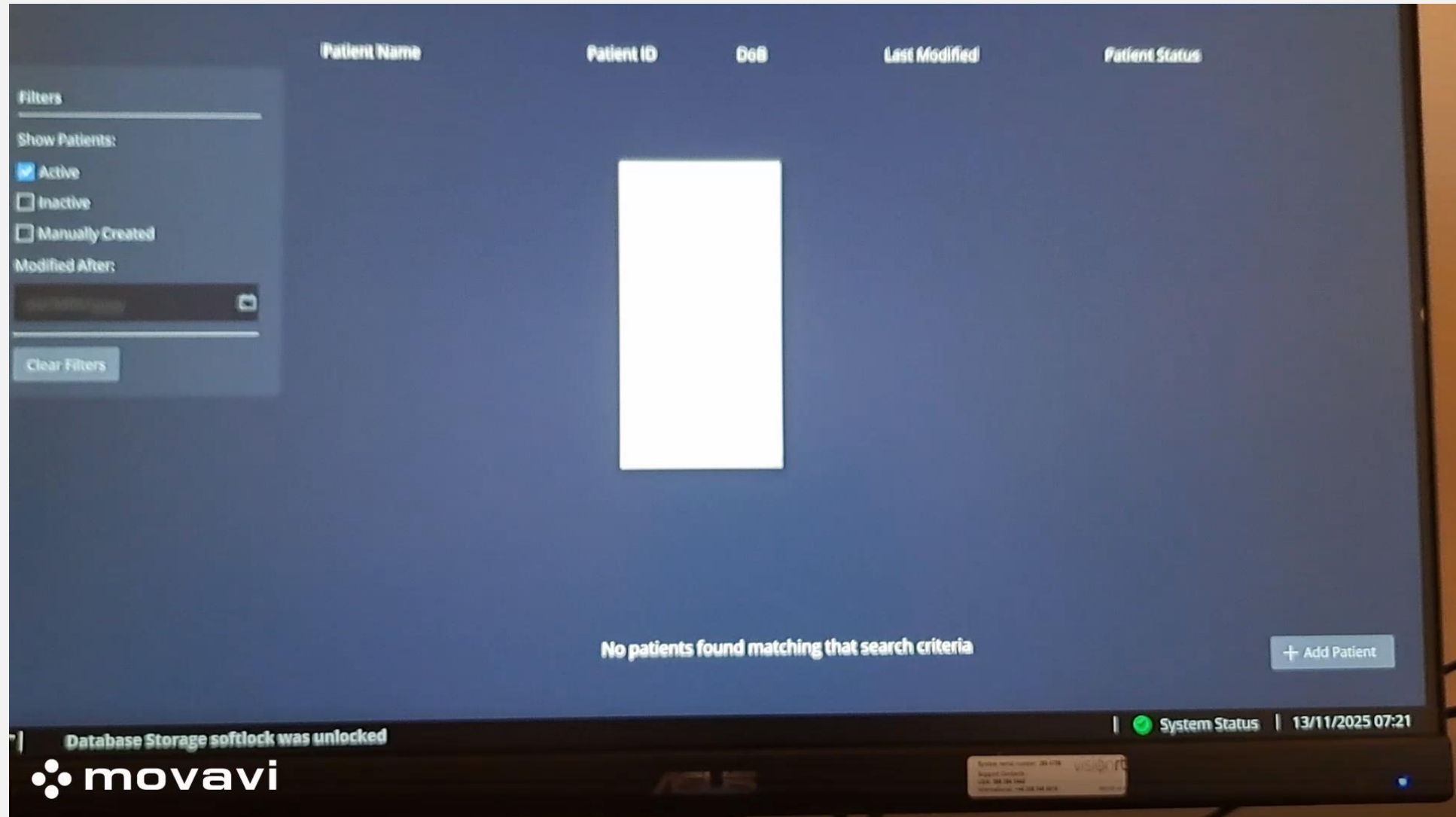
Boka

Test Patient

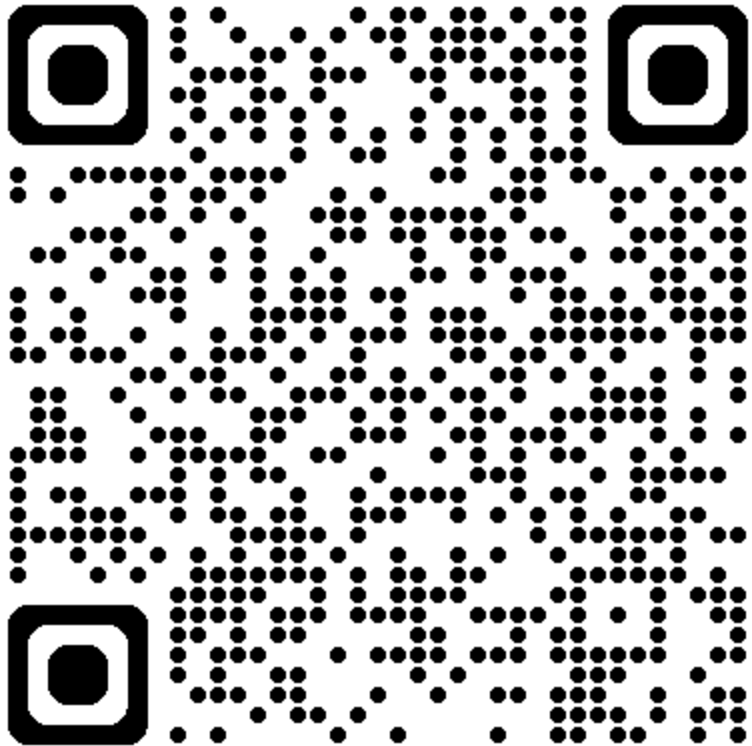
Finished product



Finished product



Link to script



Thank you for listening!