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SKAO Regional Centre Network

Using MockServer to test the CANFAR registry client

Dave Morris
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28th August 2025

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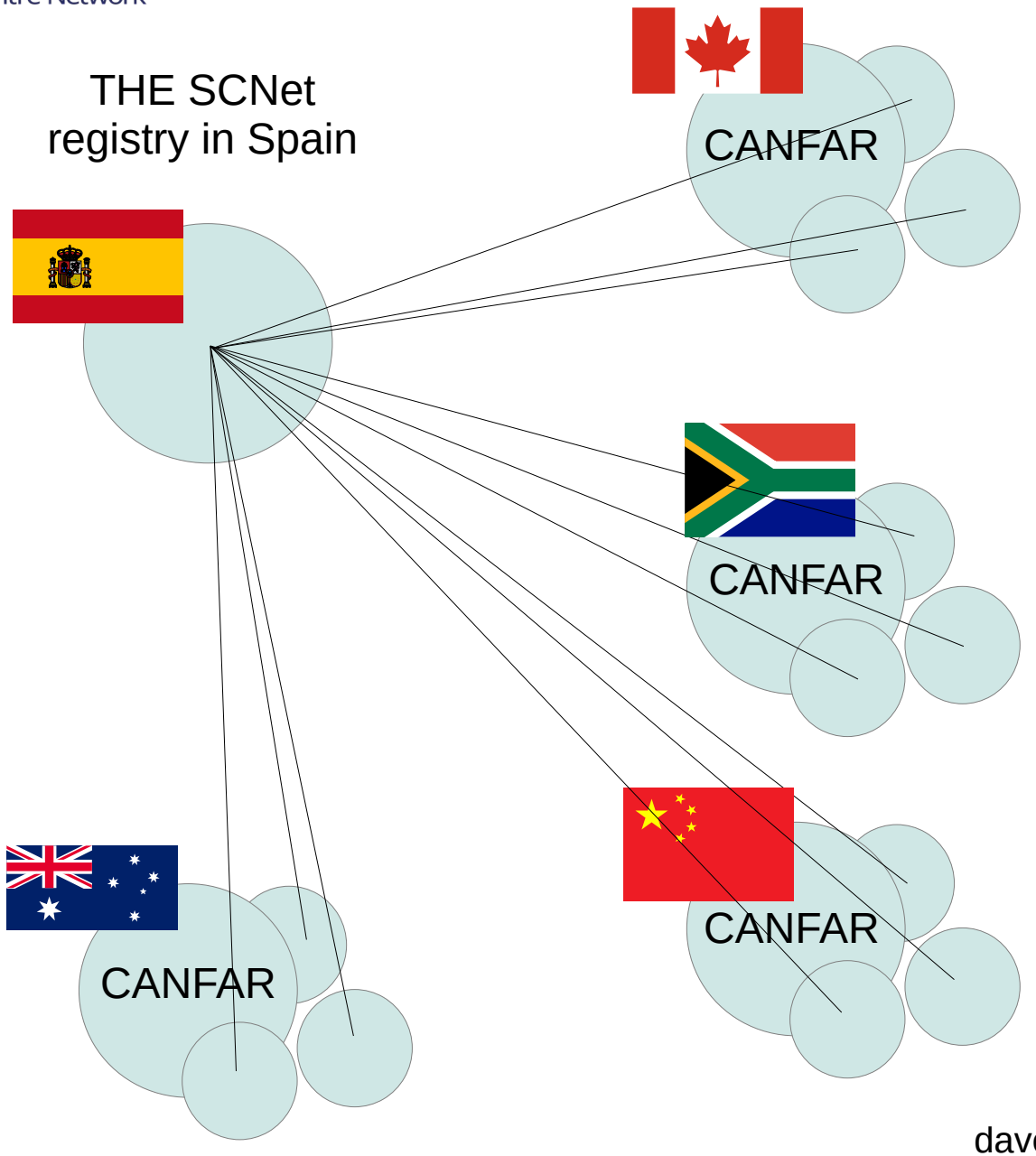
The problem :



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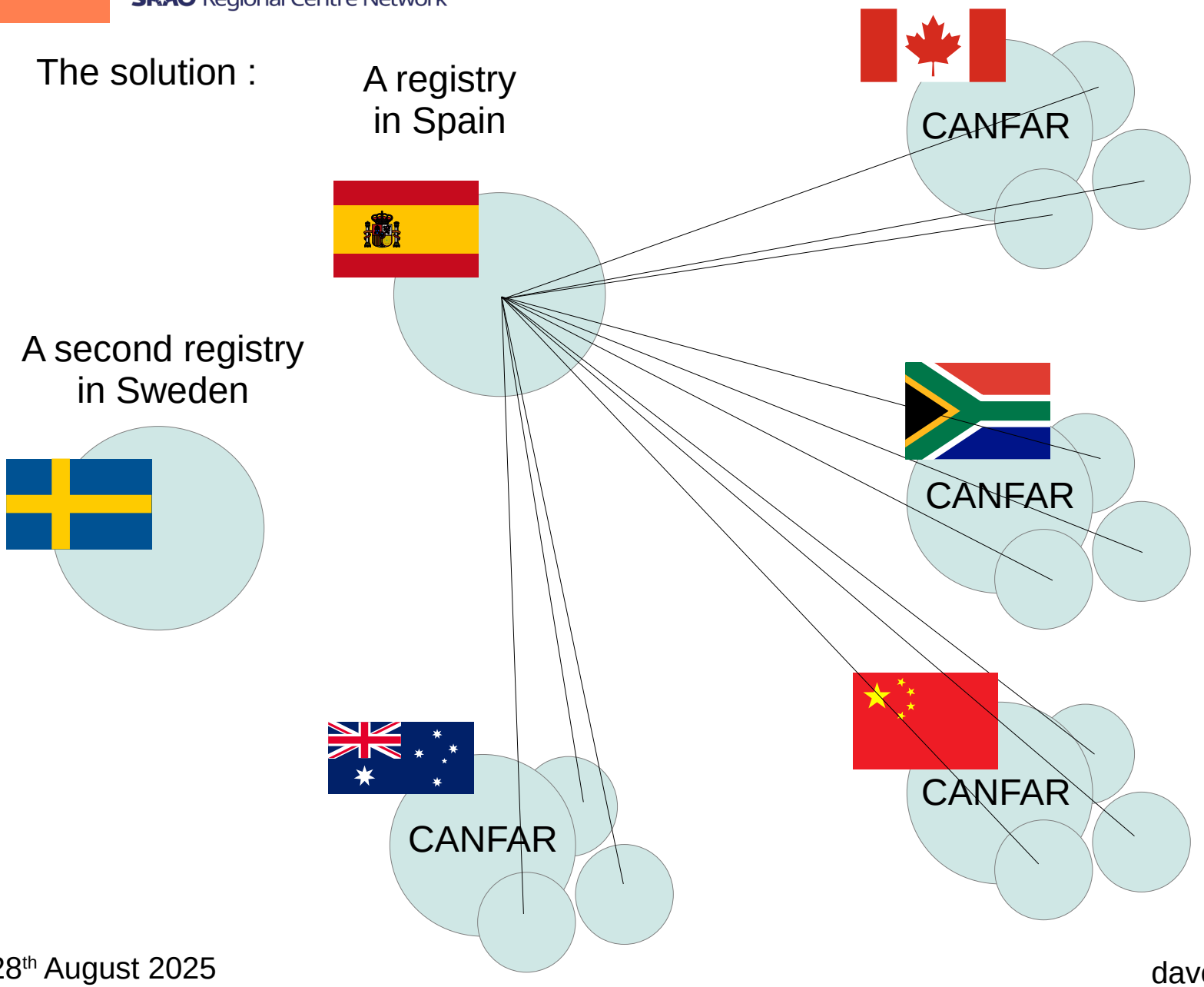
The solution :

A registry in Spain

A second registry in Sweden



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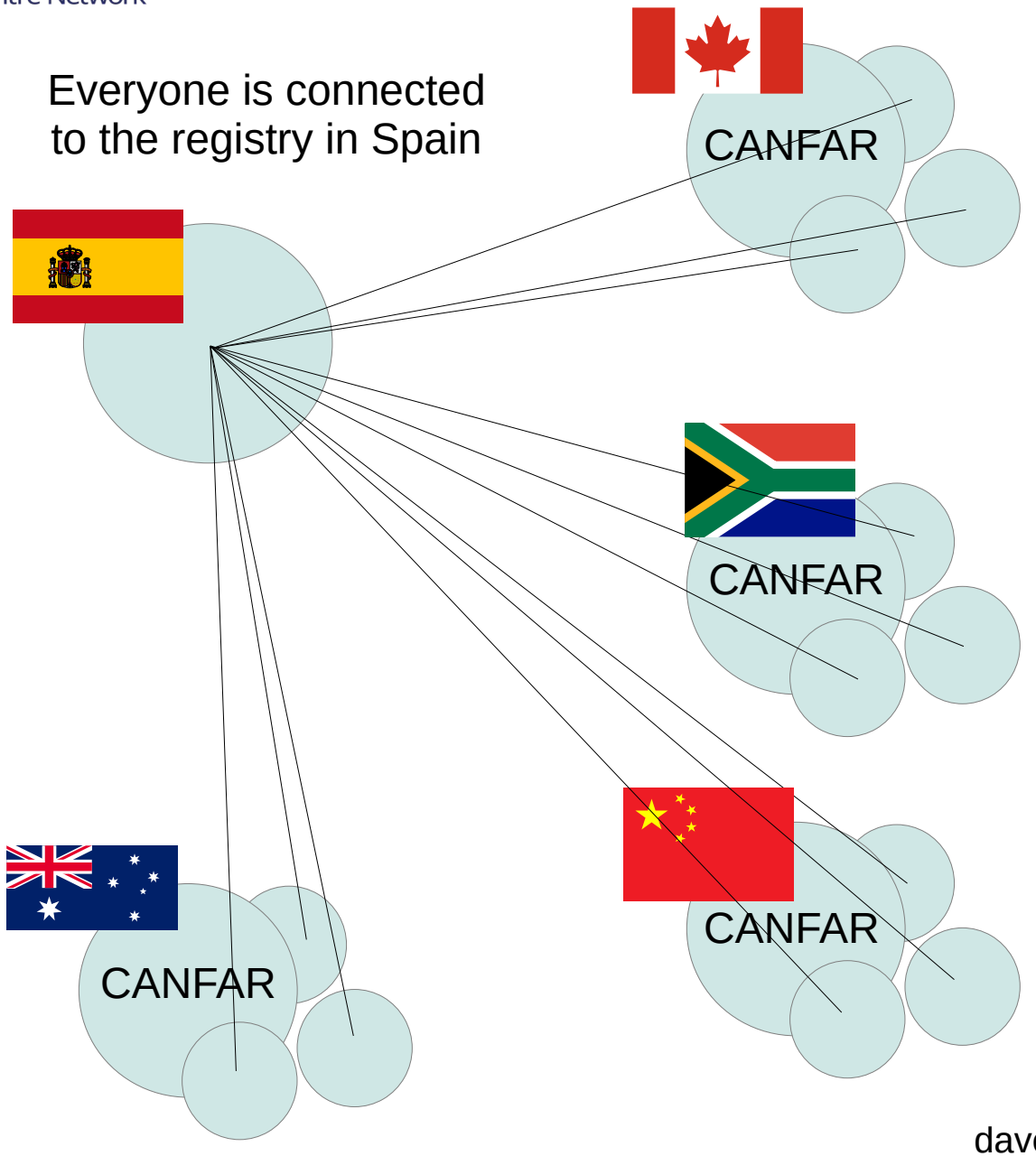
The problem :

Everyone is connected to the registry in Spain



No one knows about this one

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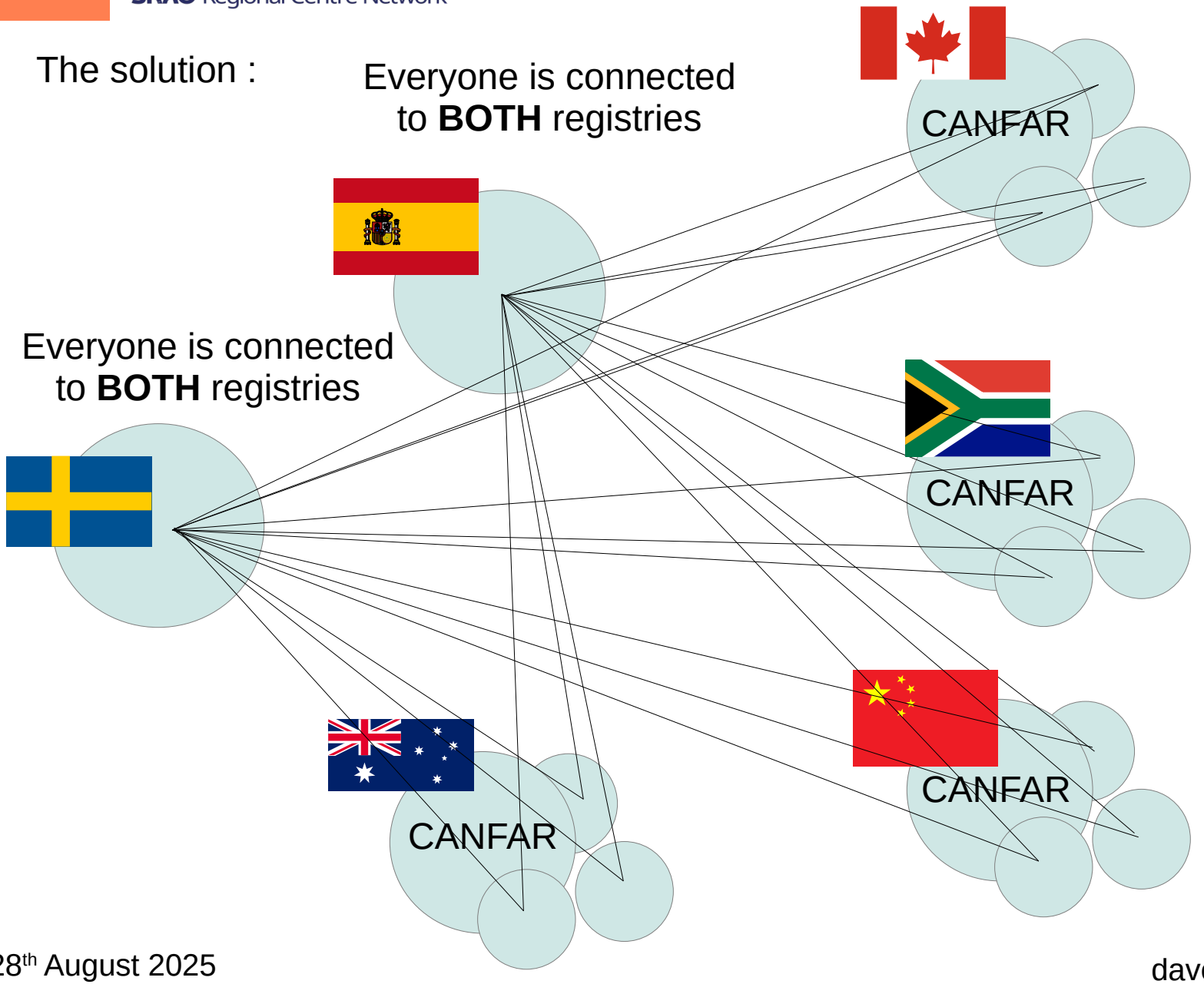
The solution :

Everyone is connected to **BOTH** registries



Everyone is connected to **BOTH** registries

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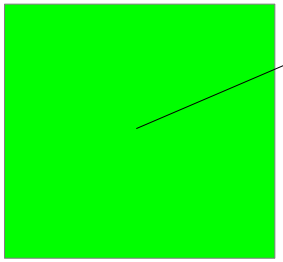
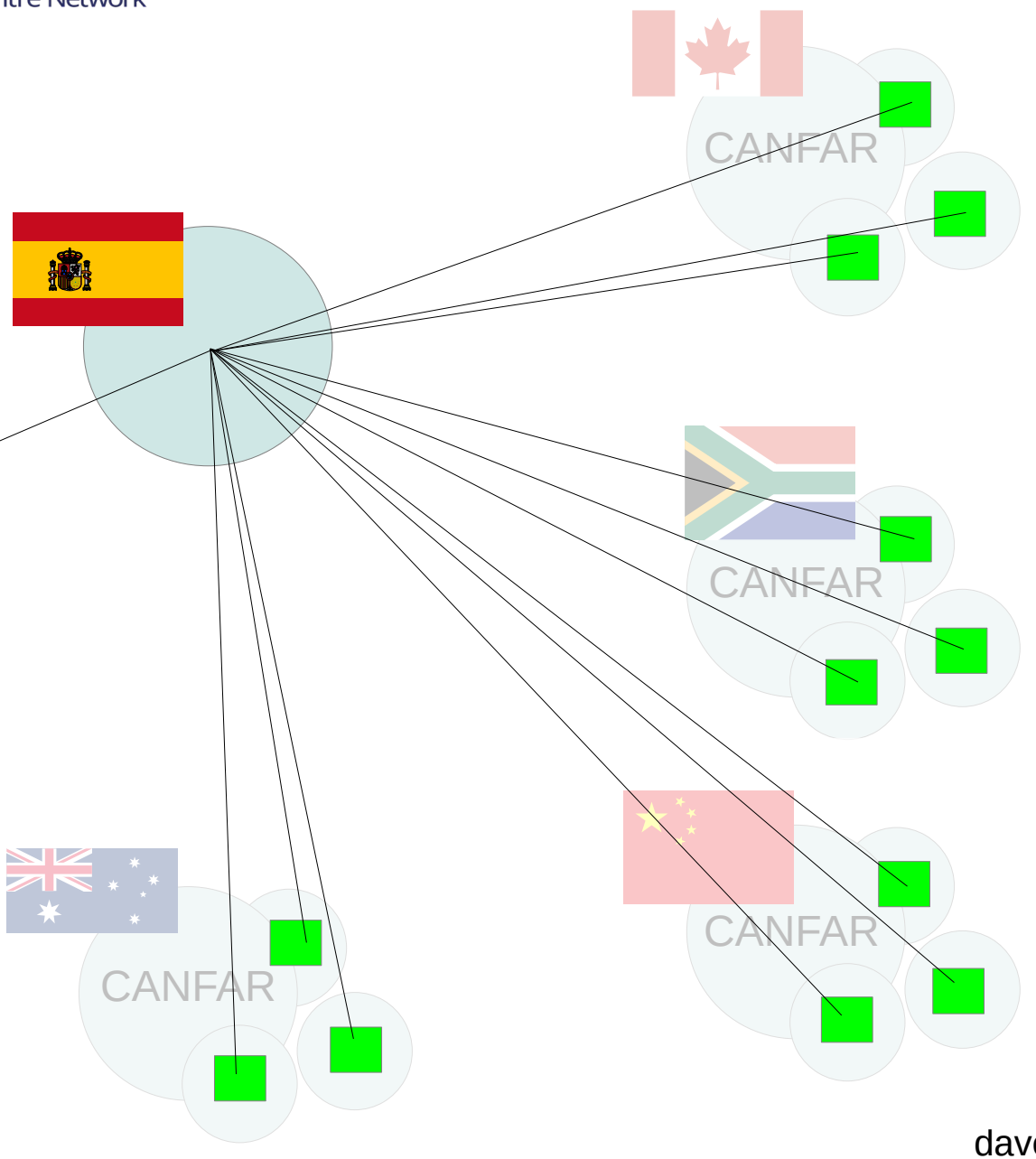
The key :

All the CANFAR components use the same client library to connect to the registry





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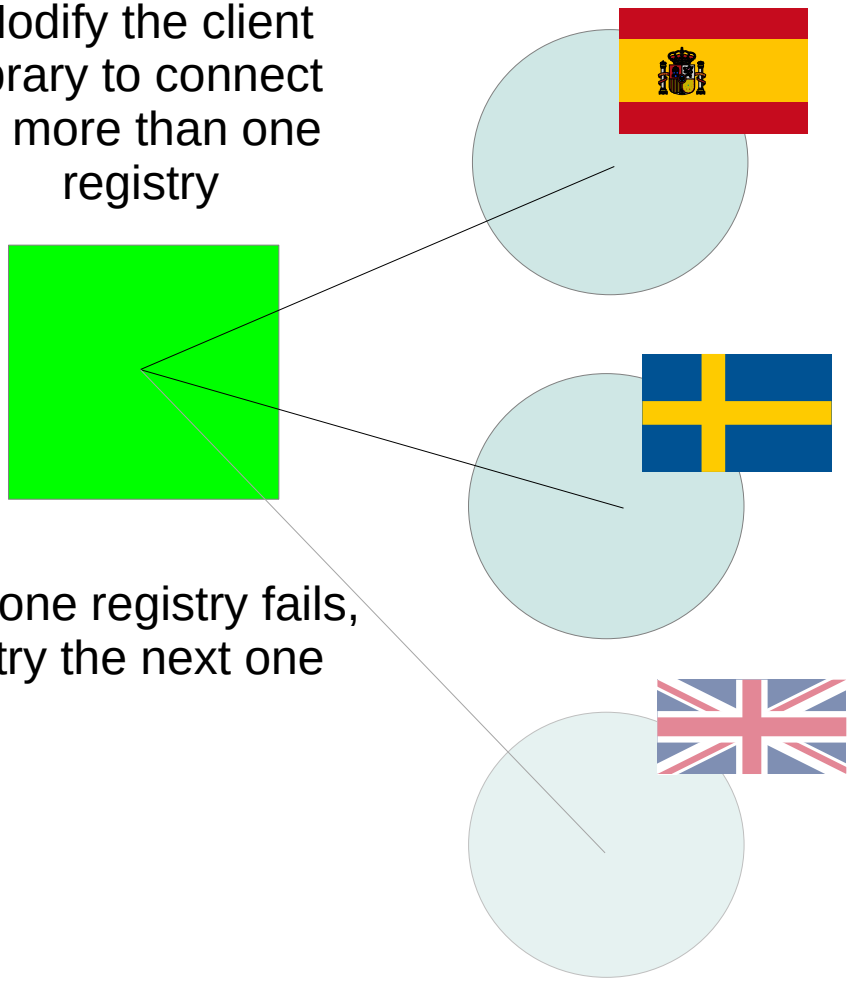
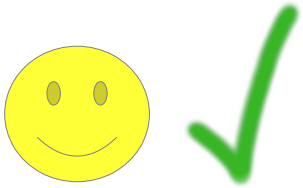
The solution :

Modify the client library to connect to more than one registry



If one registry fails, try the next one



Code complete

Changes done

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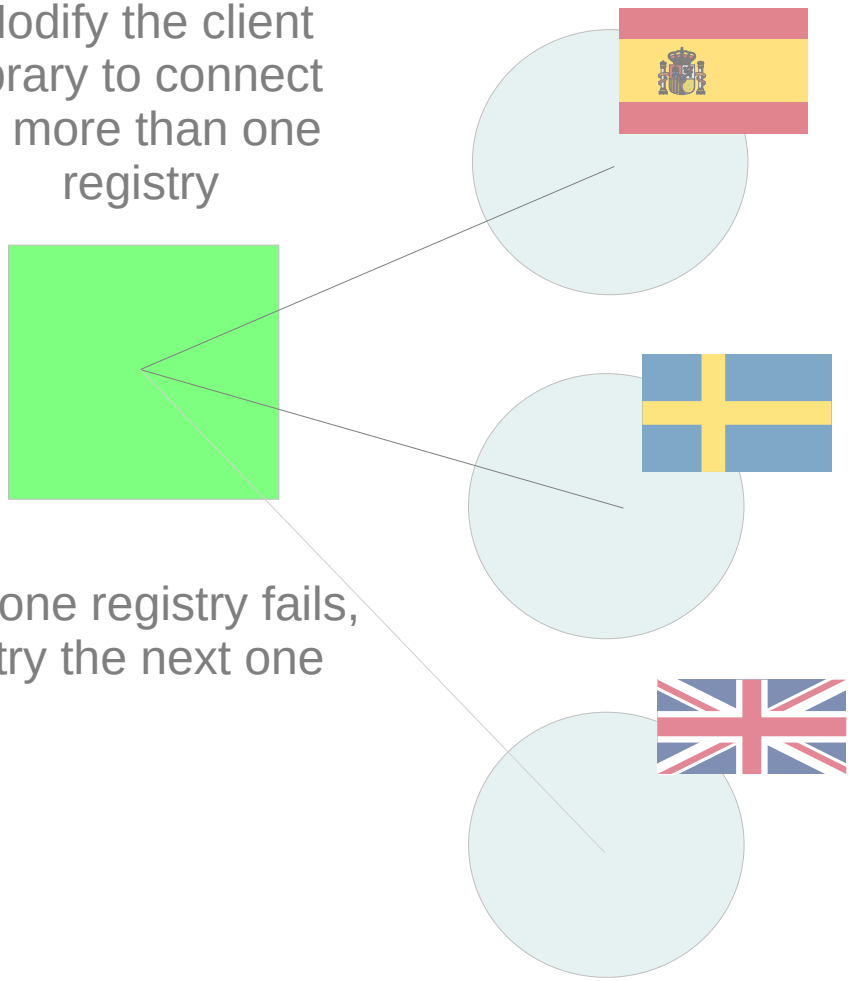
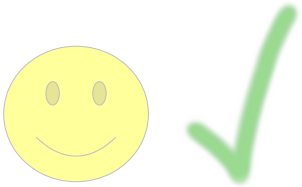
The problem :

Modify the client library to connect to more than one registry



If one registry fails, try the next one



Code complete

Changes done

How do we test it ?

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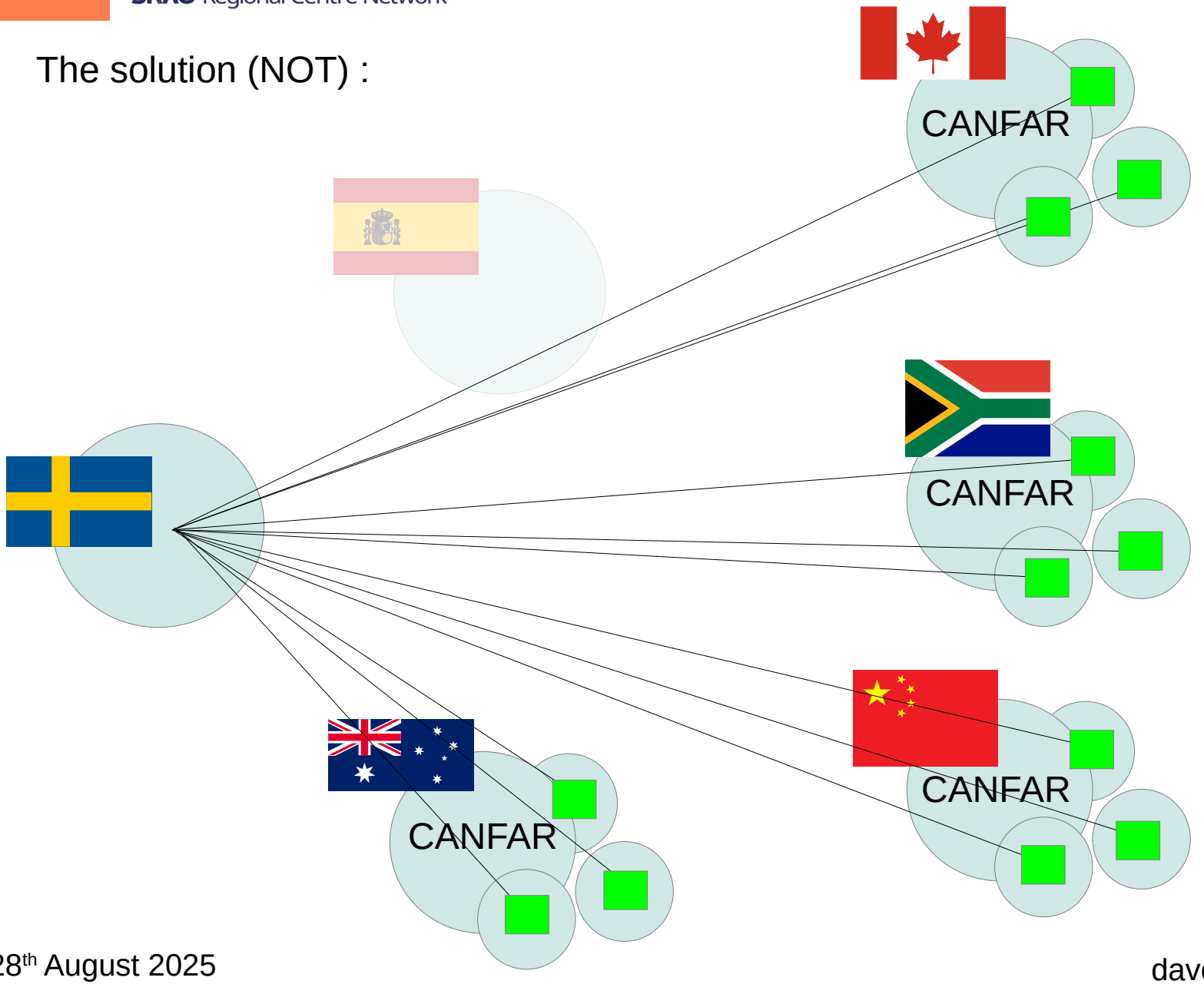
The solution (NOT) :



Deploy the updated client to all the services

Switch off the registry in Spain

All requests go to the registry in Sweden

Bravery award ?

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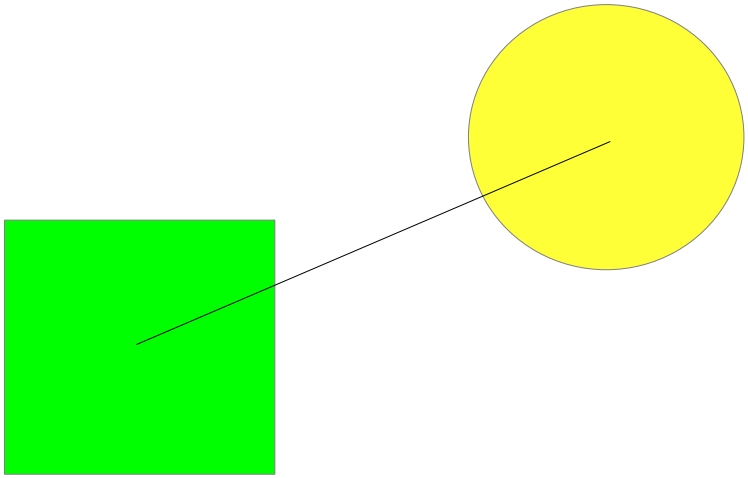
The solution :

MockServer

https://www.mock-server.com/



Configurable web service

Request that matches <pattern>

Respond with <HTTP code> and <content>

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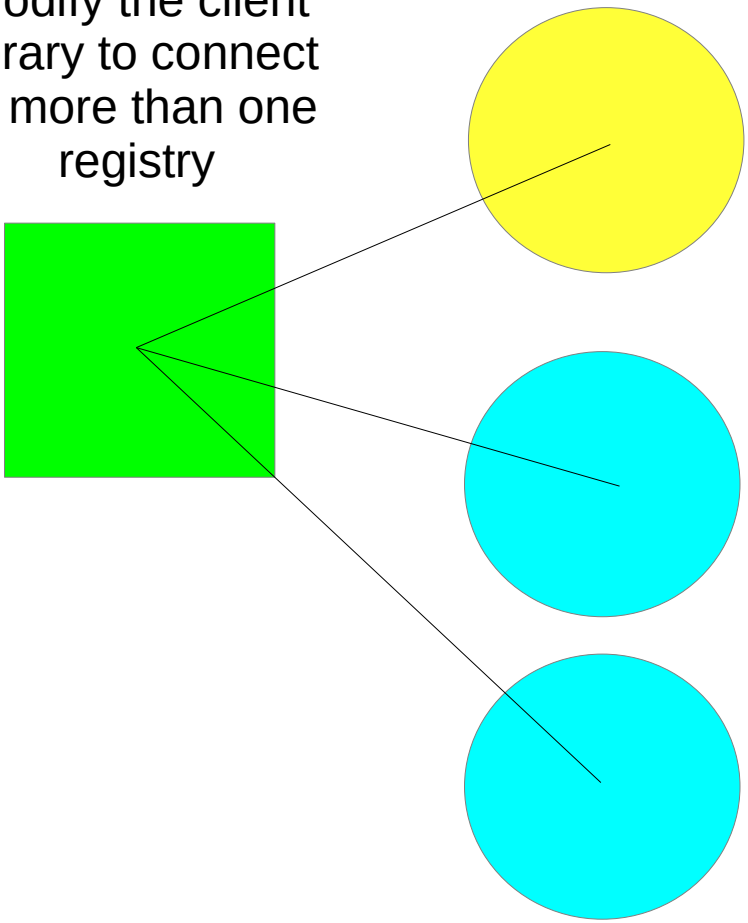
The solution :

Modify the client library to connect to more than one registry



MockServer

https://www.mock-server.com/

Configurable web service

Request that matches <registry request>

Respond with <404 Not Found>

Simulate multiple services

Request that matches <registry request>

Respond with <200 OK> and <content>

Request that matches <pattern>

Respond with <200 OK> and <content>

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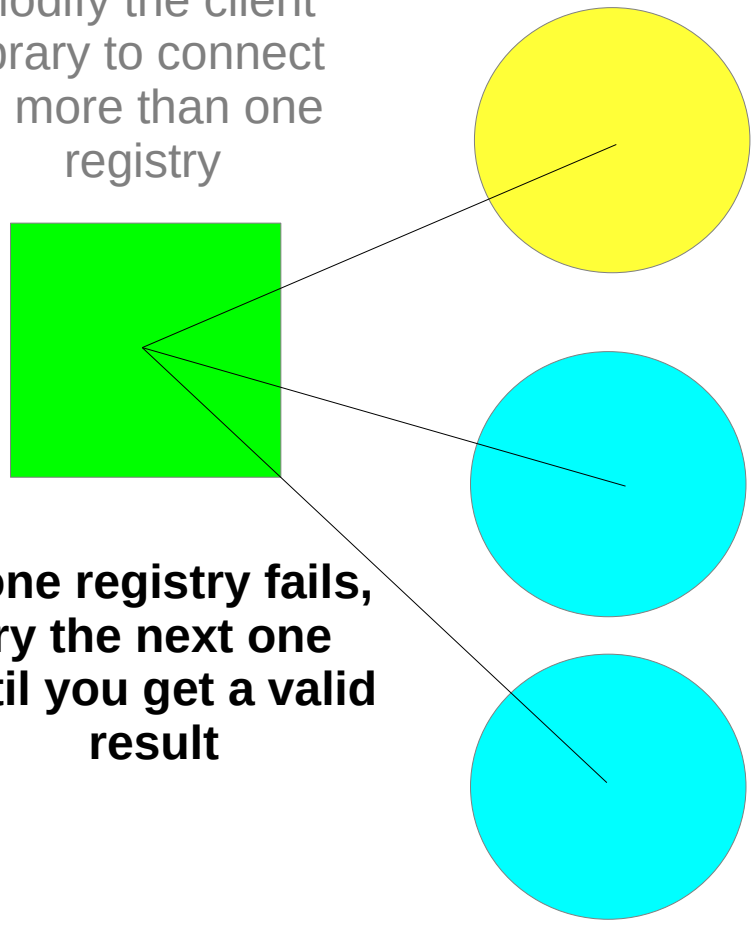
The solution :

MockServer

https://www.mock-server.com/

Modify the client library to connect to more than one registry



If one registry fails, try the next one until you get a valid result

Request that matches <registry request>

Respond with <404 Not Found>

Verify this was called ONCE

Request that matches <registry request>

Respond with <200 OK> and <content>

Verify this was called ONCE

Request that matches <registry request>

Respond with <200 OK> and <content>

Verify this was NOT called

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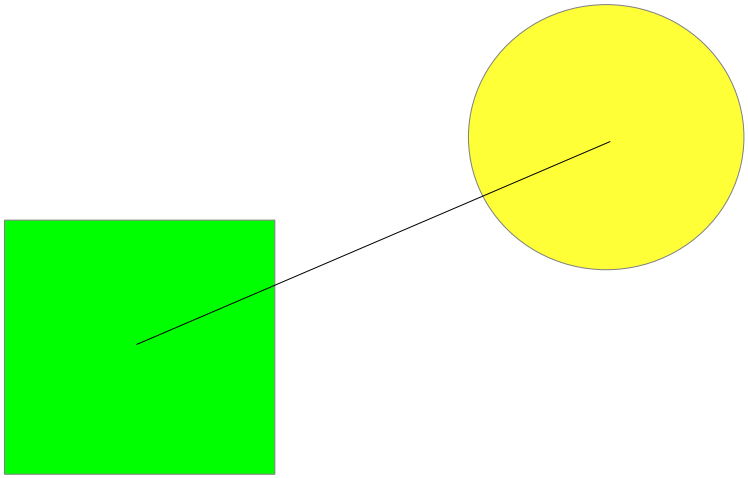
The solution :



If one registry fails, try the next one until you get a valid result

MockServer

https://www.mock-server.com/

Configurable web service

Request that matches <registry request>

Respond with <404 Resource Not Found>

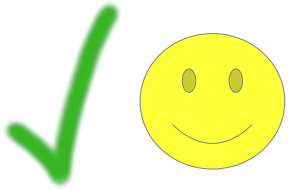
Respond with <404 Capabilities Not Found>

Respond with <200 OK> but <BAD XML>

Wait too long to respond (timeout)

Don’t respond, drop the connection

Good confidence it will work in the wild



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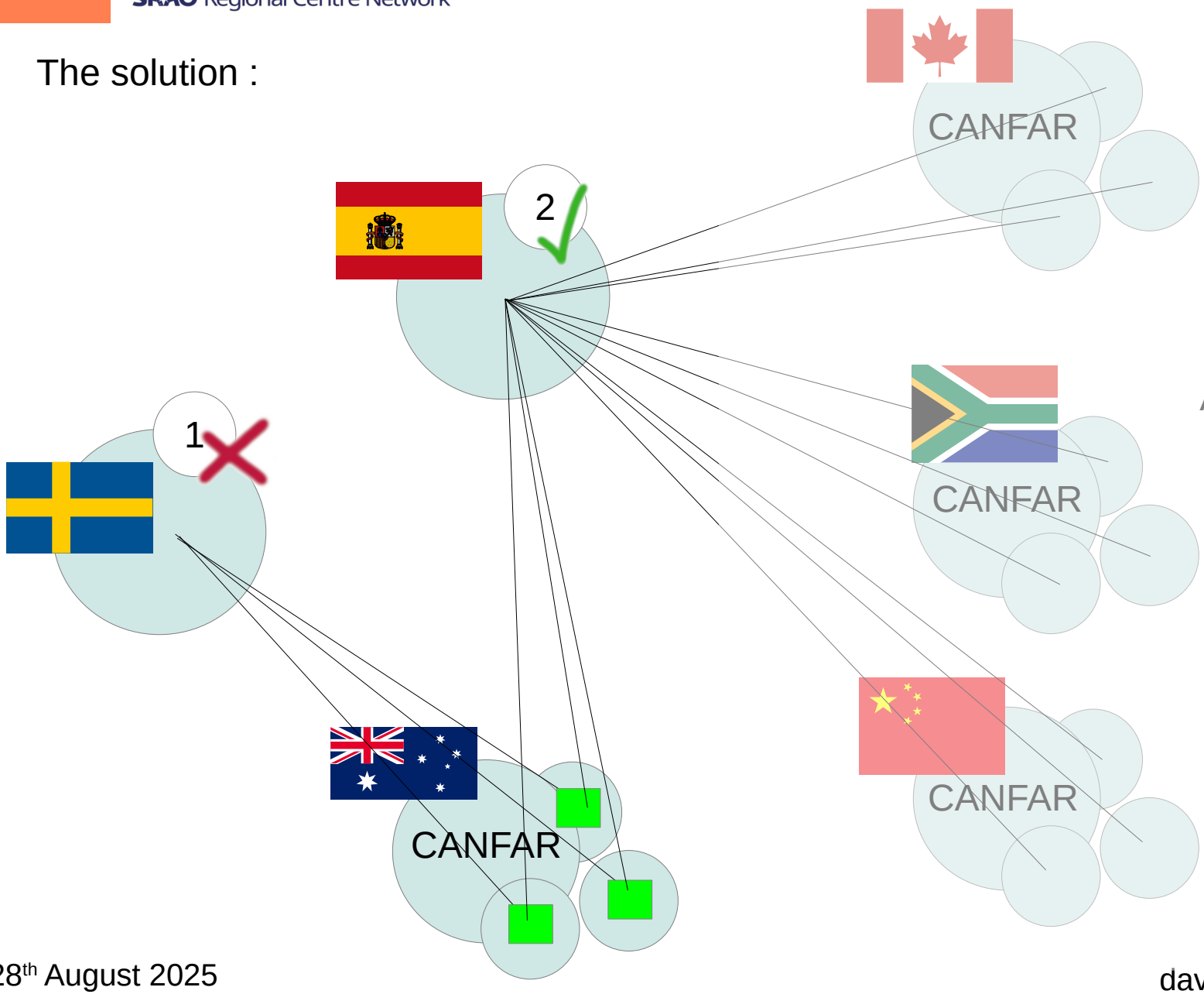
The solution :



Deploy the updated client to one service only

Updated client is configured to query the Swedish registry first 1

All the rest are still connected to the Spanish registry

Switch off the Swedish registry 1

Updated client switches to the Spanish registry 2

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