

CLINPAL

Cloud eClinical



What is the cloud really?



.... what doors does the cloud open?

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Advantages

Single Instance

Unlimited capacity
environment

Single point of integration

Not advantages, these are opportunities...

Multi-Tenant

Fast network

High availability

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Architectural Consideration - 1

How many definitions of
Date of Birth
do we need in a database?

Architectural Consideration - 1

So – in a Single instance
database, why make it easy
to create many....

Investigators – different logins per different trials

- Sites hate working with a multi-tude of usernames and passwords, even within the same system
- Standards exist to solve this
- Single instance cloud systems simplify site experience for all



Single Sign On

- Platform accessed by Clinpal Identity provider - OpenID & OpenAuth 2.0
- Login to Go to any supported application

OR

- Go directly to 3rd party applications authenticated via Clinpal
- Device data transfers by user token (not batch transfer)



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The Database

SQL

OR

No-SQL

Requirements

- Built in replication
- Run across data centres (true cloud)
- Support very large instances
- Dynamic table / record structure
- Multi-dimensional



Decision → No-SQL

- Met requirements
- Also provided means to model to tabular relational structure with y-dimension for key-value attributes
- Perfect for taking SDTM 'to the 3rd dimension



Software development goes online

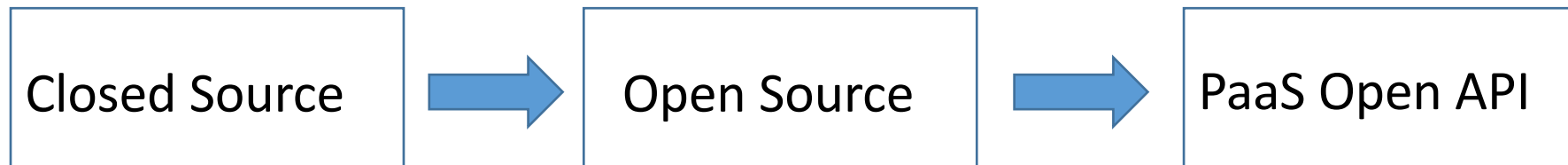
- Industry trend:
 - Software development and deployment moving to online tools
 - PAAS 4GL's with integrated DB's will emerge

Clinpal is a domain specific Development and Runtime environment

Hides the 'database'

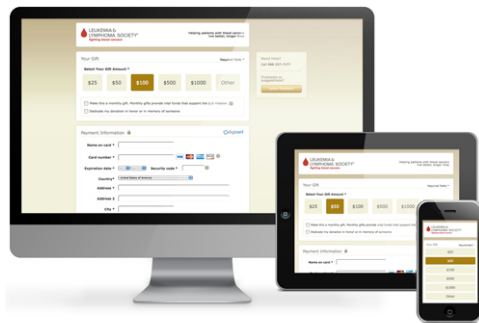
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Open Source → Open API

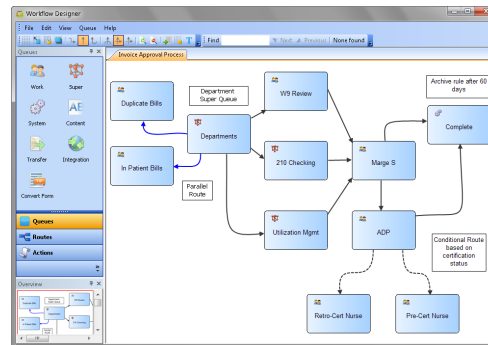


Architectural Consideration - 5

Single underlying platform for



Forms
- Responsive



Process Workflow



Multi-channel messaging

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