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Practical Search in the Cloud (sneak preview)

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LUCENE
REVOLUTION

Presented by
lucid
IMAGINATION

Apache
Solr

Lucene

My Background

- Martijn Koster
- Sr. Software Engineer at Lucid Imagination
 - **Search in early Web – WebCrawler**
 - **Customer web services – Excite Mail**
 - **Proxies for Mobile – Danger**

What I Will Cover

- A Solr based Cloud Service
- The need
- How
- Demo
- Wrap up

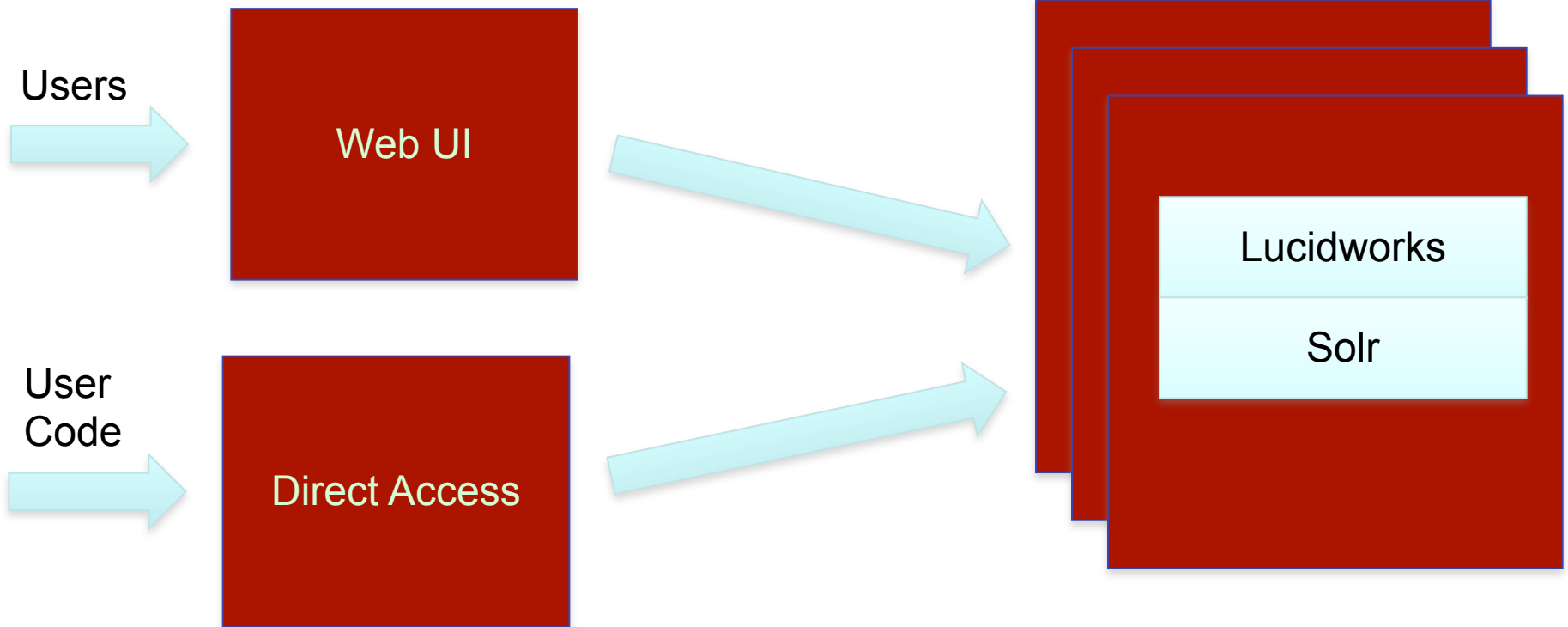
Why? – Getting Started is Hard

- Many new concepts
- Complex software configuration
- System Administration overhead

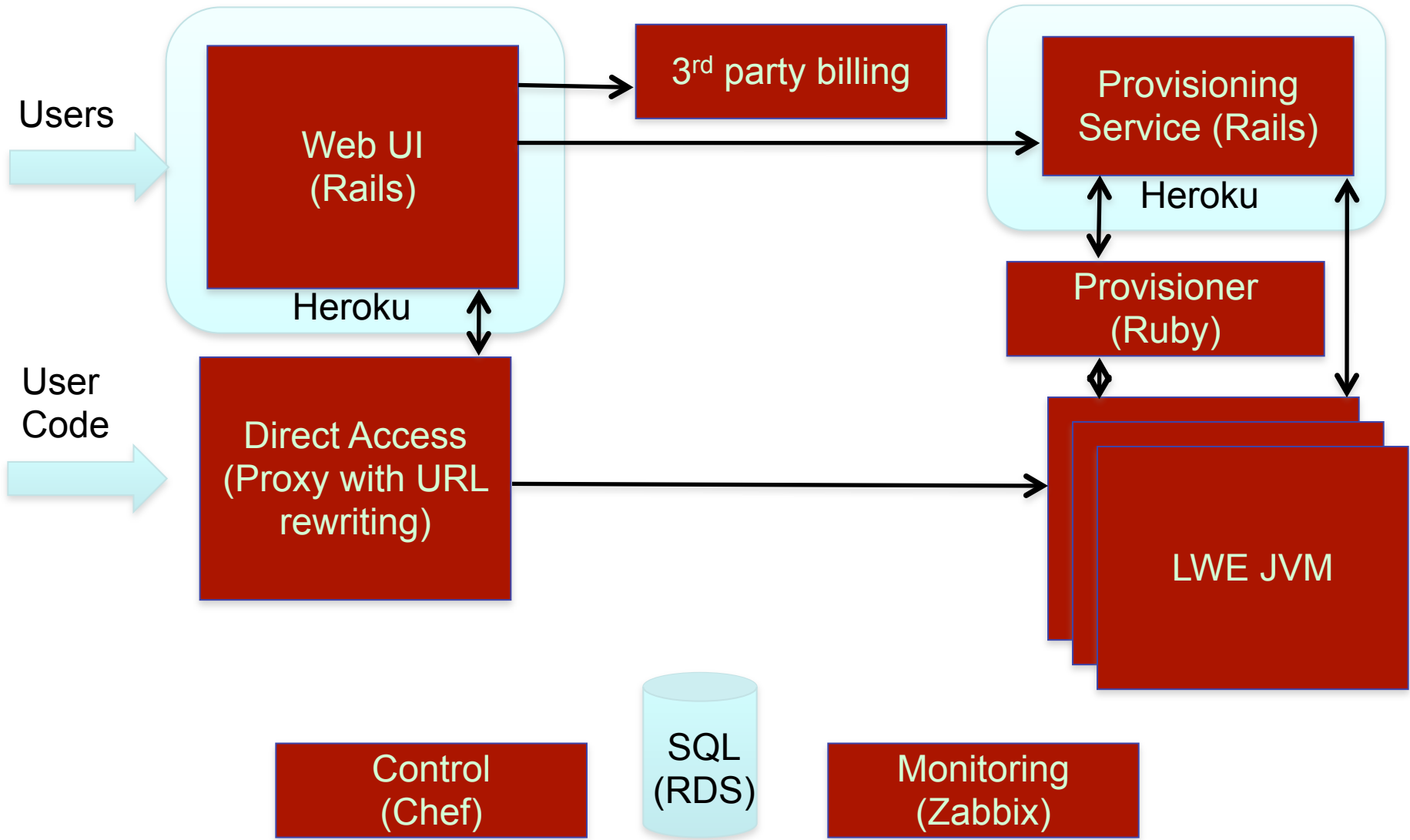
Search as a Service

- A few clicks to get started
- Full Power of LucidWorks and Solr
- Offload operations
- Expertise, tools and processes are transferable to your own deployments.

Usage Model



Architecture



Deployment Automation

- AMI
- Chef
- Custom

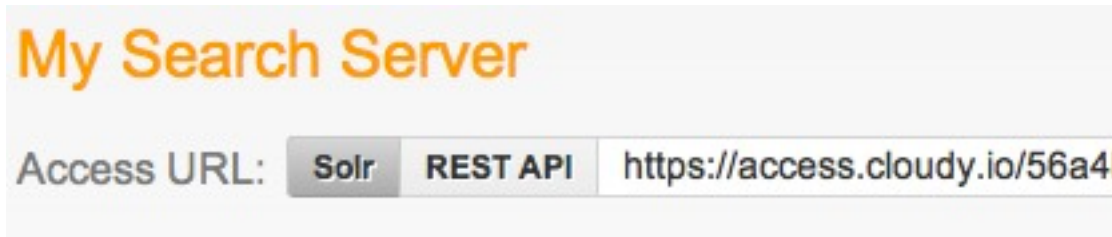
Scaling

- Heroku
- Direct Access
- Search Servers
- Provisioning/DB
- Monitoring and Control

Direct Access Example

- The Cloudy Direct Access Solr interface
 - Simple submission
 - Simple search

First, copy SOLR access URL:



SOLR="https://access.cloudy.io/.../solr"

Example - Add

```
$ cat > /tmp/doc.xml <<EOM
```

```
<add><doc>
```

```
<field name="id">testdoc_LR2011</field>
```

```
<field name="text_en">LR rocks!</field>
```

```
</doc></add>
```

```
EOM
```

```
curl $SOLR/my_news/update?commit=true \
```

```
-H "Content-Type: text/xml" \
```

```
--data-binary @/tmp/doc.xml
```

Example - Search

```
curl $SOLR'/my_news/lucid?  
q=news&role=DEFAULT&wt=json'
```

```
curl $SOLR'/my_news/select?  
wt=json&q=news&start=0&rows=10'
```

Example – Lucidworks API

- The Cloudy Direct Access Lucid API interface

API="http://access.demo.cloudy.io/.../api"

```
curl $API/collections
```

```
[  
  {"name":"lwelogs","instance_dir":"lwelogs"  
  {"name":"collection1","instance_dir":"collection1_0"},  
  {"name":"my_news","instance_dir":"my_news_1"}  
]
```

Live Demo

- Sam Pierson, Director of Product Development
- The Web User Interface
 - **Administration UI improvements**
 - **Log indexing and graphing**
- API access
 - **Ruby bindings for the LucidWorks REST API**
 - **http://rubygems.org/gems/lucid_works**

Lessons

- Cloud technologies speed up development
- Automate everything
- Avoid lock-in
- Dogfooding

Wrap Up

- Search as a Service
- Built in the Cloud, with open source
- Full Lucidworks Enterprise and Solr
- Powered by Lucid Imagination

When

- Early Access Program: July
 - Interested? cloud@lucidimagination.com

Contact



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