

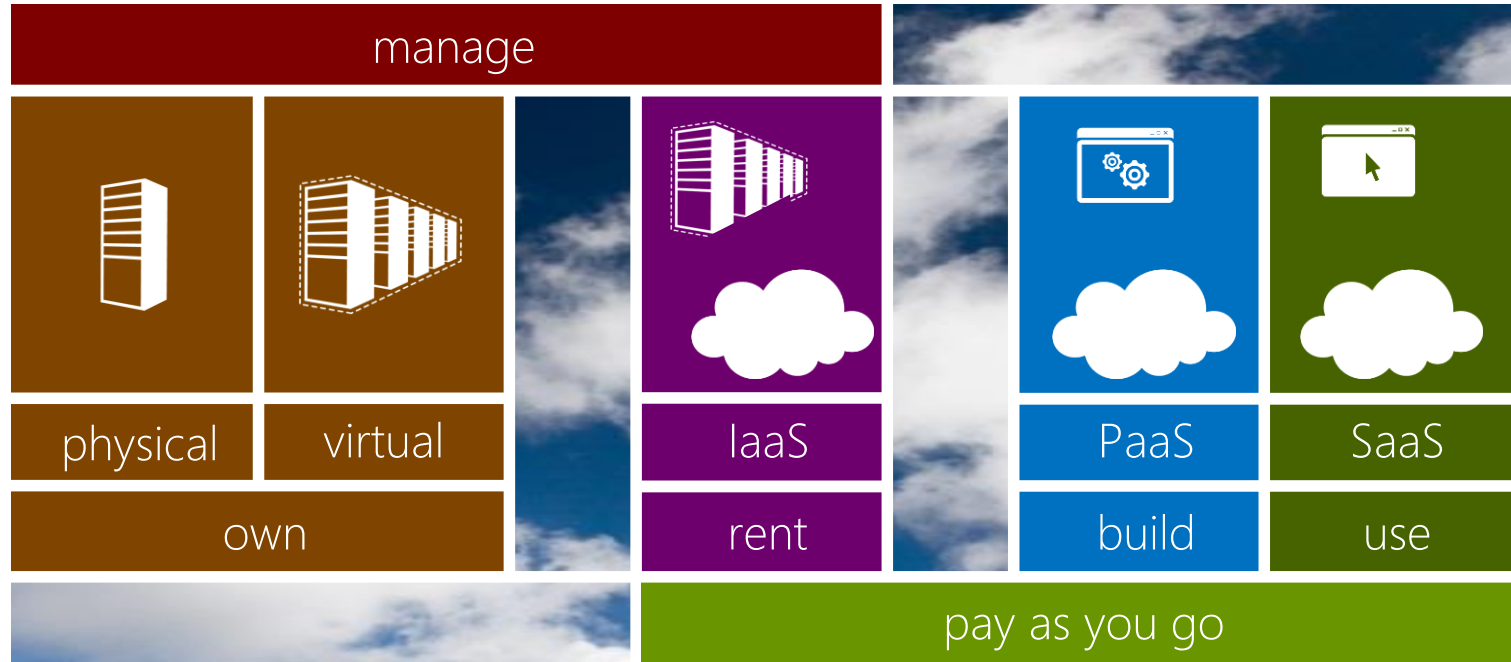


11.4.2013
Zurich

“Open and Flexible PaaS with Windows Azure”

Beat Schwegler - Director, Platform Strategy Group - Microsoft corp.
beatsch@microsoft.com - <http://cloudbeatsch.com> - @cloudbeatsch

spectrum of IT services



Windows Azure

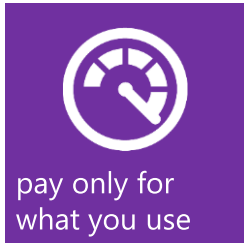
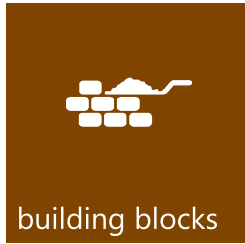
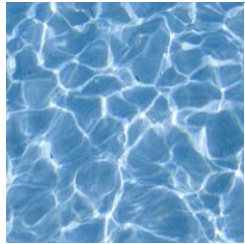


global
footprint

99.95% monthly SLA

pay only for what you use

Windows Azure



open platform

operating
systems



ubuntu[®]



application
platforms



django[®]



Windows
Azure
store



MongoLab



ClearDB



New Relic

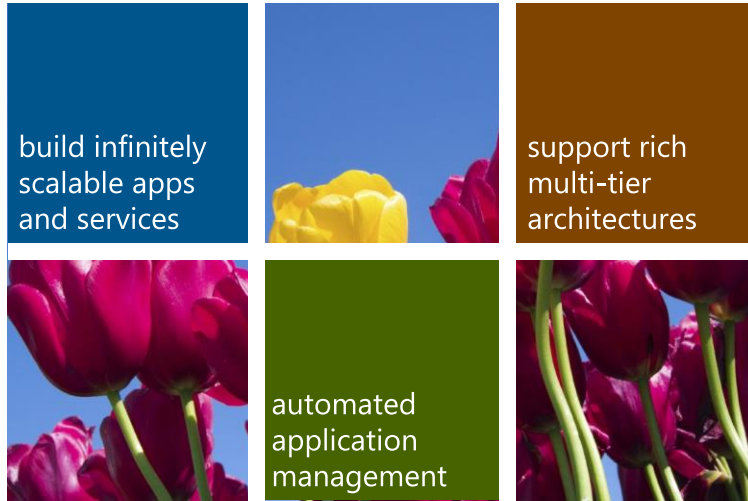




demo:

Windows Azure

cloud services



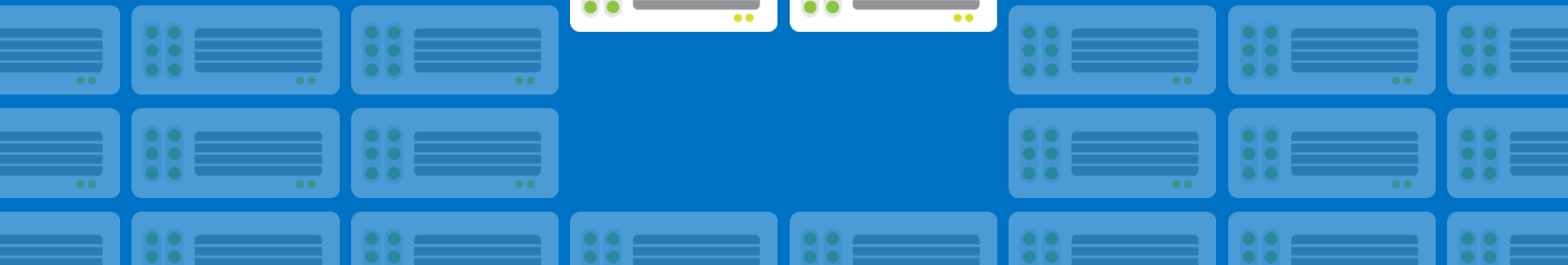


 Windows Azure





Windows Azure Datacenter





Windows Azure Datacenter





← Network load-balancer configured for traffic

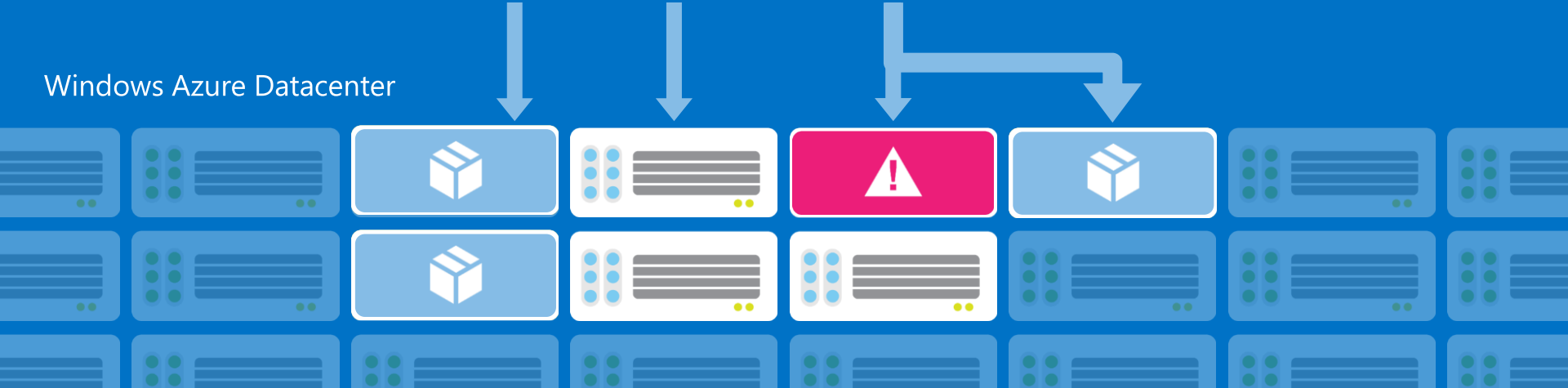
Windows Azure Datacenter



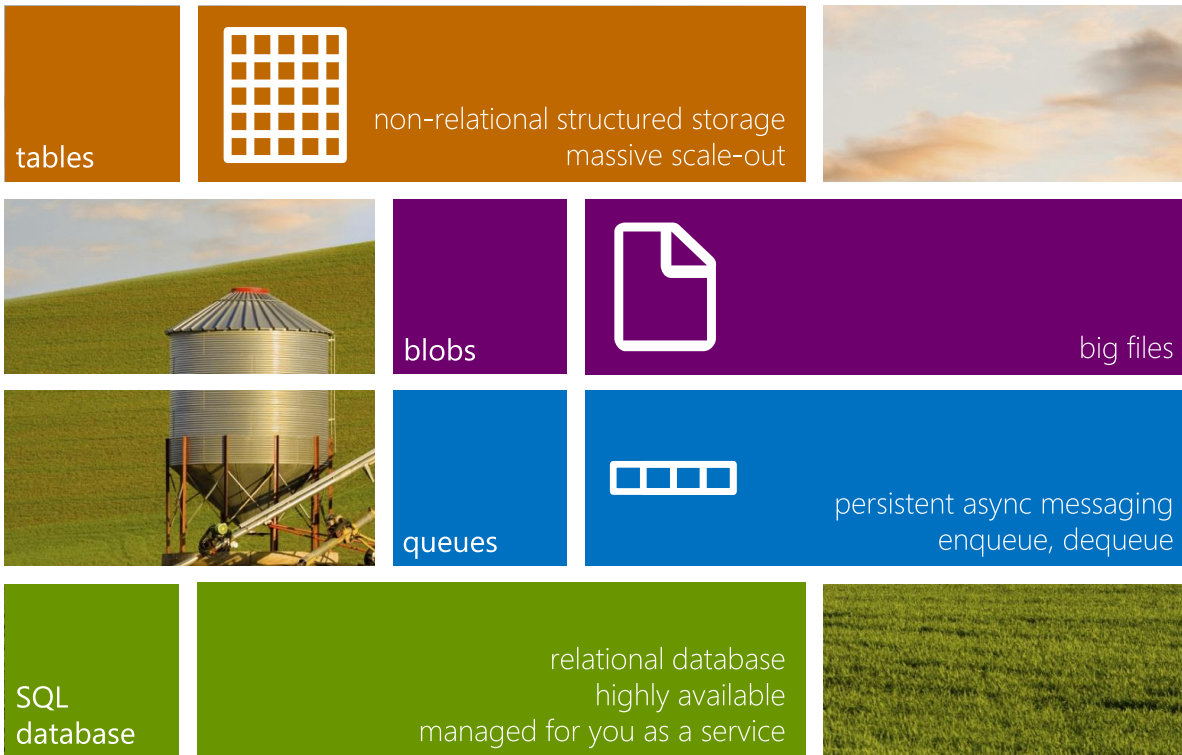


Network Load Balancer

Windows Azure Datacenter



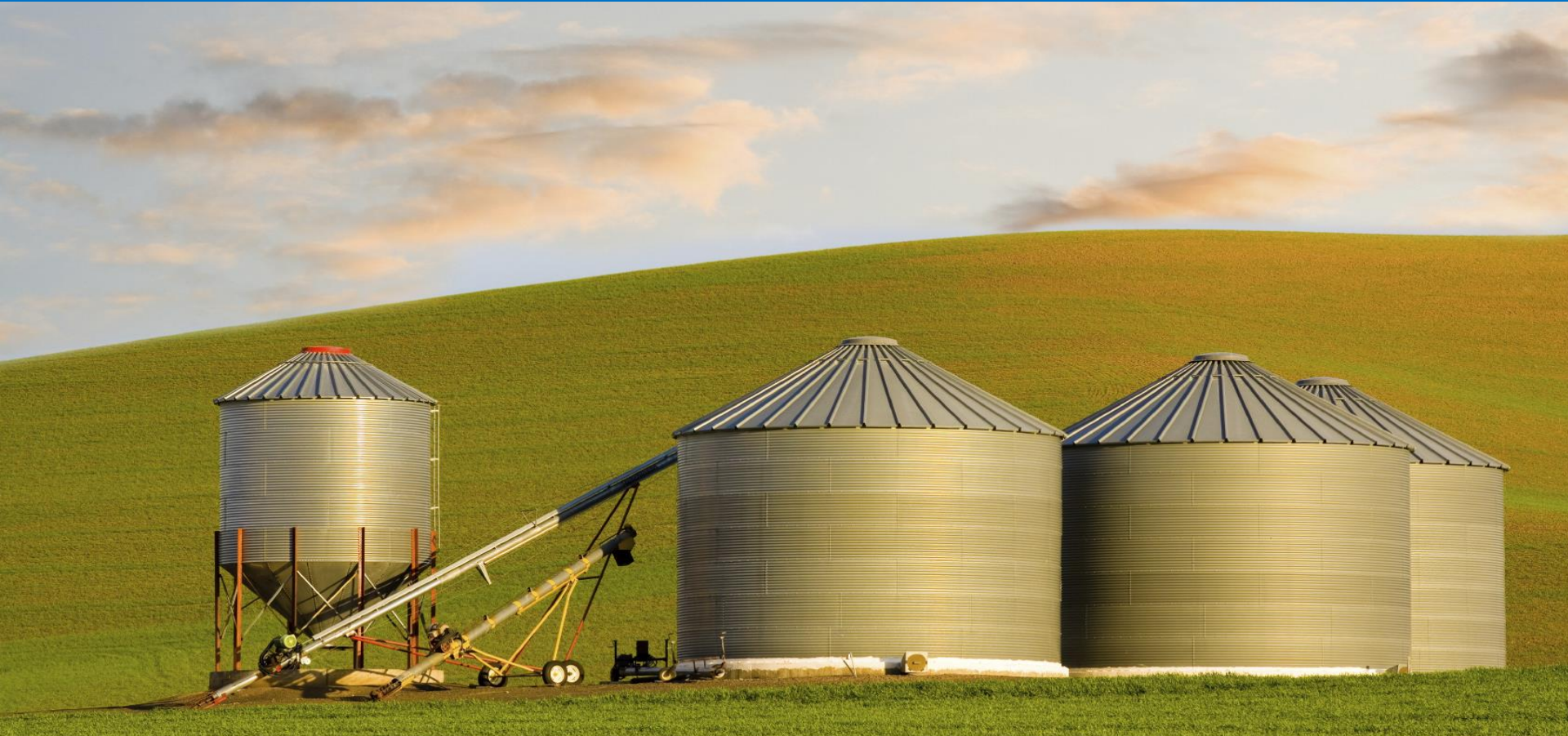
storage options



data becomes the new currency



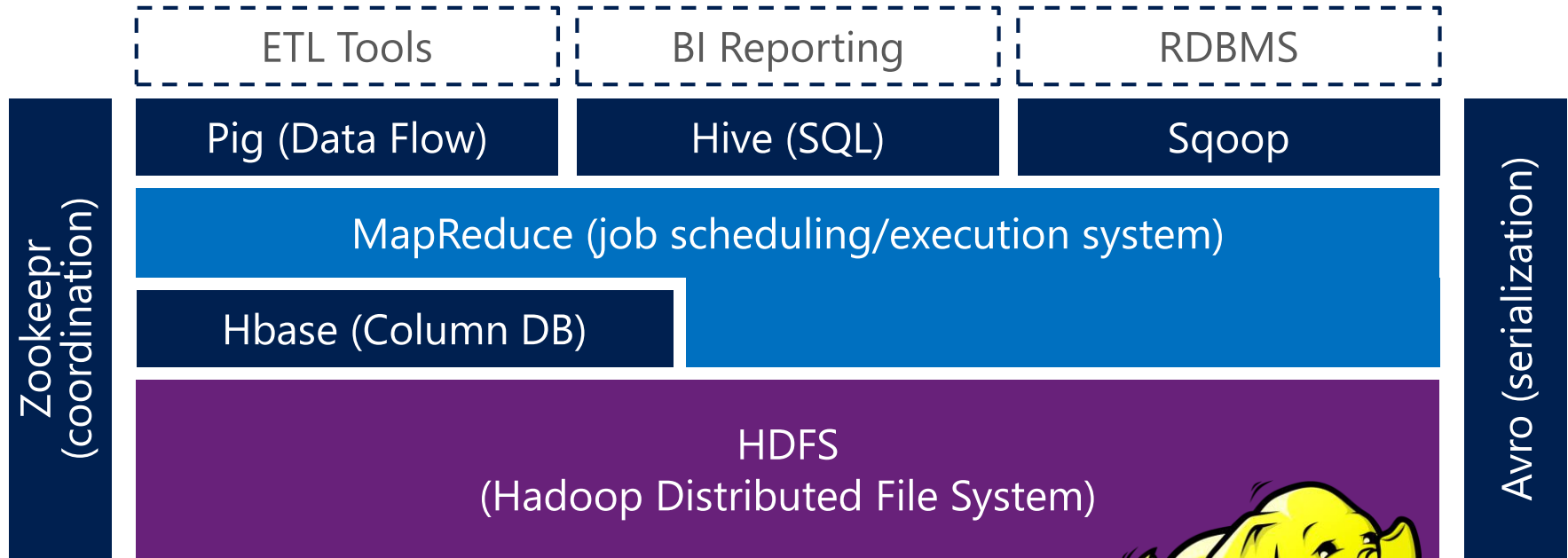
store – store – store – store – store



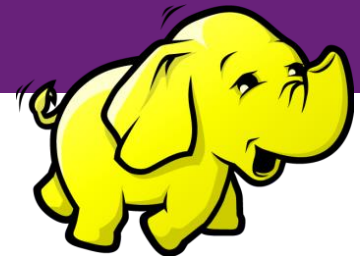
move compute to data



the hadoop ecosystem



Reference: Tom White's Hadoop: The Definitive Guide



MapReduce

functionally

Map $f(k_1, v_1) \rightarrow \text{list}(k_2, v_2)$

Reduce $f(k_2, \text{list}(v_2)) \rightarrow (k_2, v_3)$

in code

```
var map = function (key, value, context) {
  var words = value.split(/[^\a-zA-Z]/);
  for (var i = 0; i < words.length; i++) {
    if (words[i] !== "") {
      context.write(words[i].toLowerCase(), 1);
    }
  }
};

var reduce = function (key, values, context) {
  var sum = 0;
  while (values.hasNext()) {
    sum += parseInt(values.next());
  }
  context.write(key, sum);
};
```

in practice, WordCount

the quick brown fox jumps over the lazy dog

Map

(the,1) (quick,1), (brown,1), (fox,1), (jumps,1) (over,1), (the,1), (lazy,1), (dog,1)

Shuffle

(the,(1,1)) (quick,1), (brown,1), (fox,1), (jumps,1) (over,1), (lazy,1), (dog,1)

Reduce

(the,2) (quick,1), (brown,1), (fox,1), (jumps,1), (over,1), (lazy,1), (dog,1)

Then, scale to TB/PB of data over 10's, 100's or 1000's of nodes



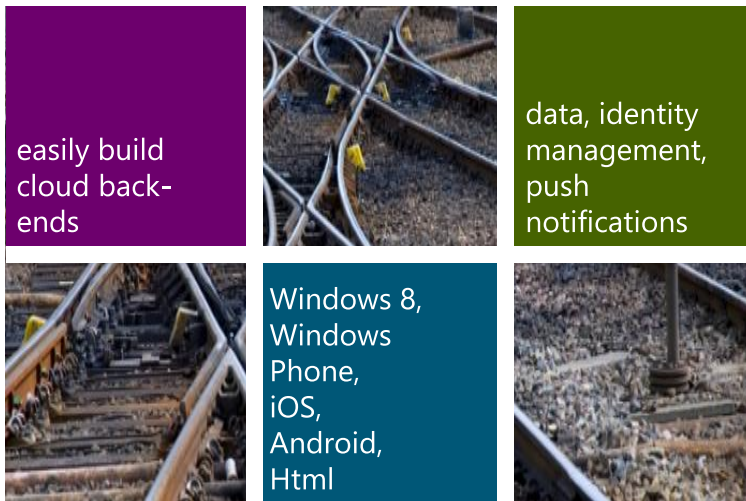
demo:

Hadoop on
Windows Azure

better together – devices and services



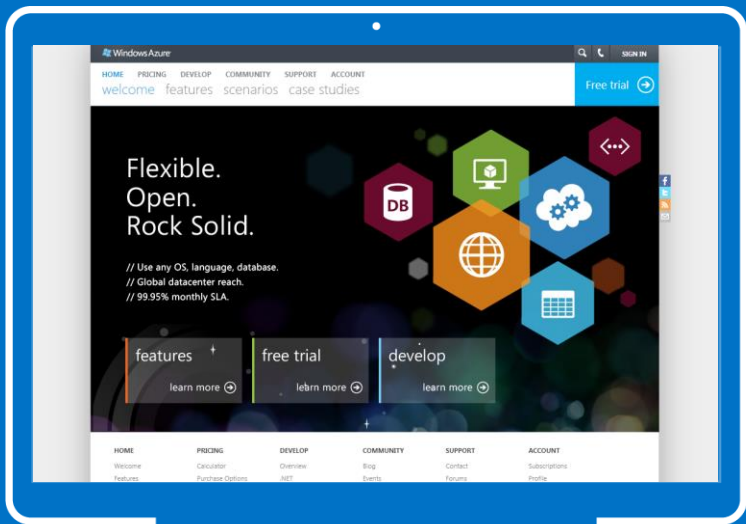
Windows Azure Mobile Services





demo:

Windows Azure
Mobile Services



start now

<http://WindowsAzure.com>

