WINDOWS AZURE MARKETPLACE DATAMARKET OVERVIEW

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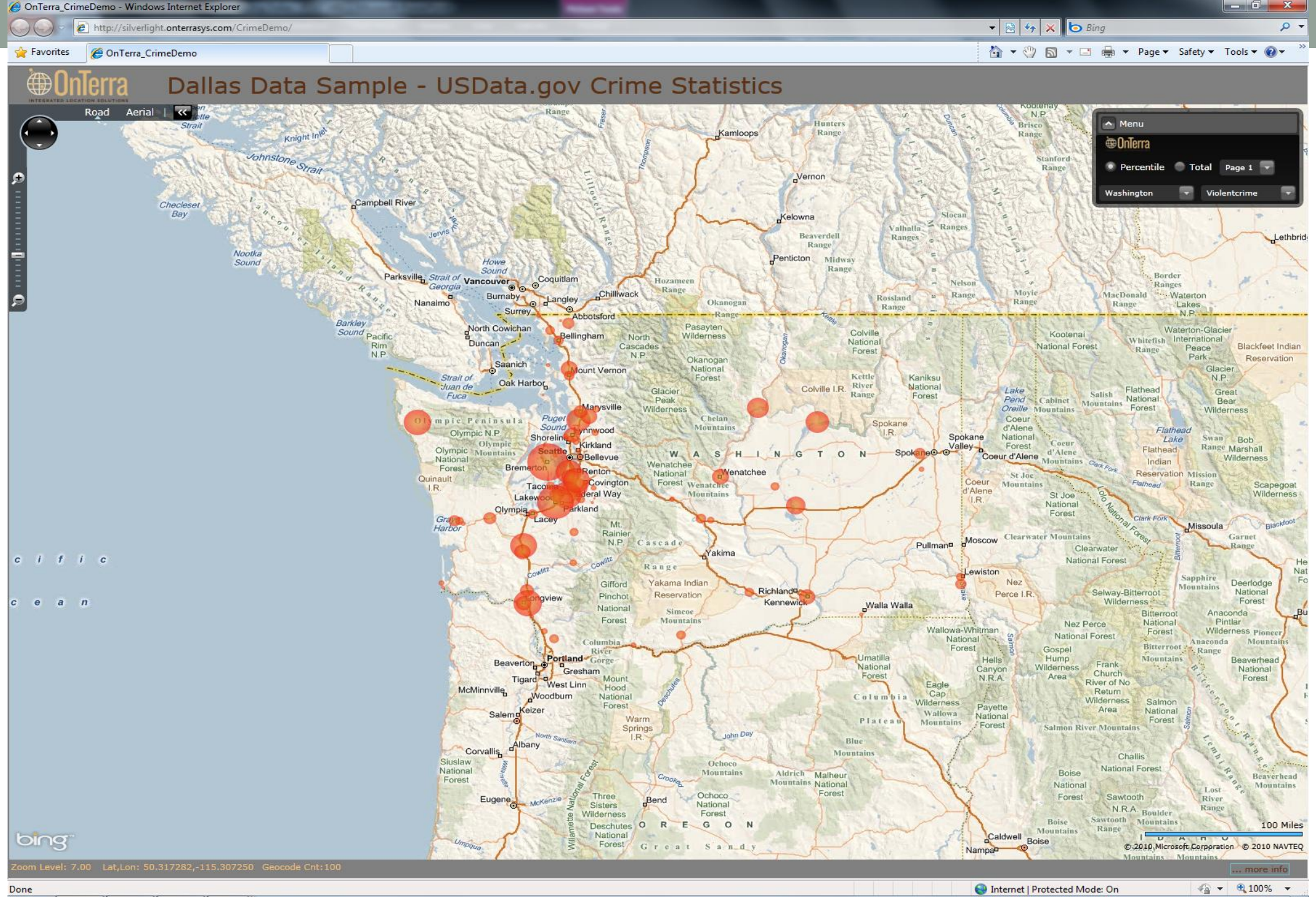
OnTerra_CrimeDemo - Windows Internet Explorer
http://silverlight.onterrasys.com/CrimeDemo/
Favorites
OnTerra_CrimeDemo
Page
Safety
Tools
OnTerra
Dallas Data Sample - USData.gov Crime Statistics
Road
Aerial
Menu
OnTerra
Percentile
Total
Page 1
Washington
Violentcrime
Kamloops
Vernon
Kelowna
Penticton
Campbell River
Parksville
Vancouver
Coquitlam
Burnaby
Langley
Chilliwack
Nanaimo
Surrey
Abbotsford
North Cowichan
Duncan
Bellingham
Saanich
Mount Vernon
Oak Harbor
Marysville
Lynnwood
Shoreline
Kirkland
Seattle
Bellevue
Bremerton
Renton
Covington
Tacoma
Lakewood
Federal Way
Olympia
Parkland
Lacey
Longview
Yakima
Richland
Kennewick
Walla Walla
Spokane
Spokane Valley
Coeur d'Alene
Pullman
Moscow
Lewiston
Missoula
Portland
Beaverton
Gresham
Tigard
West Linn
McMinnville
Woodburn
Keizer
Salem
Albany
Corvallis
Eugene
Bend
Caldwell
Boise
Nampa
Olympic Peninsula
Olympic N.P.
Olympic National Forest
Quinault I.R.
Grays Harbor
Puget Sound
Strait of Georgia
Strait of Juan de Fuca
Johnstone Strait
Knight Inlet
Checleset Bay
Nootka Sound
Barkley Sound
Howe Sound
Pacific Rim N.P.
Okanogan National Forest
Colville National Forest
Kettle River Range
Kaniksu National Forest
Spokane I.R.
Colville I.R.
Wenatchee National Forest
Wenatchee Mountains
Yakama Indian Reservation
Gifford Pinchot National Forest
Simcoe Mountains
Mt. Rainier N.P.
Cascade Range
Columbia River Gorge
Mount Hood National Forest
Warm Springs I.R.
Willamette National Forest
Three Sisters Wilderness
Deschutes National Forest
Ochoco National Forest
Ochoco Mountains
Aldrich Mountains
Malheur National Forest
Blue Mountains
Columbia Plateau
Umatilla National Forest
Eagle Cap Wilderness
Wallowa Mountains
Payette National Forest
Hells Canyon N.R.A.
Wallowa-Whitman National Forest
Nez Perce I.R.
Nez Perce National Forest
Gospel Hump Wilderness Area
Frank Church River of No Return Wilderness Area
Salmon National Forest
Salmon River Mountains
Challis National Forest
Boise National Forest
Sawtooth N.R.A.
Boise Mountains
Sawtooth Range
Boulder Mountains
Lost River Range
Beaverhead Mountains
Lemhi Range
Bitterroot Mountains
Anaconda Range
Anaconda Pintlar Wilderness
Pioneer Mountains
Beaverhead National Forest
Deerlodge National Forest
Sapphire Mountains
Bitterroot National Forest
Selway-Bitterroot Wilderness
Clearwater National Forest
Clearwater Mountains
Lolo National Forest
Flathead Lake
Flathead Indian Reservation
Flathead National Forest
Salish Mountains
Cabinet Mountains
Coeur d'Alene National Forest
Coeur d'Alene Mountains
St Joe Mountains
St Joe National Forest
Kootenai National Forest
Whitefish Range
Waterton-Glacier International Peace Park
Glacier N.P.
Great Bear Wilderness
Blackfeet Indian Reservation
Bob Marshall Wilderness
Scapegoat Wilderness
Garnet Range
Mission Range
Swan Range
Lethbridge
Lake Pend Oreille
Clark Fork
Bitterroot
Salmon
Blackfoot
Clearwater
Snake
Columbia
Kettle
Okanogan
Pasayten Wilderness
Glacier Peak Wilderness
Chelan Mountains
North Cascades N.P.
Hozameen Range
Okanogan Range
Beaverdell Range
Midway Range
Valhalla Ranges
Slocan Ranges
Nelson Range
Rossland Range
Moyie Range
MacDonald Range
Border Ranges
Waterton Lakes N.P.
Stanford Range
Brisco Range
Hunters Range
Lillooet Range
Thompson
Fraser
Jervis Inlet
Vancouver Island Ranges
Olympic Mountains
Cowlitz
Deschutes
Crooked
John Day
North Santiam
McKenzie
Umpqua
Willamette
Great Sandy
W A S H I N G T O N
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100 Miles
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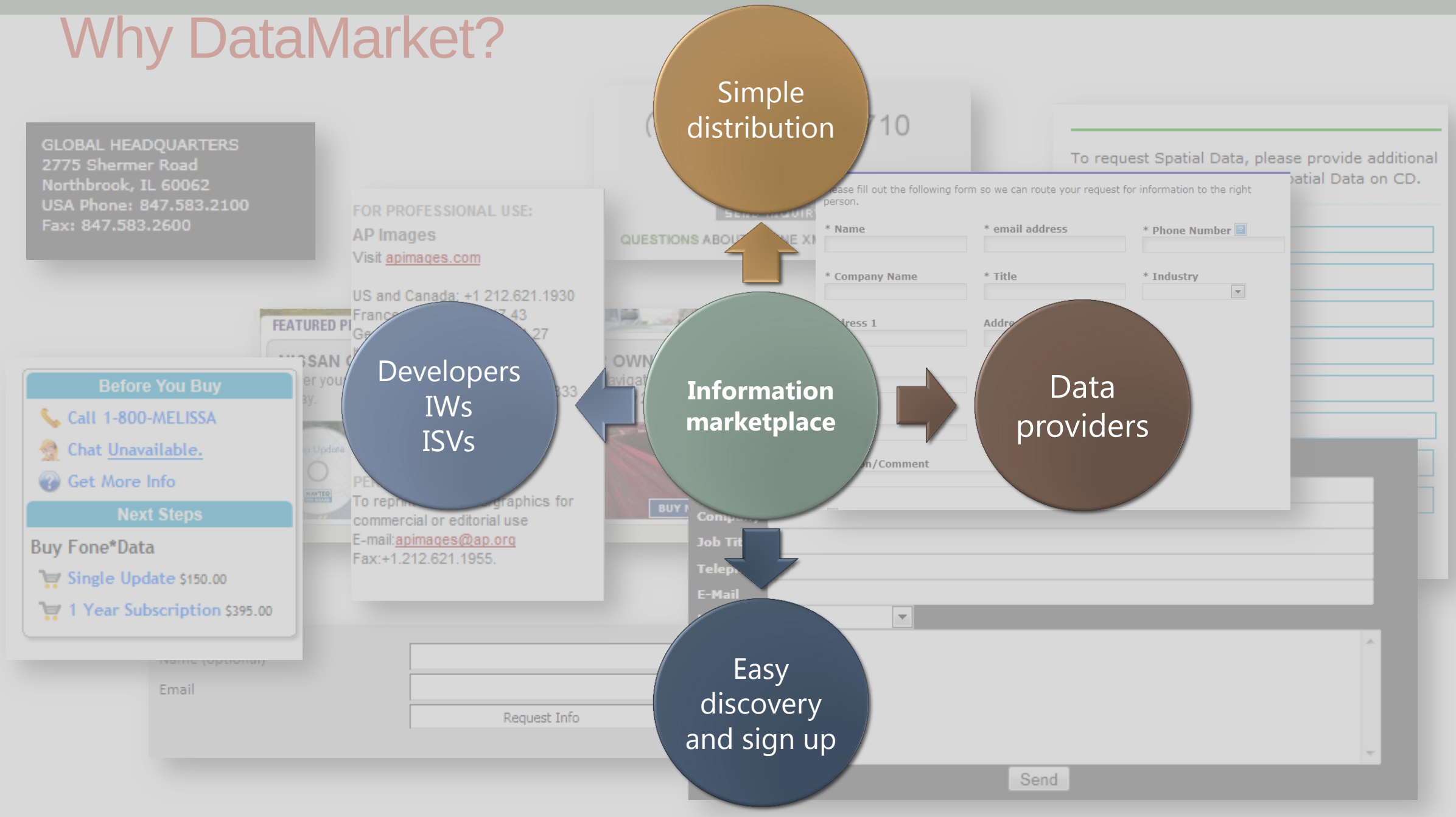
Why DataMarket?



Exploring DataMarket

demo

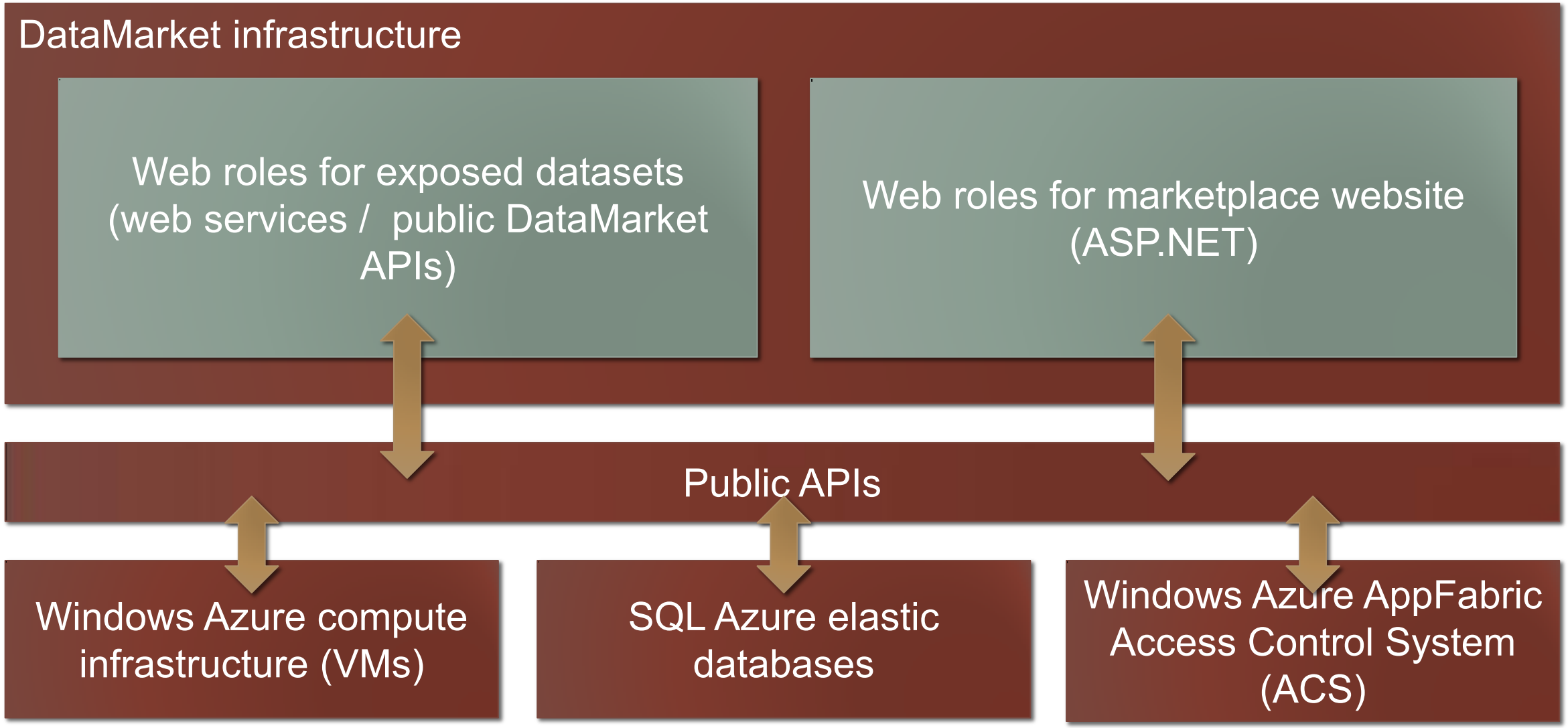
DataMarket APIs

- OData-based APIs for access to the service
  - Query language over HTTP
  - Standardized metadata
  - Server-based filtering and sorting
  - Pagination for large result sets
  - Open standard (www.odata.org)
    - Support for a lot of languages, including C#, VB.NET, PHP, Objective C, etc.
    - ATOM feed as response
- Authentication using DataMarket account key
  - HTTP basic authentication
  - Secured through SSL

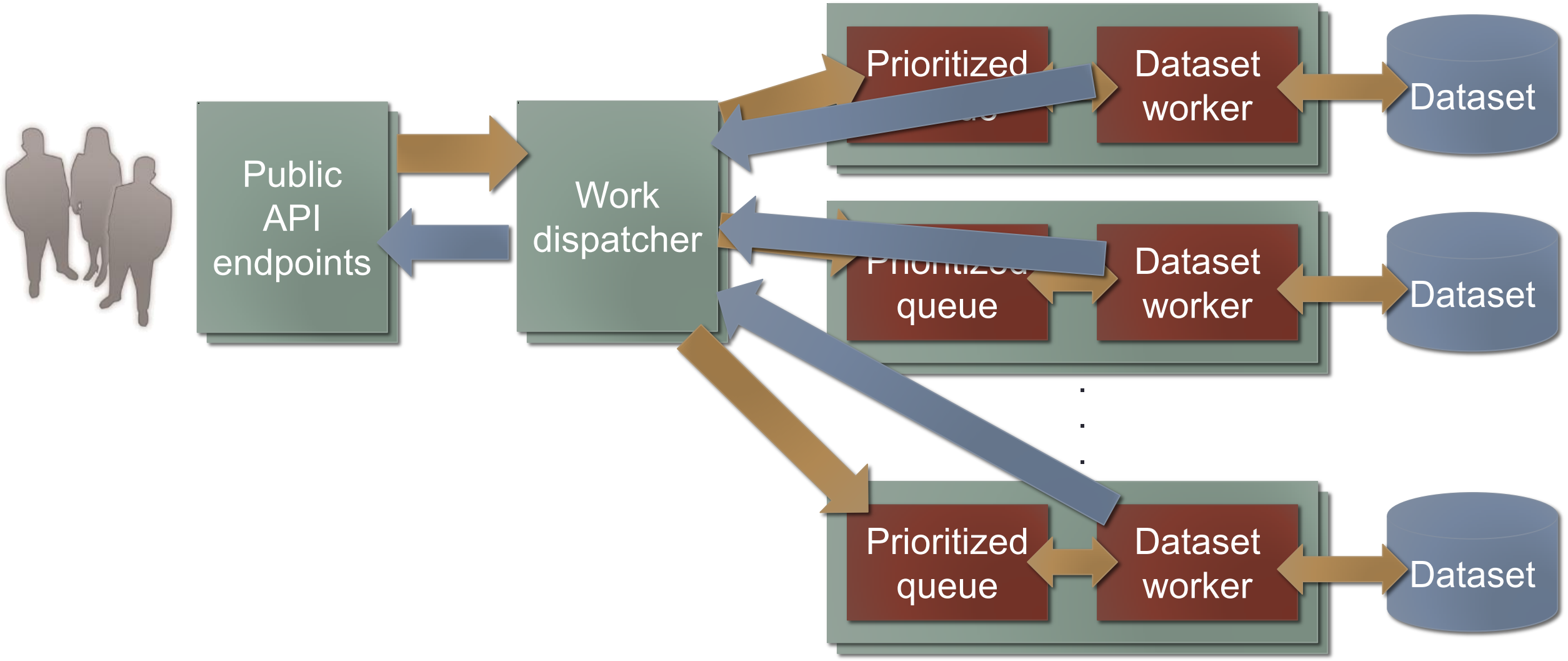
Consuming a DataMarket Dataset

demo

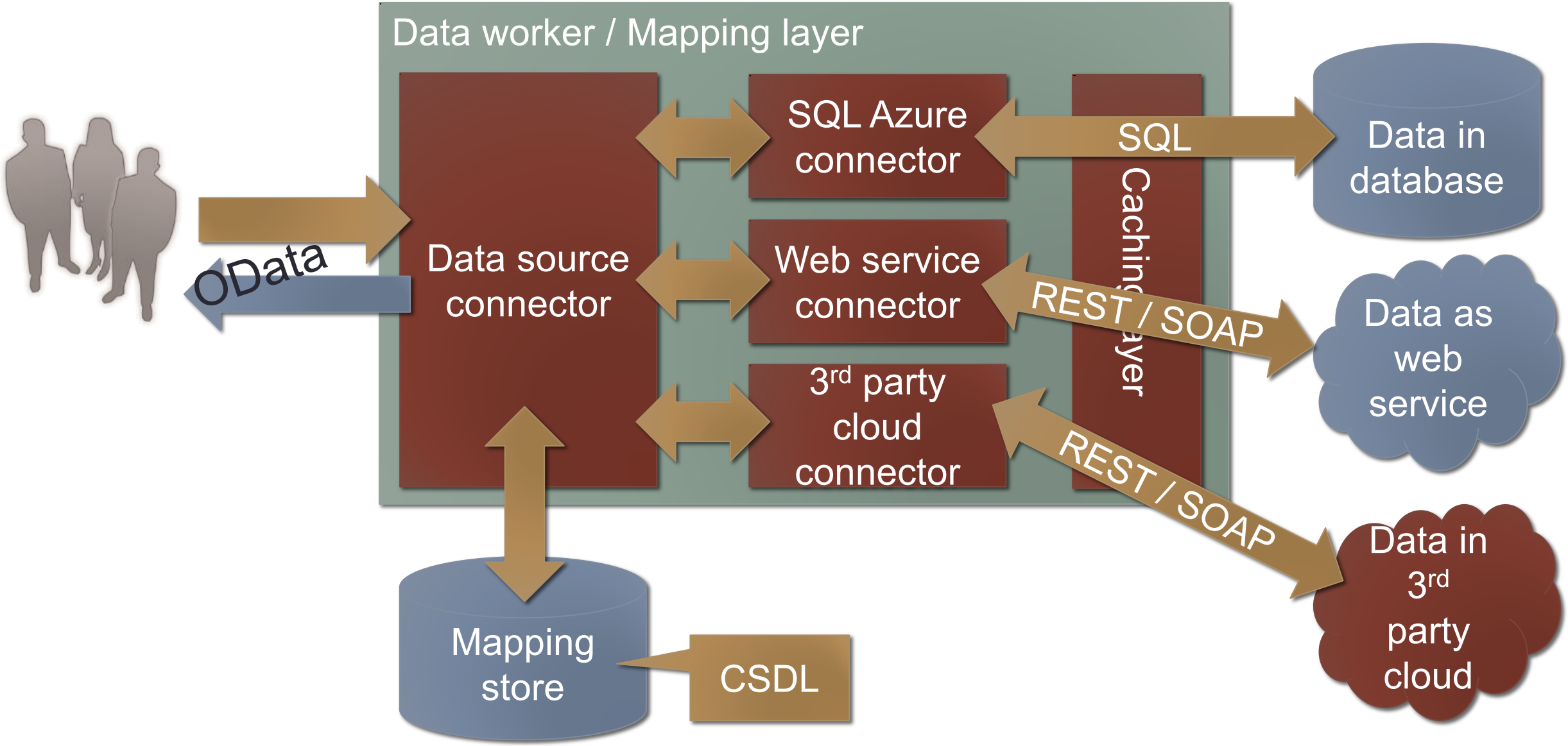
DataMarket Architecture



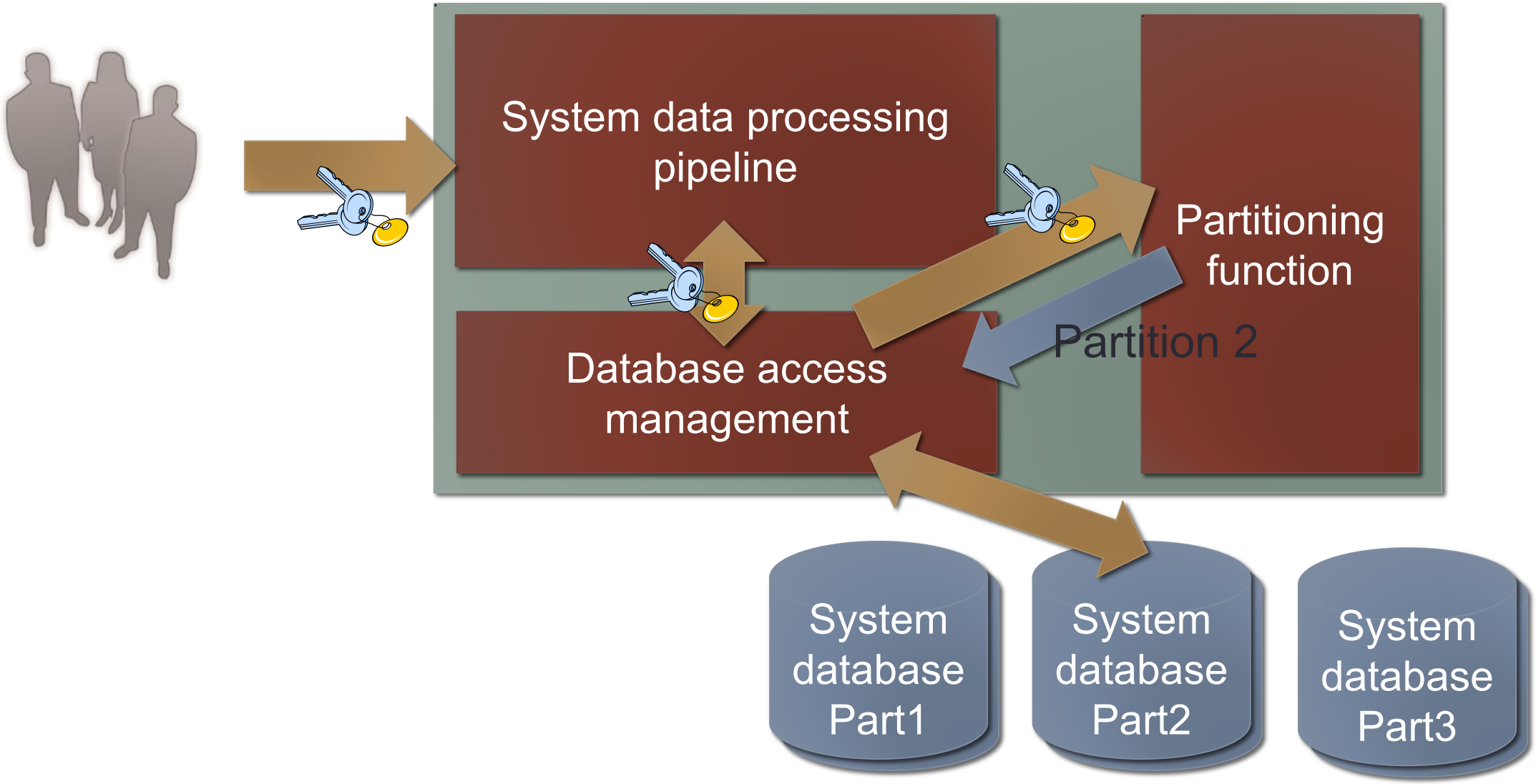
Processing user requests



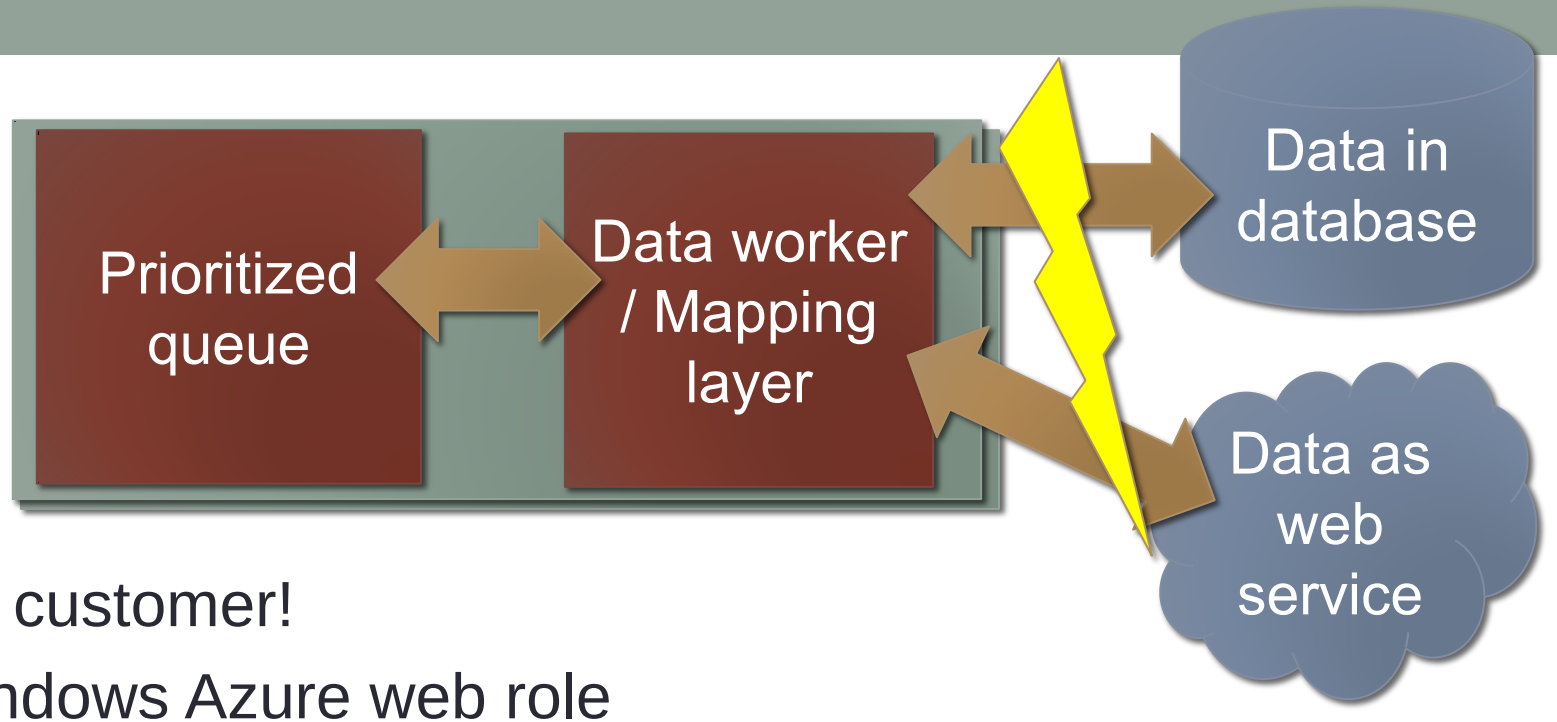
Reaching out to content provider's data



Scaling out user databases

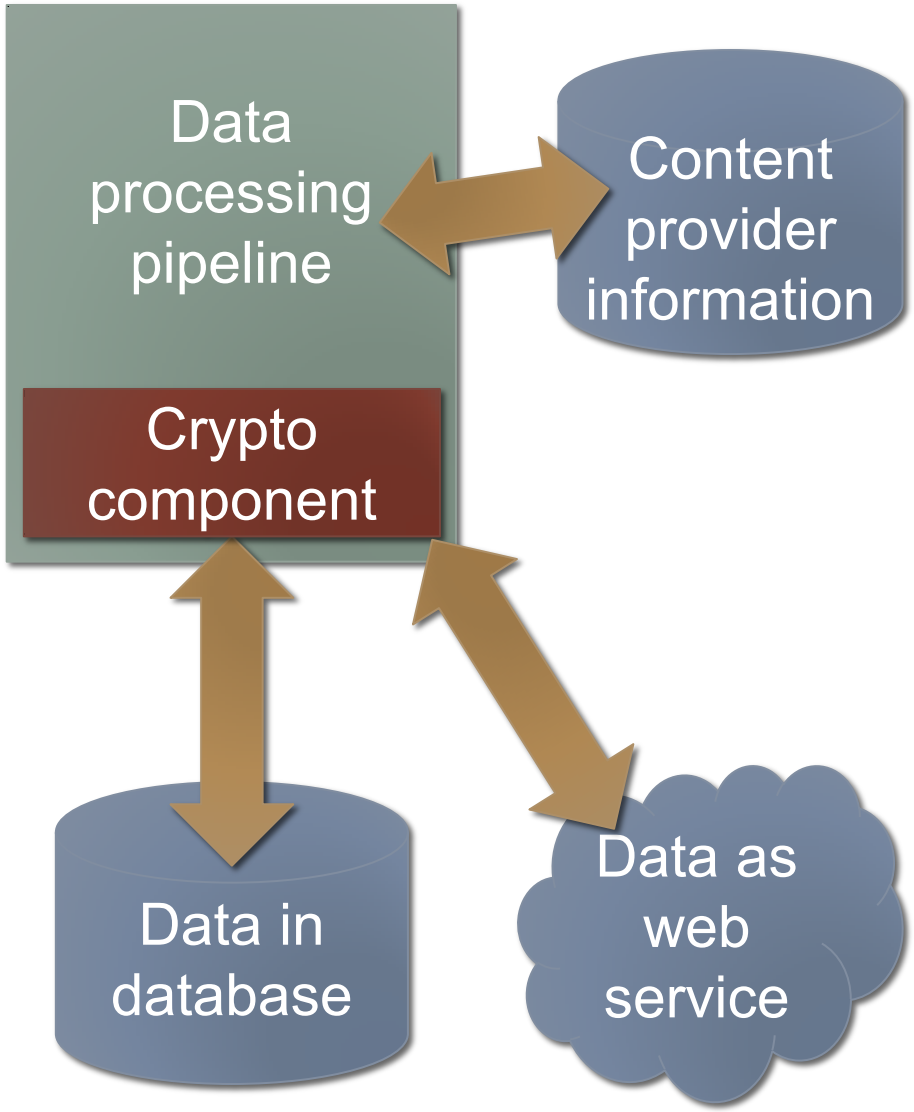


Monitoring



- Discover issues before customer!
- Build monitoring as Windows Azure web role
  - Deployed to multiple data centers (leverage Azure infrastructure)
  - Executes sample queries on regular base
  - Stores result in Windows Azure Table
- Logs transferred on a regular basis to SQL Azure
  - Reporting services to create reports
  - Alerting on condition matching

Securing high value data



- **Problem:** how to secure 3rd party connection information?
- **Solution:** Certificates!
  - Windows Azure has dedicated certificate pipeline
  - Only small number of people need access to them
- Connection information encrypted with final key during publication process
- Certificates to decrypt connection information on the fly
- Connecting to data sources through SSL

So why did we do this?

demo

How do I buy it?

- Free and commercial datasets
- Content provider sets the price
- Two supported subscription models
  - Unlimited number of queries per month
  - Limited number of queries per month and minute
- Credit card payment

Publishing data in DataMarket

- You are in control of the
  - data
  - price
  - terms of use
- Easy publishing - we create the consumer facing APIs
  - Connect to SQL Azure
  - Wrap existing web services
- Receive periodic reports and payouts

Discover DataMarket datasets from Office

Questions?