

MICHIGAN STATE
UNIVERSITY

Alpha Presentation

Global Emissions Inventory Water Dashboard

The Capstone Experience

Team Dow

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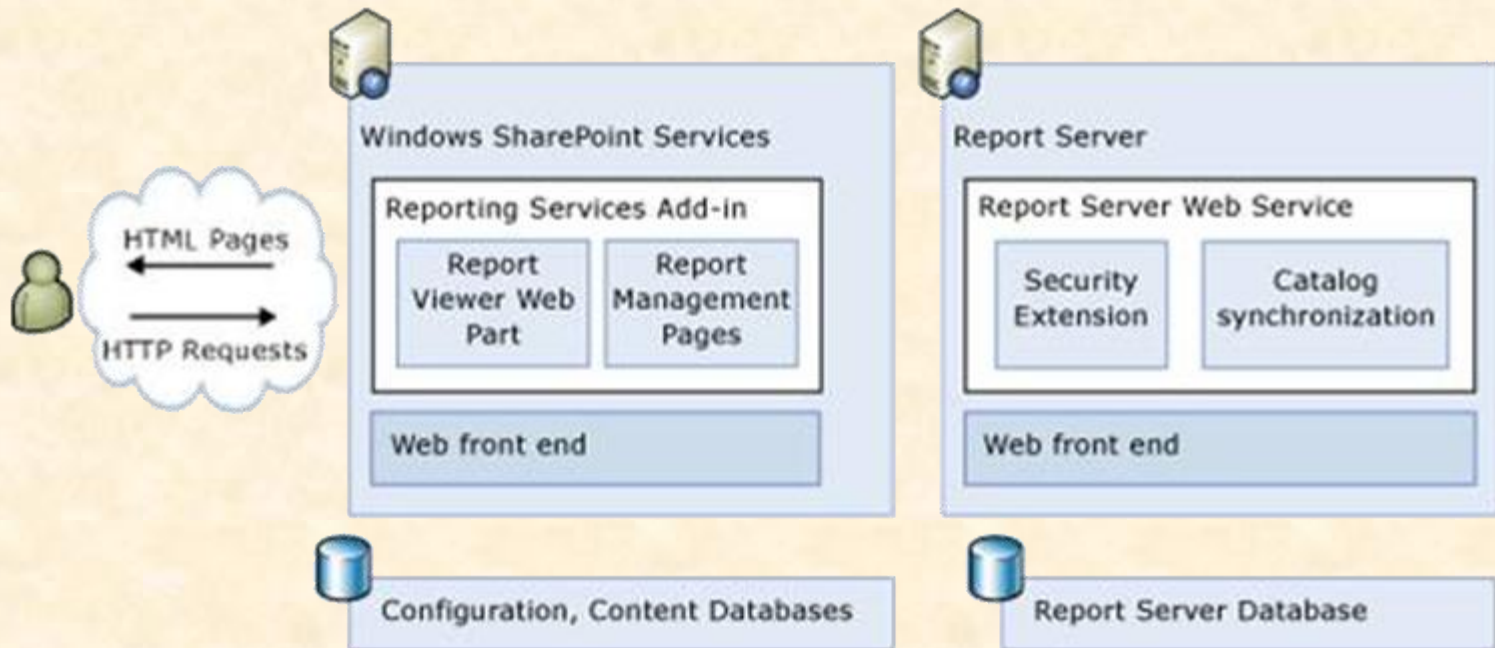


*From Students...
...to Professionals*

Project Overview


- Reusable SharePoint WebParts
- Visual display of Dow Plant emissions data
- Integrated map displaying filtered plant sites
- Dynamic SSRS analytical data

System Architecture



Screen Shot of PowerPivot Data

Site Actions Browse **List Tools** Items List TEAMDOW\spAdmin



Alpha ▸ Water Intake ▸ All Items ▾ I Like It 1

Alpha Search this site...

Libraries	Site Code	Site Name	Environmental Category	Sub Category Name	Unit of Measure	Extraction Date	Extraction Time	2005	2006	2007
Reports	000001	FREEPORT, TX	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	2,263,497,193.25711	2,230,991,689.372	2,461,657,354.26
PowerPivot Gallery	000002	PLAQUEMINE, LA	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	1,407,465,000	1,343,013,634.733	1,159,506,200.2527
Lists	001475	ST. CHARLES OPERATIONS	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	1,084,831,039.8909	1,470,432,262.2	1,220,365,275.61
Discussions	000060	TERNEUZEN, NLD	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	732,684,445.601	58,682,768	761,461,723.04
Recycle Bin	000068	STADE, DEU	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	391,795,064.525844	412,049,233.586	390,172,960.26
All Site Content	000169	LOUISVILLE, KY	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	114,281,086.563	110,329,265.193	111,233,246.10
	001405	DOW CENTRAL GERMANY, DEU	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	74,614,687	76,063,109.2	80,812,710.76054
	000486	MIDLAND OTHER, MI	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	54,020,142.8	54,776,774.55	54,306,668.5
	000040	BAHIA BLANCA, ARG	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	53,932,850.43		
	000041	ARATU, BRA	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	34,405,381.373	39,092,845	40,250,381.
	000861	SEADRIFT, TX	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	21,891,391	30,700,000	30,400,00
	001811	DEER PARK, TX (ROH)	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	37,815,775.586	39,040,181.612	36,288,670.
	000003	FORT SASKATCHEWAN,	WATER	Site Level Intake	Thousands of Pounds	5/17/2011	2:10:32 PM	24,735,877.024	23,023,192.563	19,054,814.155

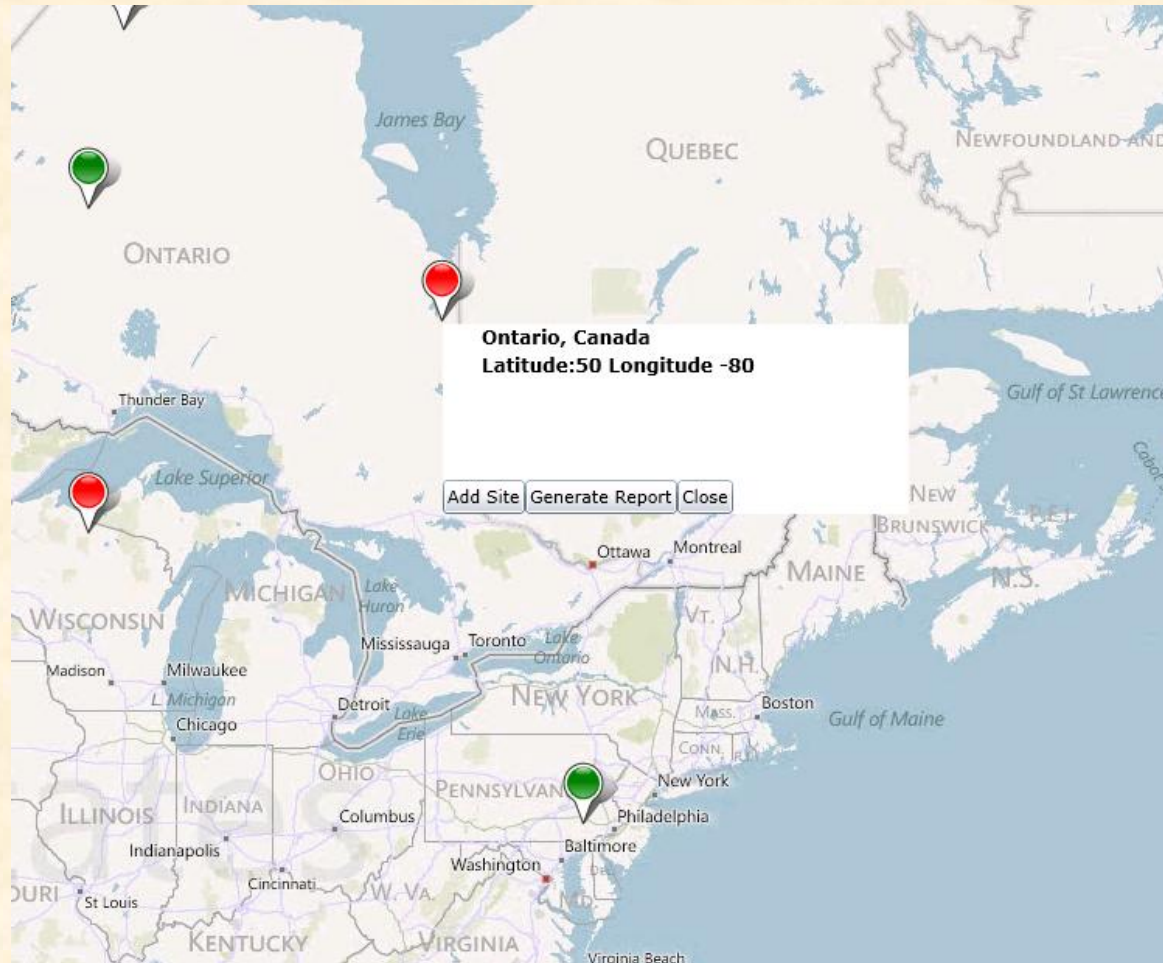


Screen Shot of Map

The screenshot displays a web application interface for a map. At the top left is the DOW logo. The page title is "GEI Water Dashboard - BingMapsTest". The breadcrumb trail shows "GEI Water Dashboard > BingMapsTest". A yellow status bar indicates "Status: Checked out and editable." The left sidebar contains a navigation menu with categories: Lists, Tasks, MapData, Dashboards, Data Connections, Libraries, Site Pages, XAPLibrary, PerformancePoint Content, PowerPivot Test, Alpha, BingMapsTest, excelservice-sample, mossbisample, and pssample. The main content area is titled "MapData" and "Silverlight Web Part". It shows a map of North America with several data points marked by colored pins (yellow, green, red) across various states and provinces. The map includes labels for major cities, states, and provinces, as well as geographical features like the Gulf of Mexico and the Arctic Ocean. A search bar is located at the top right of the map area.



Screen Shot of Map with Selection



Screen Shot of Reporting Service

The screenshot displays the Dow Reporting Service interface. At the top, there is a dark blue navigation bar with 'Site Actions' (a dropdown menu), 'Browse', and 'Page'. Below this is the Dow logo (a red diamond with 'DOW' in white) and the text 'Alpha ReportToolbar Alpha version of site & webparts'. A light blue bar below the logo contains the word 'Alpha'. The main content area is divided into two sections: 'ReportToolbar' on the left and 'Report Viewer - PieChart' on the right. The 'ReportToolbar' section includes a 'Report Type:' dropdown menu set to 'Pie Chart', 'Start Year' and 'End Year' input fields with values '2005' and '2007' respectively, 'Add Site' and 'Remove Site' buttons, a site selection dropdown menu showing 'OTTANA, ITA', and a 'Create Report' button. The 'Report Viewer - PieChart' section features a navigation bar with 'Actions' (a dropdown menu), a refresh icon, navigation arrows, a page indicator 'of 0', and a 'Find Next' search box.



Screen Shot of Generated Report

The screenshot displays a web interface for generating and viewing reports. At the top, there is a navigation bar with 'Site Actions', 'Browse', and 'Page' options. Below this is the DOW logo and a navigation menu with 'Alpha', 'ReportToolbar', and 'Alpha version of site & webparts'. The main content area is divided into two sections: 'Report Toolbar' and 'Report Viewer - PieChart'. The 'Report Toolbar' section includes a 'Report Type' dropdown set to 'Pie Chart', 'Start Year' and 'End Year' input fields (with values 2007 and 2008), 'Add Site' and 'Remove Site' buttons, a site selection dropdown (showing 'OTTANA, ITA'), and a 'Create Report' button. The 'Report Viewer - PieChart' section features a navigation bar with 'Actions', a refresh icon, and a page indicator '1 of 1'. The main area contains a pie chart titled 'Water Usage For OTTANA, ITA.' with a legend indicating blue for 2007 and orange for 2008. The 2008 slice (orange) represents approximately 65% of the total usage, while the 2007 slice (blue) represents approximately 35%.

Year	Water Usage (Estimated %)
2007	35%
2008	65%



What's left to do?

- Start-up Dashboard
- Secure Data Connections
- Vastly improved UI
- Map filtering
- Extensive testing

