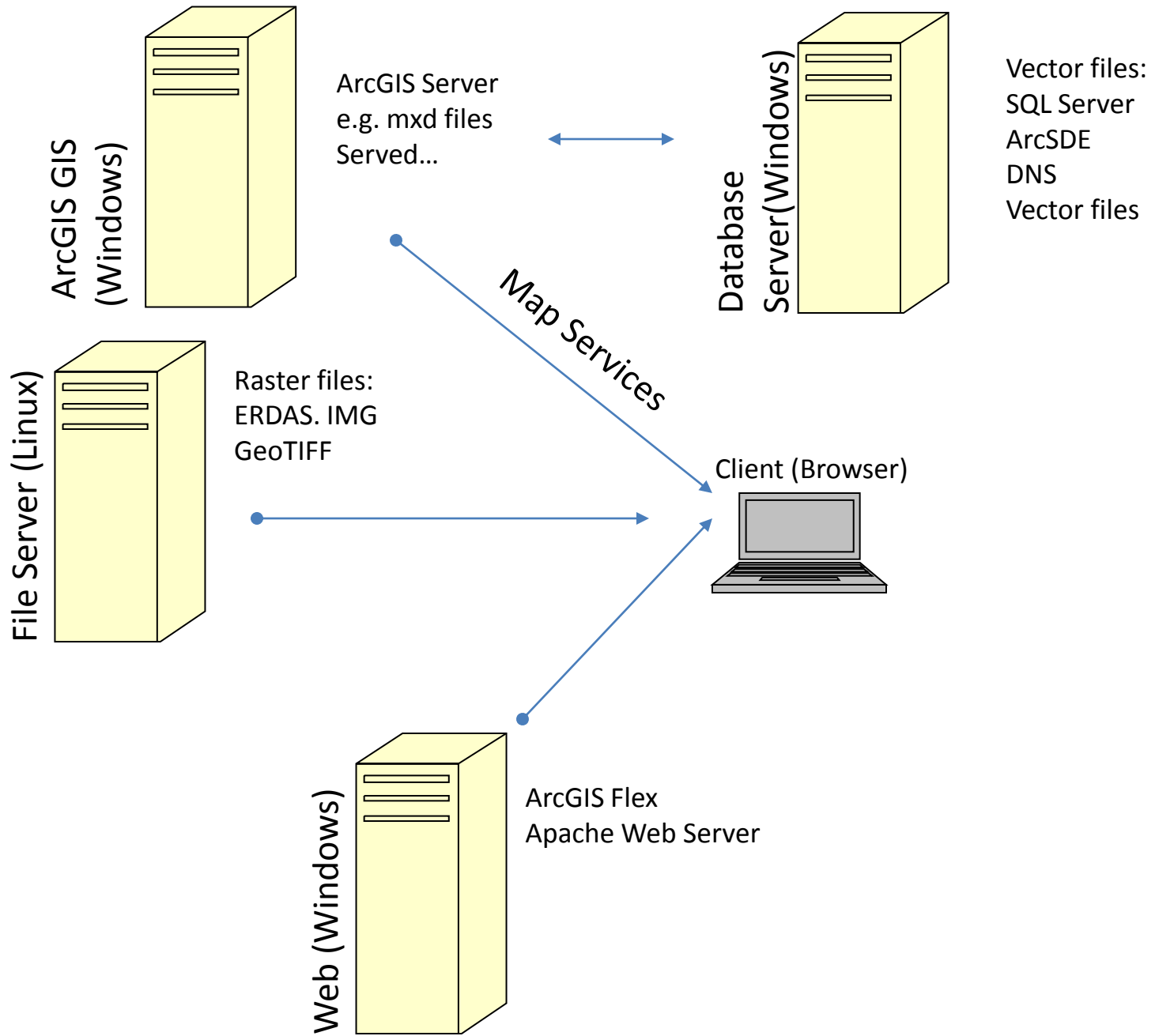
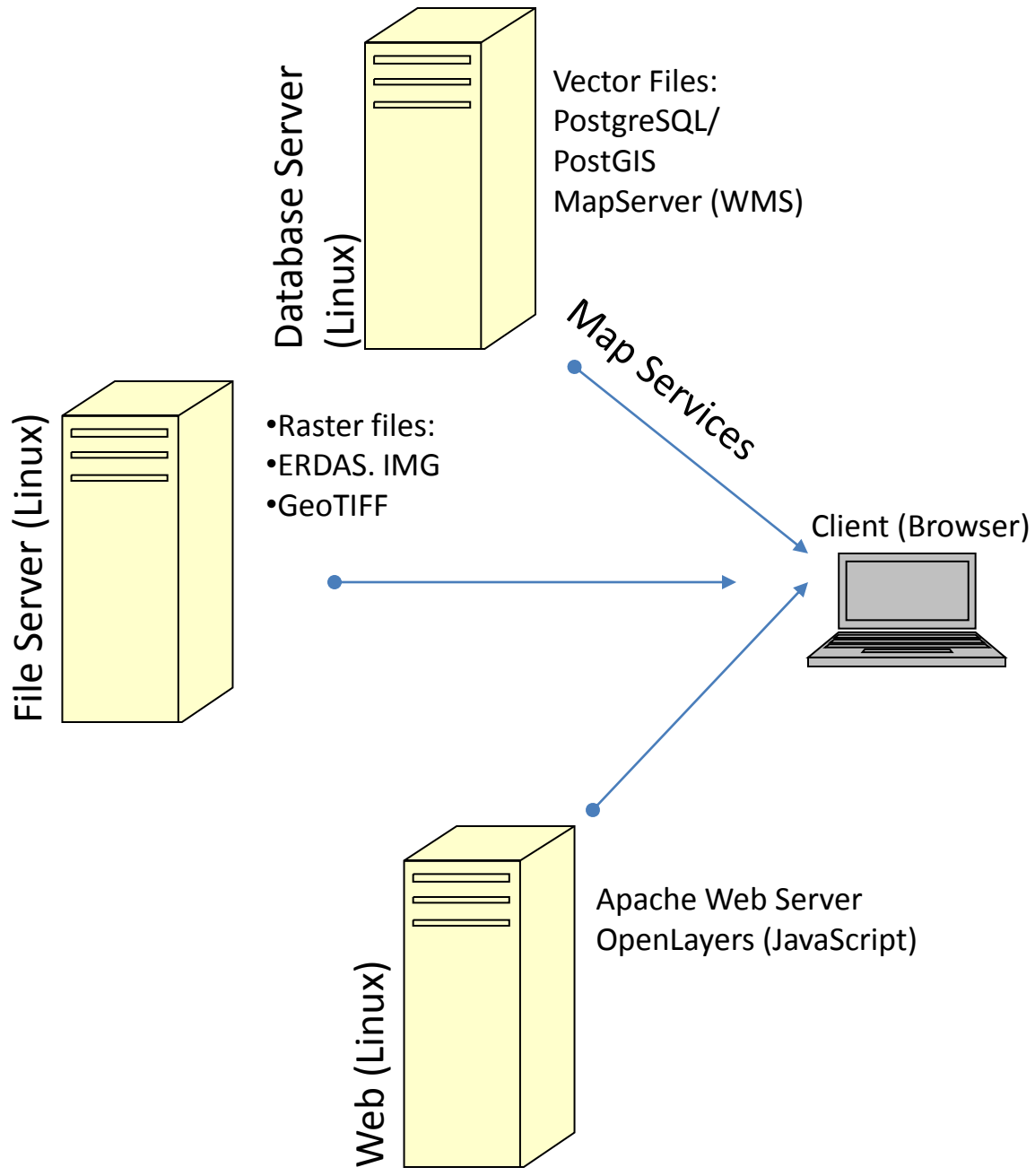


Reengineering WebGIS: An OpenLayers Case Study

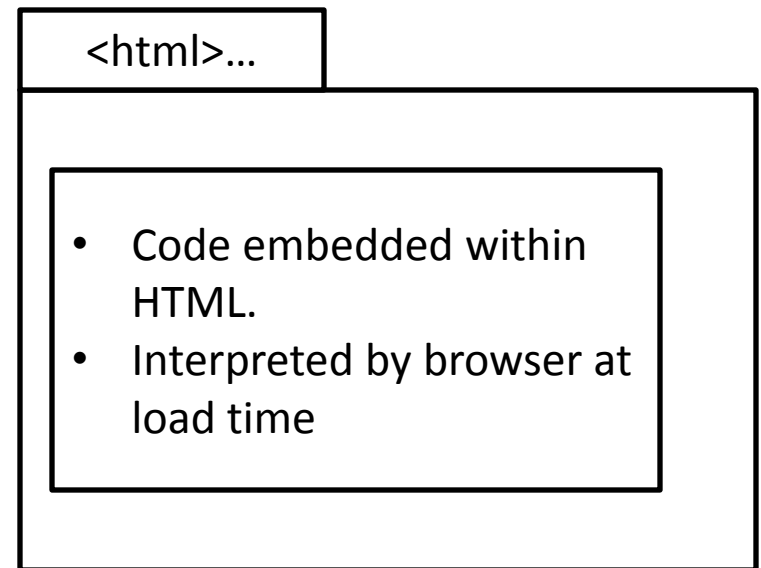
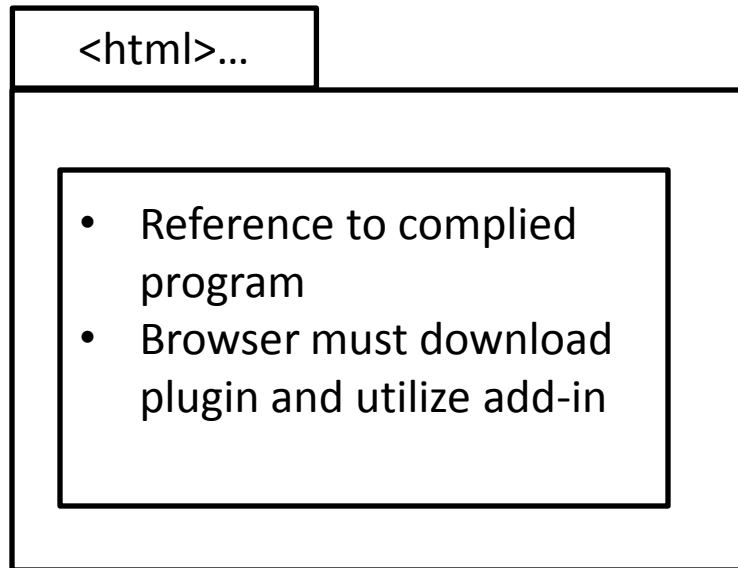
By: Derek Morgan

Acknowledgements to: Mark Phillips
& Bill Hargrove





Moving from a plugin to script-based implementation



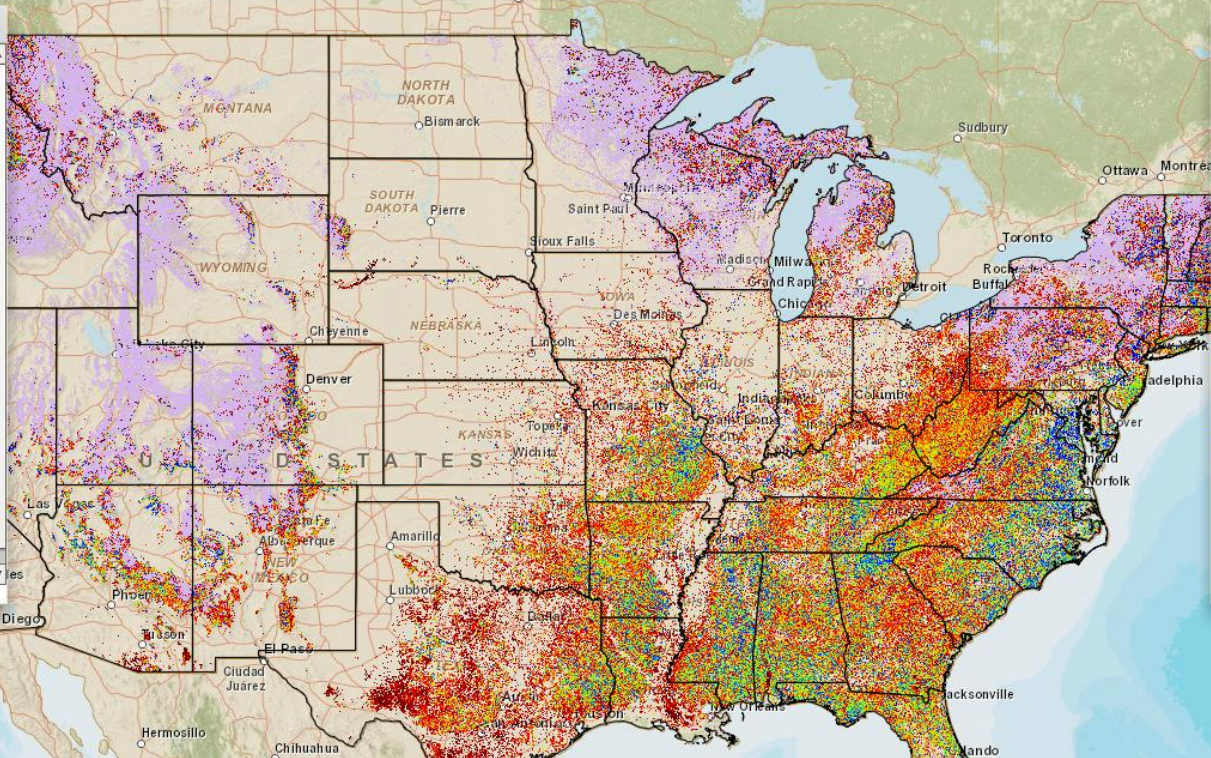
U.S. Forest Change Assessment Viewer

Basemap Streets Theme CONUS Vegetation Monitoring Tools Find Area

Map Layers

Political Boundaries and Roads

- Boundaries
 - Cities
 - State Boundaries
 - County Boundaries
 - Federal Land Boundaries
 - Federal Lands (Agencies)
- Roads
 - Interstates
 - Secondary Roads
- Fires
 - Historical Aerial Disturbance Surveys (USFS FHM)
 - Forest Disturbance Detection Maps (MODIS NRT)
 - eMODIS Cloud Assessment Products
 - Drought- US Drought Monitor
 - USGS/NDMC VegDRI Drought Assessment Products
 - Other Weather and Climate



Map Tools

Legend (click to clear layer)

States

TACs-NASA Products

% Change in NDVI

Dark Red	-61% to -99%
Red	-30%
Orange	-20%
Light Orange	-15%
Yellow	-12.5%
Light Green	-10%
Green	-5%
Light Blue	-3%
Blue	-1.5%
White	0%
Dark Blue	+25%
Light Blue	+100%
Purple	Snow

Print Map

Export Map to JPG

Graph NDVI

Share this Map



Forest Change Assessment Viewer (OpenLayers Version)

Find Area: Base Map: Streets Theme: CONUS Vegetation Monitoring Tools



Map Layers

- Political Boundaries and Roads
- Fires
- Historical Aerial Disturbance Surveys (USFS FHM)
- Forest Disturbance Detection Maps (MODIS NRT)
- Forest NDVI Change (USFS TACs-NASA)
 - Change from All-Year Baseline
 - current_oct31_nov23.tif
 - previous1_oct23_nov15.tif
 - previous2_oct15_nov7.tif
 - Change from 1-Year Baseline

Map Tools

Share this Map

Legend (click to clear layer)

States
TACs-NASA Products
% Change in NDVI

Dark Red	- 61% to -99%
Red	- 30%
Orange	- 20%
Yellow	- 15%
Light Green	- 12.5%
Green	- 10%
Light Blue	- 5%
Blue	- 3%
Dark Blue	- 1.5%
White	0%
Light Purple	+ 25%
Dark Purple	+ 100%
White	Snow

Events and State Changes

- Listeners:
 - Hover
 - Button clicks
 - Map extent changes
 - Legend graphic clicks
 - Layer changes
 - Theme change
- State changes:
 - Button color
 - Legend graphic changes
 - Theme etc...
- Share URL as power feature:

