

An Agency-wide Approach to Geospatial Training at the US Forest Service



ESRI UC 2009

July 15, 2009

US Forest Service GSTC

IGIS Technologies



Presentation Outline

- Increased GIS usage within the Forest Service
- Benefits of geospatial training
- Need for innovative approaches to training
- eLearning demonstration
- Summary and questions

US Forest Service and GIS Usage

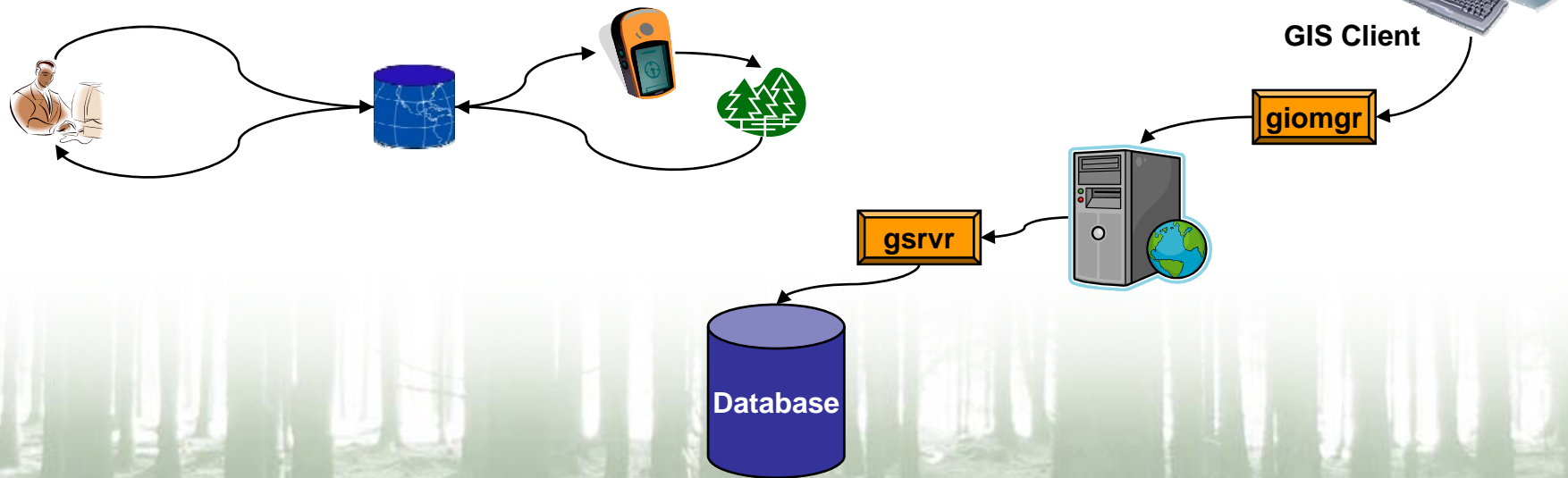
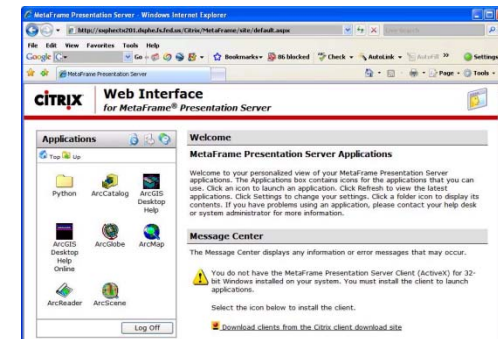
- Historic Usage
- Enterprise License Agreement with ESRI
- Projected future GIS usage

Where GIS is used within the USFS

- Geospatial Advisory Committee (GAC)
- GSTC
- RSAC
- 9 USFS Regions
- USFS Research Stations
- Motorized Vehicle Use Map program
- National Applications
 - ◆ NRIS
 - ◆ INFRA

Enterprise approach to GIS

- Centralizing applications with CITRIX
- Centralizing geospatial data into a Data Center
- Standardizing GIS workflows at the USFS



Benefits of Training

- Protect software investment
- Develop and maintain authoritative data
- Ensure adequately trained labor pool
- Stay in step with advancing technology
- Create productive GIS users that can get the most benefit out of the GIS

Historic Training Approach

- Instructor-Led Training (ILT)
- ESRI-developed standard curriculum
- USFS customized training
 - ◆ Developed by USFS
 - ◆ Incorporates USFS data, workflows, and mission into the course content

Need for Innovative Approaches to GIS Training

- Heavier GIS usage throughout the USFS
- Keep course delivery costs down
- Significant logistics for training delivery
- Need to increase student access to training
- Serving a geographically dispersed student audience
- Simplify curriculum updating
- Slashed agency funding for training and travel

USFS Examines Training Delivery Alternatives

- GAC is funding some eLearning module development
- EGIS is funding some eLearning module development
- RSAC and web casts
- National Applications and eLearning
- Widespread efforts to exploit Internet for training and information distribution

Training Delivery Formats

- Instructor-led training
- Web casts
- Self-paced eLearning



OB_storyboard_v06

USDA FOREST SERVICE

Apply your knowledge: Map Use

- Which feature appears to be more important, Larch Mountain or Buck Ridge?

- Larch Mountain
- Buck Ridge

Buck Ridge

5-7

© Hixson 10 Seconds Remaining

Outline Thank Notes Search

Slide Title	Duration
Slide 1	00:22
Slide 2	00:05
Lettering and Label Pl...	00:10
Map Typography	00:05
Map Typography	00:20
Functions of Map Lett...	00:12
Apply your knowledge...	00:05
Typeface Characterist...	00:06
Elements of Type	00:27
Components	00:13
Apply your knowledge...	00:05

00:05 / 00:05

Camera and Voice

Experience Bank

Quiz

Which program

Talk

...a blended approach

Components of eLearning module

- Content published as a Flash File
- Table of contents
- Search engine for content
- Common navigation tools
- Knowledge checks
- Data and exercise downloads
- Recorded demonstrations
- Compatible with an LMS (Learning Management System)

Demonstration



US Forest Service:
Applied Cartographic Concepts
Module 8: Data Classification



US Forest Service:
Applied Cartographic Concepts
Module 19: Generating Hillshades
and Contours

Summary

- Enterprise-wide GIS requires enterprise-wide training strategy
- Leverage the Internet and rapid eLearning development tools to achieve high quality, accessible training
- Blend various training formats as is appropriate: ILT, web casts, and browser-based eLearning