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

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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

...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