

MAP2PDF – PROVIDING EASY ACCESS TO GIS



GeoPDF

TerraGO
TECHNOLOGIES

What is a GeoPDF File?

- ➔ Created with MAP2PDF Software
- ➔ Preserves the geospatial content of the source data in the Adobe software platform
- ➔ Allows for access without cost to recipients
- ➔ Disconnected or Connected Users
- ➔ Provides tools that eliminate technology boundaries so that anyone, anywhere can access and collaborate on intelligent, interactive maps.

A map must be three things:

- ➔ Readable
- ➔ Understandable
- ➔ Accurate

In today's world for a map to be effective it must also be:

- ➔ Accessible
- ➔ Useable



GeoPDF Workflow

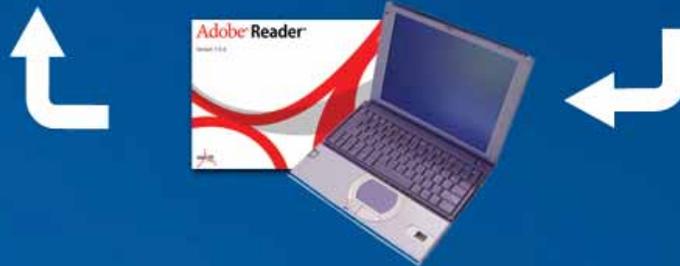


2. Export map & data to GeoPDF

1. Author Map



3. Reader Enable the GeoPDF using Acrobat Professional



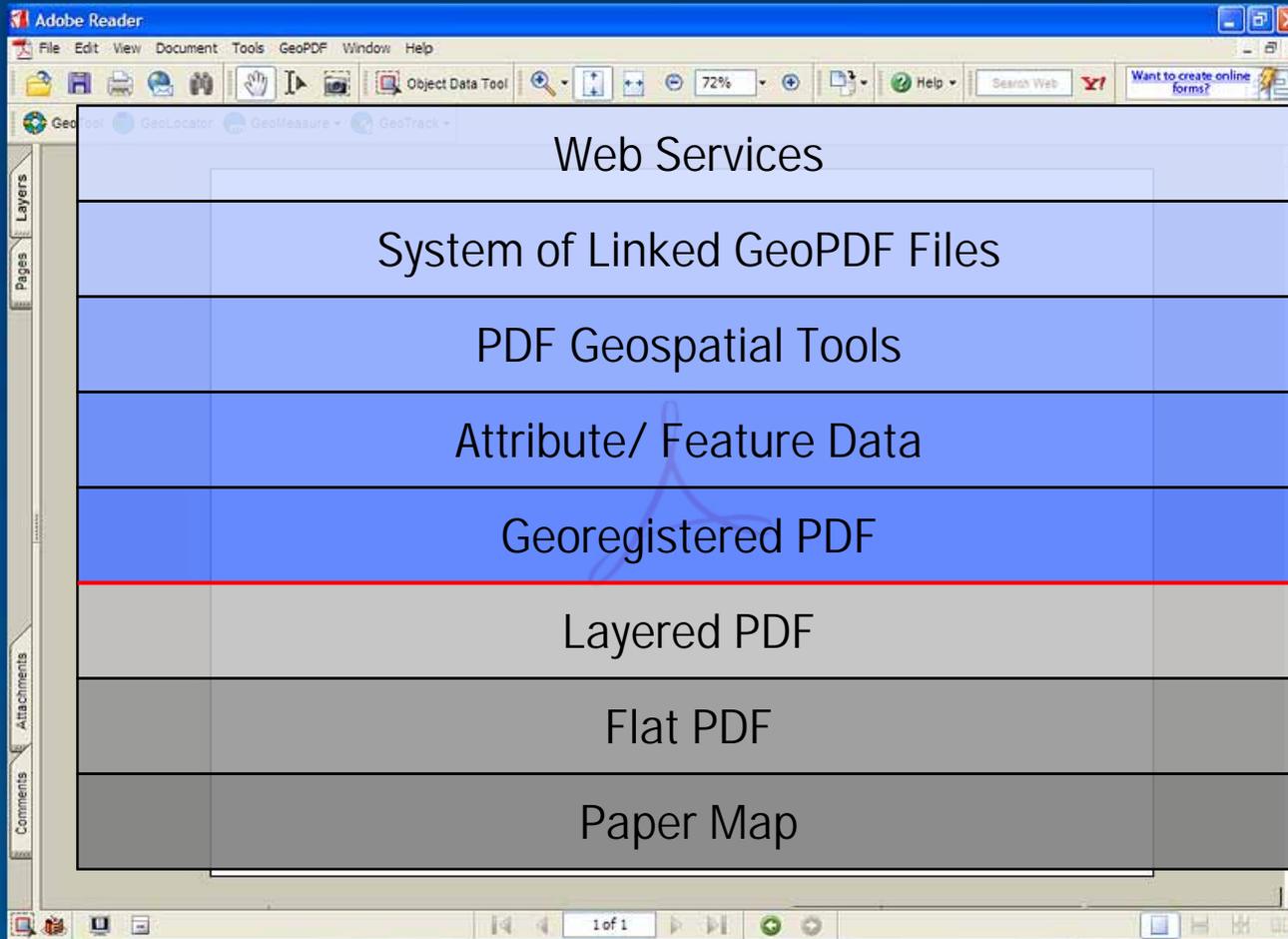
4. Redline and Markup & export to shape using free GeoPDF Toolbar

GeoPDF Technology – Opens in Adobe Reader

GeoPDF Key Features

- Standard coordinate reference systems & projections
- Layers
- Intelligent object data
- Measurement of distances & area
- Two way collaboration using comments & markup tools for redlining, Geonotes, and shapefiles
- Export GIS industry standard format (.shp)
- Connection to GPS & digital camera
- Free GeoPDF Toolbar adds geospatial tools

GeoPDF Files – A Comparative Analysis



Benefits

- ➔ Leverage investment in geospatial data across organizations, internally and externally
- ➔ Distribute geospatial data in a standard format
- ➔ Provide access to disconnected users
- ➔ Ease of use and cost effective implementation
- ➔ Controlled security and policy
- ➔ Collaboration among all constituents
- ➔ Integration with existing infrastructure
- ➔ Avoid replication of data

Coal Mining Permits

Coal mining permits are complex, with potentially thousands of pages covering a variety of technical issues as mandated by Surface Mining Control and Reclamation Act (SMCRA) regulations. Even with electronic permitting supplanting the traditional paper permits, SMCRA programs need a way to organize and access that mass of information. A Geographical Information System (GIS) can provide the solution, and GeoPDFs can be the foundation for the GIS.

How GeoPDFs for Coal Mine Reclamation:

- General permit documents showing
Permit Boundary, Land and mineral interest ownership
Location/setting of mine
- Ponds and Impoundments
Location polygon with name, ID, ancillary info
Pond design AutoCAD drawing & design SEDCAD calculations
Document certifying "as-built"
Letter from State Engineer authorizing a "Permanent Impoundment of greater than 10 Acre-Feet" when required
- Topsoil/Topdressing Stockpiles
Polygon with name, ID, ancillary info
Excel spreadsheet containing Mass Balance calculations
Photo depicting required signage
Notice of Violation pertaining to that particular stockpile and failure to have a sufficient berm

How GeoPDFs for Coal Mine Reclamation (cont):

- Seeded areas
 - Location polygon with name, ID, date seeded
 - Seed list showing with species used to establish vegetation
- Surface Hydrology
 - Point layer showing locations of various surface water quality monitoring/sampling stations (Single Stage Sediment sampler, National Pollutant Discharge Elimination System (NPDES) Outfalls)
 - Photo of a particular sampling station
 - NPDES permit document on file
- Bond Release
 - Location polygon with name, ID, type of release, date released
 - Report from bond release inspection
 - Approval letter granting bond release

GeoPDFs for Abandoned Mine Lands (AML)

- Map of reconnaissance with identified AML sites, point-based, with Site ID, mine name, commodity, severity classification
 - Photos of site (approach shot and up-close view)
 - Generalized surface & mineral interest ownership
- Realty & Right-Of-Entry Information
 - Map of project sites showing ownership info and status of ROE
 - Signed ROE form for individual site with cover letter
 - Legal instrument (Warranty Deed) for record of ownership
- Construction-Phase Information
 - Overview map of project sites
 - Detail map of site in either AutoCAD or ArcGIS format
 - Construction design drawing in AutoCAD
 - Project Manual

Successful Implementations

