

### **ArcGIS Desktop Products Data Sheet**

October 2003

The ArcGIS<sup>™</sup> Desktop products consist of ArcReader<sup>™</sup>, ArcView<sup>®</sup>, ArcEditor<sup>™</sup>, and ArcInfo<sup>™</sup>. These products are built on a common architecture with the same user interface.

- ArcReader is a free, downloadable, easy-to-use application for viewing, exploring, and printing published map files (PMF).
- ArcView adds comprehensive mapping and analysis tools along with simple editing and geoprocessing tools.
- ArcEditor includes the full functionality of ArcView plus advanced editing capabilities for geodatabases.
- ArcInfo extends the functionality of all three products to include advanced geoprocessing.

#### ArcGIS system support

**Operating Systems:** 

#### ArcReader, ArcView, and ArcEditor

Windows NT Windows 2000 Windows XP (Home Edition and Professional)

#### ArcInfo Windows NT

Windows 2000 Windows XP (Home Edition and Professional) ArcInfo Workstation adds UNIX support.

ArcGIS	<b>Desktop Products</b>
arcReader	Freely downloadable read only map viewer
urcView	All of ArcReader PLUS  Data access  Mapping  Geocoding  Customization  Spatial query  Simple feature editing
arcEditor	All of ArcView PLUS  • Multiuser geodatabase editing  • Topologic geodatabase editing  • Disconnected editing  • Definition of geodatabase relationships  • Additional data management tools
vcinfo	All of ArcEditor PLUS  Topologic coverage editing Advanced geoprocessing tools Remote geoprocessing server Complete set of data conversion tools Event geoprocessing Customization environments for cross-platform workstation applications

Contents	
Key Features in ArcReader, ArcView, ArcEditor, and ArcInfo Map Interaction Page Layout and Printing Document Support Map Display Application Framework	8.3 p.2 p.2 p.2 p.2 p.2 p.2
Additional Key Features in ArcView, ArcEditor, and ArcInfo Map Interaction Document Support Map Analysis Map Display Application Framework Symbology Labeling Document Support Page Layout and Printing Utility Network Analysis Geocode Addresses and Locations Editing Data Support Data Conversion Tabular Data Metadata Linear Referencing Application Framework	8.3 p.3 p.3 p.3 p.3 p.4 p.4 p.4 p.5 p.5 p.6 p.7 p.8 p.8
Additional Key Features in ArcEditor and ArcInfo 8.3  Data Creation Data Management Editing Linear Referencing  Additional Key Features in ArcInfo 8.3  Data Creation and Management Data Conversion Map Analysis Linear Referencing Application Framework	p.9 p.9 p.9 p.9 p.10 p.10 p.11 p.11



All the features listed below can be found in each of the ArcGIS Desktop products: ArcReader, ArcView, ArcEditor, and ArcInfo.

### Map Interaction

	ArcReader	ArcView	ArcEditor	ArcInfo
Pan/Zoom/Identify tools	•	•	•	•
Access hyperlink feature	•	•	•	•
Dynamic map tips	•	•	•	•
Magnification window	•	•	•	•
Use spatial bookmarks	•	•	•	•
Measure distances	•	•	•	•
Overview window	•	•	•	•

### Map Display

	ArcReader	ArcView	ArcEditor	ArcInfo
On-the-fly projection of all data	•	•	•	•
Full cartographic visualization of any pmf file	•	•	•	•

### Application Framework

	ArcReader	ArcView	ArcEditor	ArcInfo
Standard Microsoft Windows look and feel	•	•	•	•

### Page Layout and Printing

	ArcKeader	ArcView	ArcEditor	Arcinto
Layout view of the map for page layout presentation	•	•	•	•
Support Windows and PostScript print drivers	•	•	•	•

### Document Support

	ArcReader	ArcView	ArcEditor	ArcInfo
Read published map files	•	•	•	•



ArcView, ArcEditor, and ArcInfo have all the capabilities of ArcReader and also include these key features.

### Map Interaction

	ArcReader	ArcView	ArcEditor	ArcInfo
Tools for selecting data		•	•	•
Create hot link/hyperlink to external application, macro, or URL		•	•	•
Create/manage/use spatial bookmarks		•	•	•

### Document Support

	ArcReader	ArcView	ArcEditor	ArcInfo
Create and use map documents (MXD) between users		•	•	•
Use map templates (MXT) to standardize maps		•	•	•

### Map Analysis

	ArcReader	ArcView	ArcEditor	ArcInfo
Interactive selection		•	•	•
Selection based on attributes		•	•	•
Selection based on location		•	•	•
Buffer		•	•	•
Clip		•	•	•
Merge		•	•	•
Union		•	•	•
Spatial join		•	•	•
Create reports		•	•	•

### Map Display

	1 1 3	ArcReader	ArcView	ArcEditor	ArcInfo
Inte	eractively set transparency for all data		•	•	•
Inte	eractive histogram for data classification		•	•	•
The	matic classifications				
	Single symbol		•	•	•
	Unique value		•	•	•
	Match to predefined style		•	•	•
	Graduated colors or symbols		•	•	•
	Proportional symbols		•	•	•
	Dot density mapping		•	•	•
	Chart mapping including pie and bar chart		•	•	•
	Bivariate and multivariate data rendering		•	•	•
lma	age classification				
	Thematic classes		•	•	•
	Individual band settings		•	•	•
	Color maps		•	•	•
	Contrast		•	•	•
	Brightness		•	•	•
TIN	data classification				
	Classify and render faces		•	•	•
	Nodes		•	•	•
	Triangles		•	•	•
	Slope		•	•	•
	Aspect		•	•	•
	Elevation		•	•	•
	Hillshade		•	•	•

### Application Framework

	ArcReader	ArcView	ArcEditor	ArcInfo
Dockable/Floating toolbars		•	•	•



### Symbology

	ArcReader	ArcView	ArcEditor	ArcInfo
Interactive symbol composer		•	•	•
Advanced drawing options for control over draw order		•	•	•
More than 12,000 predefined symbols		•	•	•
Symbolize topology features		•	•	•

### Labeling

	ArcReader	ArcView	ArcEditor	ArcInfo
On-the-fly automatic labeling		•	•	•
Interactive label tool		•	•	•
Automatic conflict detection and label placement		•	•	•
Many predefined label styles (including highway shields)		•	•	•
Save labels with data		•	•	•
Rotate labels from an attribute field		•	•	•
Text formatting tags for dynamic labels		•	•	•

### Document Support

	ArcReader	ArcView	ArcEditor	ArcInfo
Create and edit map documents (MXD)		•	•	•
Import ArcView 3.x APR and AVL files		•	•	•
Create PMF (requires ArcGIS Publisher)		•	•	•

### Page Layout and Printing

	ArcReader ArcV	iew ArcEditor	ArcInfo
Easy-to-use wizards and tools to insert m	ap elements inc	luding	
Title	•	•	•
Text	•	•	•
Neatlines	•	•	•
Legend	•	•	•
North arrows	•	•	•
Scale bar	•	•	•
Scale text	•	•	•
Pictures	•	•	•
OLE objects	•	•	•
Measured reference grid	•	•	•
Graticules	•	•	•
Export graphics to			
Enhanced Metafile (EMF)	•	•	•
Windows bit map (BMP)		•	•
Encapsulated PostScript (EPS)		•	•
Tagged image file format (TIFF)	•	•	•
Portable document format (PDF)		•	•
Joint Photographic Experts Group (JPEG)	•	•	•
Computer graphics metafile (CGM)	•	•	•
Adobe Illustrator (AI)	•	•	•
Export PostScript color separates (with page marks)	•	•	•

### Utility Network Analysis

	ArcReader	ArcView	ArcEditor	ArcInfo
Trace upstream		•	•	•
Trace downstream		•	•	•
Find common ancestors		•	•	•
Find connected network features		•	•	•
Find loops in network		•	•	•
Find disconnected network features		•	•	•
Find path		•	•	•
Find path upstream		•	•	•
Find upstream accumulation		•	•	•

### Additional Key Features in ArcView, ArcEditor, and ArcInfo 8.3

# Geocode Addresses and Locations

	ArcReader	ArcView	ArcEditor	ArcInfo
Single or batch address geocoding		•	•	•
Reject processing		•	•	•
Client/Server database support for geocoding on the server*		•	•	•
Create multiple geocoding services (indexes) per data source		•	•	•
Find and display dynamic segmentation events (point, linear, continuous)		•	•	•
Find and display <i>x,y</i> events		•	•	•

<sup>\*</sup> Requires  $\mathsf{ArcSDE}^\mathsf{TM}$ .

### **Editing**

	ArcReader	ArcView	ArcEditor	ArcInfo
Edit multiple layers simultaneously		•	•	•
Unlimited undo/redo operations		•	•	•
Feature construction tools including				
Point-and-click feature location with mouse		•	•	•
Streaming locations with mouse		•	•	•
x,y coordinate input with keyboard		•	•	•
DeltaX, DeltaY coordinate input		•	•	•
Bearing and distance coordinate input		•	•	•
Parallel to other feature segments		•	•	•
Midpoint between two locations		•	•	•
Angle and distance from point		•	•	•
Direction and distance from specified point		•	•	•
Perpendicular to other feature segments		•	•	•
Implied intersection between two other feature segments		•	•	•
Connect points with parametric curves		•	•	•
Square and finish polygons		•	•	•
Autocomplete for polygons		•	•	•

### Continued from *Editing*

Editing	ArcReader ArcView	ArcEditor	ArcInfo
Feature edit tools including			
Move, rotate, delete, copy, and paste	•	•	•
Reshape	•	•	•
Split and trim	•	•	•
Extend	•	•	•
Flip	•	•	•
Divide into N-parts or into specified intervals	•	•	•
Scale	•	•	•
Vertex editing (add, delete, move)	•	•	•
Shared-edge editing (map topology)	•	•	•
Create true parametric curves	•	•	•
Copy parallel	•	•	•
Buffer	•	•	•
Mirror	•	•	•
Merge	•	•	•
Union	•	•	•
Intersect	•	•	•
Explode	•	•	•
Annotation edit tool	•	•	•
ArcPad Integration tools including			
Check in/out data from personal geodatabase	•	•	•
Extract data	•	•	•
Export symbology	•	•	•
View topology properties	•	•	•
Display features with topology	•	•	•
Spatial adjustment tools including			
Rubber sheeting	•	•	•
Transformation	•	•	•
Edgematching	•	•	•
Attribute transfer	•	•	•
Snap to vertex, endpoint, midpoint, or along the edge of features	•	•	•
Snapping settings for each layer	•	•	•
Snapping indicator and snap tips	•	•	•
WinTab digitizer support	•	•	•
Image rectification	•	•	•
Image rotation	•	•	•
Image flip	•	•	•



### **Additional Key Features in ArcView, ArcEditor, and ArcInfo 8.3**

## Data Support

	ArcReader ArcView	ArcEditor	ArcInfo
<b>Direct Read of Vector Data</b>			
Shapefiles	•	•	•
Coverages	•	•	•
Geodatabase	•	•	•
ArcIMS® MapServices	•	•	•
ArcIMS Feature Services	•	•	•
Geography Network <sup>SM</sup> Feature Service	•	•	•
Smart Data Compression (SDC)	•	•	•
PC ARC/INFO® coverages	•	•	•
ArcSDE 3.x	•	•	•
VPF	•	•	•
Direct Read of CAD			
DXF	•	•	•
DWG	•	•	•
DGN	•	•	•
Direct Read of Raster			
Geography Network Map Service	•	•	•
ESRI grids	•	•	•
ArcSDE rasters	•	•	•
ESRI image catalogs	•	•	•
ERDAS IMAGINE (IMG)	•	•	•
ERDAS 7.5 LAN (LAN)	•	•	•
ERDAS 7.5 GIS (GIS)	•	•	•
ERDAS Raw (RAW)	•	•	•
ESRI raster catalogs	•	•	•
ESRI band interleaved by line (BIL)	•	•	•
ESRI band interleaved by pixel (BIP)	•	•	•
ESRI band sequential (BSQ)	•	•	•
ESRI grid stack	•	•	•
ESRI grid stack file (STK)	•	•	•
Windows bit map (BMP)	•	•	•
Controlled Image Base (CIB)	•	•	•
Compressed ARC Digitized Raster Graphics (ADRG)	•	•	•
ADRG image (IMG)	•	•	•
ADRG overview (OVR)	•	•	•
ADRG legend (LGG)	•	•	•
DTED (levels 1 and 2)	•	•	•

### Continued from

Data Support	ArcReader	ArcView	ArcEditor	Arcinfo
ER Mapper (ERS)		•	•	•
Graphics interchange format (GIF)		•	•	•
JPEG file interchange format (JFIF) including JPEG 2000		•	•	•
National Image Transfer Format v2.0 and 2.1 (NITF, NTF)		•	•	•
Portable Network Graphics (PNG)		•	•	•
LizardTech MrSID (SID) including generation 3		•	•	•
Tagged image file format (TIFF)		•	•	•
DIGEST (ASRP/USRP)		•	•	•
Direct Read of Other Data				
Geostatistical layers		•	•	•
TIN		•	•	•
DBF		•	•	•
TXT		•	•	•
INFO		•	•	•
ODBC		•	•	•
Microsoft Access		•	•	•
Edit and/or Creation of				
Shapefiles		•	•	•
DBF		•	•	•
TIN (requires ArcGIS 3D Analyst™)		•	•	•
GRID (requires ArcGIS Spatial Analyst)		•	•	•
IMG		•	•	•
TIFF		•	•	•



### **Additional Key Features in ArcView, ArcEditor, and ArcInfo 8.3**

### Data Conversion

	ArcReader ArcView	ArcEditor	Arcin
Import to Geodatabase			
CAD formats (DXF, DGN, DWG) to geodatabase	•	•	•
Coverage to personal geodatabase	•	•	•
Route event table to feature class (wizard)	•	•	•
Shapefile to geodatabase	•	•	•
Table to geodatabase	•	•	•
VPF to geodatabase	•	•	•
Import to Image/Raster			
ASCII to grid	•	•	•
DEM to grid	•	•	•
DTED to grid	•	•	•
Floating-point data to grid	•	•	•
SDTS raster to grid	•	•	•
Import to Shapefile			
AGF to shapefile	•	•	•
Geodatabase to shapefile	•	•	•
MIF to shapefile	•	•	•
Import to Table			
Geodatabase to table	•	•	•
OLE DB to table	•	•	•
Table to point features	•	•	•
Import to Coverage			
ArcInfo Export (E00) to coverage	•	•	•
SDTS point file to coverage	•	•	•
Export from Geodatabase			
Geodatabase to shapefile	•	•	•
Geodatabase to table	•	•	•
Export from Image/Raster			
Raster to MrSID	•	•	•
Raster to grid	•	•	•
Raster to ERDAS IMAGINE	•	•	•
Raster to TIFF	•	•	•
Export from Shapefile		•	
Shapefile to AGF	•	•	•
Shapefile to DXF	•	•	•
Shapefile to geodatabase	•	•	•

ArcReader	ArcView	ArcEditor	Arcinfo
	•	•	•
	•	•	•
	•	•	•
	•	•	•
	ArcReader	ArcReader ArcView	ArcReader ArcView ArcEditor



### Tabular Data

	ArcReader	ArcView	ArcEditor	ArcInfo
On-the-fly dynamic joins between different databases		•	•	•
Create and use many-to-one and one-to-many joins		•	•	•
View joined data tables		•	•	•
Edit table records		•	•	•
Create statistics		•	•	•
Create charts and reports		•	•	•
Sort by multiple attributes		•	•	•
Calculate values based on expression		•	•	•
Summarize data		•	•	•
Connect to and use remote database data		•	•	•

### Metadata

		ArcReader	ArcView	ArcEditor	ArcInfo
Aut met	omatically or manually generate tadata for data files		•	•	•
lmp	ort/Export metadata		•	•	•
Met	tadata styles		•		
	FGDC		•	•	•
	FGDC classic		•	•	•
	FGDC ESRI		•	•	•
	FGDC FAQ		•	•	•
	FGDC Geography Network		•	•	•
	ISO		•	•	•
	ISO Geography Network		•	•	•
	Raw XML data		•	•	•
	d tool to find data based on metadata l location		•	•	•
	olish metadata to the ArcIMS tadata Server		•	•	•

### Linear Referencing

	ArcReader	ArcView	ArcEditor	ArcInfo
Create and edit routes in a shapefile or personal geodatabase		•	•	•
Route data conversion		•	•	•
Query route data		•	•	•
Hatch route data		•	•	•
View dynamic segmentation		•	•	•

### Application Framework

	ArcReader	ArcView	ArcEditor	ArcInfo
Customizable look and feel (drag and drop to rearrange tools/toolbars)		•	•	•
Create and save macros using Visual Basic for Applications (VBA)		•	•	•
Create new tools/toolbars storing customized functionality with map document		•	•	•
Use any COM-compliant language for development environment		•	•	•
UNICODE support for multilanguage attributes		•	•	•



### **Additional Key Features in ArcEditor and ArcInfo 8.3**

ArcEditor and ArcInfo have all the capabilities of ArcReader and ArcView and also include these key features.

### Data Creation

	ArcReader	ArcView	ArcEditor	ArcInfo
Create and edit multiuser geodatabases (stored in industry-standard DBMS)			•	•
Create and edit geodatabase features participating in geometric networks and relationship classes			•	•
Create relationship classes between different feature classes			•	•
Create relationship classes between different tables			•	•
Create relationship classes between feature classes and tables			•	•
Create multiple versions on a multiuser geodatabase			•	•
Resolve conflicts between versions of a multiuser geodatabase			•	•
Modify feature attributes in coverages			•	•
Create and edit dimension features			•	•
Create and edit feature-linked annotation feature classes in a geodatabase			•	•
Create dynamic features from geocoded locations			•	•
Create raster catalogs in DBMS			•	•

### **Editing**

		ArcReader	ArcView	ArcEditor	ArcInfo
Crea	ate, validate, edit, and manage topology			•	•
Mai	nage topology errors			•	•
Fea	ture construction tools including			•	•
	Proportion			•	•
	Inverse			•	•
	Traverse			•	•
	Fillet			•	•
Fea	ture edit tools including			•	•
	Extend undershoots			•	•
	Trim overshoots			•	•
	Generalize			•	•
	Smooth			•	•
Inte	ractively move, scale, and rotate annotation			•	•
Disc	connected edit tools including				
	Check in/out data from a multi- user geodatabase			•	•
	Edit versions of the DBMS			•	•

### Data Management

	ArcReader	ArcView	ArcEditor	ArcInfo
Load data into multiuser geodatabases			•	•
Load raster data into a multiuser geodatabase			•	•
Create attribute subtypes on geodatabase feature classes			•	•
Create attribute domains			•	•

### Linear Referencing

	ArcReader	ArcView	ArcEditor	ArcInfo
Create and edit routes in a geodatabase			•	•
Define route portion			•	•
Calibrate route			•	•
Modify portion of a line			•	•



### **Additional Key Features in ArcInfo 8.3**

## ArcInfo has all the abilities of ArcReader, ArcView, and ArcEditor. ArcInfo also includes these key features.

## Data Creation and Management

	ArcReader	ArcView	ArcEditor	ArcInfo
Create coverage from selected features in another coverage*				•
Append selected features to another coverage*				•
Advanced topologic coverage editing environment and tools*				•
Establish Z-values on nodes				•
Tools for data conflation				•

<sup>\*</sup> Coverage editing included in ArcInfo Workstation.

### Data Conversion

	ArcReader	ArcView	ArcEditor	ArcInfo
Import to Raster				
ADRG to grid				•
Line coverage to grid				•
Point coverage to grid				•
Polygon coverage to grid				•
SDTS to coverage				•
TIN to grid				•
Import to Table				
dBASE to INFO				•
DBMS to INFO				•
Import to Coverage				
DFAD to coverage				•
DIME to coverage				•
DLG to coverage				•
DXF to coverage				•
ETAK to coverage				•
Generate file to coverage (wizard)				•
Grid to line, point, or polygon coverage				•
IGDS to coverage				•
MOSS to coverage				•
TIGER to coverage				•
VPF to coverage				•

#### Continued from

Data Conversion	ArcReader ArcView	w ArcEditor	Arcin
Export from Raster			
Grid to ASCII			•
Grid to DEM			•
Grid to floating point data			•
Grid to image			•
Grid to line, point, or polygon coverage			•
Grid to TIN			•
Raster to geodatabase			•
Export from Shapefile			
Shapefile to coverage			•
Export from Table			
Export to E00			•
Export from CAD		'	
Export to geodatabase*			•
Export from Coverage			
Coverage to DFAD			•
Coverage to DIME			•
Coverage to DLG			•
Coverage to DXF			•
Coverage to generate file			•
Coverage to IGDS			•
Coverage to IGES			•
Coverage to MOSS			•
Coverage to SLF			•
Coverage to VPF			•
Coverage to E00			•
Coverage to SDTS			•
Coverage to grid			

<sup>\*</sup> ArcInfo and ArcEditor support both the personal geodatabase and a multiuser geodatabase.



### Map Analysis

ı J	ArcReader ArcView	ArcEditor ArcIn
Spatial Relationships and Ana	alysis	
Remote geoprocessing server		•
Continguity tools to find adjacent areas within a given distance		•
Coincidence tools to create new data relationships		•
Eliminate polygons or lines from specified coverages		•
Erase features from a coverage based on features in another coverage		•
Topologic spatial overlay		•
Union		•
Intersect		•
Identify		•
Advanced buffer generation and proximity analysis tools		•
Advanced polygon dissolve and eliminate		•
Complete spatial and logical query tools		•
Sophisticated tabular analysis tools		•
Contiguity tools		•
Coincidence tools		•
Connectivity tools (with optional ArcNetwork™ extension)		•
Surface modeling tools (with optional ArcTIN™ extension)		•
Raster modeling tools (with optional ArcGrid™ extension)		•
Create advanced logical expressions		•
Coverage processing tools		•
Aggregation tools		•
Database query tools		•
Overlapping polygon modeling (regions)		•

### Linear Referencing

		O			
		ArcReader	ArcView	ArcEditor	ArcInfo
Complete dynamic segmentation creation and management					•
Route events geoprocessing					
	Intersect two route event layers				•
	Union two route event layers				•
	Dissolve/concatenate route events				•
	Transform events from one route reference to another				•
	Locate point features along routes		·		•
	Locate polygon features along routes				•

### Application Framework

	ArcReader ArcVi	ew ArcEditor	ArcInfo
<b>Customization Environmen</b>	ts		
Visual Basic ActiveX components: Arc Automation Server, ArcPlot™, ArcEdit™, Grid OCX			•
JavaBeans for Arc, ArcPlot, ArcEdit, and ArcGrid			•
ARC Macro Language (AML™)			•
Cross platform			•

#### **Corporate Headquarters**



380 New York Street Redlands, California 92373-8100, USA Telephone: 909-793-2853 Fax: 909-793-5953

For more information, call ESRI at 1-800-447-9778. Send e-mail inquiries to info@esri.com.

Visit ESRI's Web page at www.esri.com.

Outside the United States, contact your local ESRI distributor. For the number of your distributor, call ESRI at 909-793-2853, ext. 1-1235.

Copyright © 2002 ESRI. All rights reserved. ESRI, ArcView, ArcIMS, P.C ARC/INFO, the ESRI globe logo, ArcGis, the ArcGis logo, ArcReade, ArcEditor, ArcInfo, ArcFint, ArcGist, Geography Network, @estric.com, and wave-seric orn are trademarks, registered trademarks, or service marks of ESRI in the United States. The European Community, or certain other jurisdictions. Other companies and products mentioned herein are trademarks or registered trademarks of their respective trademark contents.