

## Feature Enhancements by Release

### Increase productivity by using a powerful infrastructure design solution

Autodesk® Land Desktop 2007 automates time-consuming land planning tasks and combines centralized data management to streamline design and analysis collaboration. Built on AutoCAD® 2007 and Autodesk Map® 3D 2007 software platforms, Land Desktop enables land professionals to create maps, model terrain, label COGO (coordinate geometry) points, create alignments, and define parcels quickly and easily. Perform topographic analysis, use real-world coordinate systems, and calculate volume totals and roadway geometry more rapidly and accurately. Enhance Land Desktop 2007 even further with specialized, custom functionality using its comprehensive development API (application programming interface) product extensions to meet your organization's individual requirements.

This document highlights the feature enhancements with each release of Autodesk Land Desktop software from Release 1 through the current 2007 release.

Autodesk Land Desktop 2007	
Feature	Function
<b>Latest Platform</b>	Built on AutoCAD® 2007 and components of Autodesk Map® 3D 2007.
<b>Civil Batch Drawing Converter Utility</b>	The Autodesk® Civil Batch Drawing Converter Utility provides batch conversion of drawings via the "Export to AutoCAD" functionality and the Object Enabler. It also allows you to set the INSUNITS in a drawing to any supported unit in order to insure correct scale and display when you open the drawing in Autodesk Land Desktop 2007.

Autodesk Land Desktop 2006	
Feature	Function
<b>Latest Platform</b>	Built on AutoCAD® 2006 and components of Autodesk Map® 3D 2006.
<b>Drawing Standards</b>	A complete set of imperial and metric CAD standards for the land planner and surveyor are now included. Also included with each standard is a prototype drawing with layer definitions, prototype projects with description key files, point group definitions and other project settings, symbol libraries, label styles, contour styles, drawing setup files, and figure prefix libraries.
<b>Parking Layout Dynamic Blocks</b>	Based on the AutoCAD 2006 Dynamic Blocks, Land Desktop 2006 includes Dynamic Blocks specifically designed for parking lot layout. Dimensions are dynamically displayed on geometry as you create or edit it. Enter new values directly at the graphics cursor. Revised values are displayed instantly in the drawing geometry, providing immediate feedback on the information you enter.

AUTODESK LAND DESKTOP 2007 FEATURE ENHANCEMENTS BY RELEASE

<b>Autodesk Land Desktop 2006</b>	
<b>Feature</b>	<b>Function</b>
<b>Interoperability with Autodesk Civil 3D 2006</b>	This release provides enhanced interoperability with Autodesk® Civil 3D® 2006, including the ability to extract Civil 3D data directly from a drawing into a Land Desktop Project.
<b>Restricted and Limited User</b>	Added to this release is support for Microsoft® Windows® XP Restricted and Limited User configurations.
<b>Details Manager</b>	Enhancements to the Details Manager interface include the ability to create and manage new detail components in the user interface instead of making manual edits in the details database. Other enhancements make the Details Manager interface more informative and streamlined.

<b>Autodesk Land Desktop 2005</b>	
<b>Feature</b>	<b>Function</b>
<b>Latest Platform</b>	Built on AutoCAD® 2005 and components of Autodesk Map® 3D 2005.
<b>Detail Component Manager</b>	<p>New Details functionality facilitates the creation and management of construction details for use in submittal documentation. Now you can more quickly create construction details and reuse these details for future projects. The Details Component Manager</p> <ul style="list-style-type: none"> <li>• Takes advantage of the Construction Specifications Institute's five-digit coding format for the cataloging of construction materials</li> <li>• Combines database information with XML files to create a drawing detail of a construction material or combination of materials in plan, elevation, or section view</li> <li>• Manages blocks and symbols, integrating existing symbol and block libraries</li> </ul>
<b>Carlson Connect</b>	Carlson Connect, new survey equipment communication software, is provided with Autodesk Land Desktop 2005. It offers support for additional survey equipment vendors and utilities to download and upload data from Autodesk Land Desktop 2005, Autodesk Civil Design 2005, and Autodesk Survey 2005. This new support greatly streamlines the process of moving data between the field and office, resulting in increased efficiency and fewer requirements to convert data to various data formats.
<b>Interoperability with Autodesk Civil 3D 2004</b>	<p>Work interactively between Autodesk® Civil 3D® 2004 and Autodesk Land Desktop 2005. Take advantage of the preliminary design, subdivision layout, and basic site design capabilities in Autodesk Civil 3D in conjunction with Autodesk Land Desktop 2005 and Autodesk Civil Design 2005.</p> <p>Autodesk Civil 3D 2004 is the latest civil engineering tool from Autodesk. It creates relationships between objects so that design changes are dynamically updated. Autodesk Civil 3D combines graphical interaction, tabular editing, and style-based control so you can model interrelated, real-world environments. Autodesk Civil 3D 2004 is a preview release and not yet a replacement for Autodesk Land Desktop and Autodesk Civil Design software. However, it does complement these products, enabling you to explore new design concepts while using Autodesk Land Desktop and Autodesk Civil Design for project design.</p>
<b>LandXML Reports</b>	<p>LandXML reporting capabilities now include two new reports:</p> <ul style="list-style-type: none"> <li>• Legal Description</li> <li>• Radial Stakeout</li> </ul> <p>The reports are generated using LandXML data exported from Autodesk Land Desktop. The LandXML Report Generator is then used to open the LandXML file and create the desired report.</p>

AUTODESK LAND DESKTOP 2007 FEATURE ENHANCEMENTS BY RELEASE

<b>Autodesk Land Desktop 2005</b>	
<b>Feature</b>	<b>Function</b>
<b>Tables</b>	Autodesk Land Desktop 2005 introduces new functionality for line, curve, spiral, and point tables. When generating these types of tables, you can create a table object. As you can for AutoCAD 2005 tables, you can use a table style to generate the table, which can be resized dynamically after insertion into the drawing, maintaining its link to the referenced data. A new Table command creates a point table from points in the Autodesk Land Desktop project, resulting in immediate time savings.
<b>Multiview Blocks</b>	The Autodesk Land Desktop Symbol Manager now includes a new symbol set for multiview blocks. Multiview blocks contain a 2D and 3D representation. When viewed from 2D, the block appears as a 2D drafting representation. Viewed in 3D, the block is suitable for visualization and rendering. This symbol set includes several symbol palettes of multiview blocks, such as buildings, trees, and automobiles. You can use these multiview blocks in Autodesk Land Desktop 2005 as both regular drawing symbols and description key symbols.
<b>Trimble Link</b>	Updated Trimble <sup>®</sup> Link.

<b>Autodesk Land Desktop 2004</b>	
<b>Feature</b>	<b>Function</b>
<b>Latest Platform</b>	Built on AutoCAD <sup>®</sup> 2004 and components of Autodesk Map <sup>®</sup> 2004.
<b>LandXML Report Generator</b>	LandXML Report Generator <ul style="list-style-type: none"> <li>• Create custom reports from any LandXML file</li> <li>• Create custom report templates that match desired report format</li> </ul>
<b>Land XML Import/Export</b>	Additional LandXML Import/Export Support <ul style="list-style-type: none"> <li>• Export pipe data</li> <li>• Additional road and project model information</li> <li>• Support for LandXML 1.0 including Date Stamp, Point Group organization, and support for Federal Highways IHSDM analysis software</li> </ul>
<b>Trimble Link</b>	Updated Trimble Link

<b>Autodesk Land Desktop 3</b>	
<b>Feature</b>	<b>Function</b>
<b>Latest Platform</b>	Built on AutoCAD <sup>®</sup> 2002 and components of Autodesk Map <sup>®</sup> 5.
<b>LandXML Import</b>	LandXML Import Support <ul style="list-style-type: none"> <li>• Import LandXML file with points</li> <li>• Scale/move data on import</li> <li>• Import a subarea of the LandXML file</li> </ul>
<b>Land XML Export</b>	LandXML Export Support <ul style="list-style-type: none"> <li>• Export LandXML file</li> <li>• Select specific data to export</li> <li>• Associate XSL style sheet for reports</li> </ul>

AUTODESK LAND DESKTOP 2007 FEATURE ENHANCEMENTS BY RELEASE

<b>Autodesk Land Desktop 3</b>	
<b>Feature</b>	<b>Function</b>
<b>Point Management</b>	<p>Improved point management and manipulation</p> <ul style="list-style-type: none"> <li>• Symbol preview in Description Key Manager</li> <li>• Ability to maintain criteria used to define point groups so that changes to the point database are automatically reflected in the groups</li> <li>• Ability to save and load point groups from a prototype so that standards can be maintained</li> <li>• New, streamlined interface for Edit, List, and Point Groups</li> <li>• Ability to lock point groups (either definition or points in the group)</li> <li>• New functions including multiple edits to points, import/remove from drawing via editor, and more</li> </ul>
<b>Quick Sections</b>	<p>Improved Quick Surface Section</p> <ul style="list-style-type: none"> <li>• Quick sections extracted from any polyline</li> <li>• Edits to polyline reflected in the section viewer (including adding new vertices)</li> <li>• Full support for arcs</li> <li>• Support for multiple surfaces</li> <li>• Ability to plot the section as AutoCAD objects from the viewer or by simply selecting the polyline</li> <li>• Ability to control vertical and horizontal scale, label increment, and more</li> </ul>
<b>Object Projection</b>	<p>Improved Object Projection</p> <ul style="list-style-type: none"> <li>• Improved support for curved objects</li> <li>• Draped objects drawn as single 3D polyline (as opposed to being broken into multiple polylines)</li> </ul>
<b>Trimble Export</b>	<p>Direct to construction with export to Trimble TSC1 data collector, or SiteVision system for stakeout or utilization by heavy equipment:</p> <ul style="list-style-type: none"> <li>• Export Surface (Land Desktop)</li> <li>• Export Road (Land Desktop/Civil)</li> <li>• Export Points (Land Desktop)</li> <li>• Export Geoid model (Land Desktop/Survey)</li> <li>• Export Datum Grid (Land Desktop/Survey)</li> <li>• Export Feature Code (Land Desktop/Survey)</li> </ul>

<b>Autodesk Land Desktop 2i</b>	
<b>Feature</b>	<b>Function</b>
<b>Latest Platform</b>	Built on AutoCAD® 2000 and components of Autodesk Map® 4.
<b>API</b>	New API for the majority of Land Desktop (objects and databases)
<b>Productivity</b>	<p>Miscellaneous productivity enhancements:</p> <ul style="list-style-type: none"> <li>• Multiuser alignment database(s)</li> <li>• Ability to save as Land Desktop 1 or S8 database</li> <li>• Ability to merge databases from other files into current project</li> </ul>

AUTODESK LAND DESKTOP 2007 FEATURE ENHANCEMENTS BY RELEASE

<b>Autodesk Land Desktop 2i</b>	
<b>Feature</b>	<b>Function</b>
<b>Points</b>	<ul style="list-style-type: none"> <li>• Ability to sort, resize, and reorder columns in point list, edit, and manager dialog boxes</li> <li>• Ability to display RAW and Full Descriptions in point dialog boxes</li> <li>• Ability to save description key file to prototype and to import pre-Land Desktop description key files</li> </ul>
<b>Watersheds for Surfaces</b>	<ul style="list-style-type: none"> <li>• New "Multinotch" drain watershed type</li> <li>• New option to import a specific watershed boundary by either selecting a point graphically or by selecting the watershed in Terrain Model Explorer</li> <li>• Option to insert watershed numbers in the drawing</li> </ul>
<b>Terrain Modeling</b>	<ul style="list-style-type: none"> <li>• Weed Contours command to eliminate unneeded contour vertices</li> </ul>

<b>Autodesk Land Desktop 1/1.02</b>	
<b>Feature</b>	<b>Function</b>
<b>Latest Platform</b>	Built on AutoCAD <sup>®</sup> Release 14 and components of Autodesk Map <sup>®</sup> 3.
<b>Softdesk</b>	Reorganization of the many Softdesk 8 modules into three logical products—Land Development Desktop, Civil Design, and Survey.
<b>Environment</b>	New project, prototype, and settings options, Menu palettes, long file name support, drawing setup
<b>Points</b>	<ul style="list-style-type: none"> <li>• Point Group Manager</li> <li>• New Description Keys interface and management system</li> <li>• Point XDREFs for associating external data references to points</li> <li>• New Import/Export with user-defined formatting</li> <li>• New Listing and Edit Listing interfaces</li> <li>• Points are stored in a Microsoft<sup>®</sup> Access database</li> </ul>
<b>Objects</b>	Point Object <ul style="list-style-type: none"> <li>• Control graphical display and screen size</li> <li>• Move text and leader is drawn to point location</li> <li>• Add labels to point object</li> </ul>
<b>Labeling</b>	<ul style="list-style-type: none"> <li>• Style-based point, line, curve, spiral labeling that can be associative or static</li> <li>• Includes support for polylines and multiple labels per entity.</li> <li>• Various improvements throughout the Labeling commands and controls</li> </ul>
<b>Terrain Modeling</b>	<ul style="list-style-type: none"> <li>• Substantial increases in performance and power</li> <li>• Terrain Model Explorer interface</li> <li>• Streamlining of commands</li> <li>• Automatic definition of watershed boundaries</li> <li>• Direct use of external ASCII data</li> <li>• Direct access to surface statistics and status</li> <li>• Ability to perform display operations from Terrain Model Explorer</li> </ul>

AUTODESK LAND DESKTOP 2007 FEATURE ENHANCEMENTS BY RELEASE

<b>Autodesk Land Desktop 1/1.02</b>	
<b>Feature</b>	<b>Function</b>
<b>Quick Sections</b>	Dynamic Quick Sections <ul style="list-style-type: none"> <li>• Section object that displays current surface conditions along the surface</li> <li>• Edits to the object are reflected in the surface section viewer</li> </ul>
<b>Contours</b>	<ul style="list-style-type: none"> <li>• Contour style manager</li> <li>• Ability to control appearance and smoothing of contour</li> <li>• Ability to control style, color, and orientation of contour label</li> <li>• Increased performance when creating contours</li> </ul>
<b>Visualization</b>	Object viewer for viewing and rendering objects in 3D

Occasionally, Autodesk makes statements regarding planned or future development efforts for our existing or new products and services. These statements are not intended to be a promise or guarantee of future delivery of products, services, or features but merely reflect our current plans, which may change. Purchasing decisions should not be made based upon reliance on these statements. The Company assumes no obligation to update these forward-looking statements to reflect events that occur or circumstances that exist or change after the date on which they were made. Autodesk is not responsible for typographical or graphical errors that may appear in this document.

Autodesk, AutoCAD, Autodesk Map, and Civil 3D are either registered or trademarks of Autodesk, Inc., in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. © 2006 Autodesk, Inc. All rights reserved.