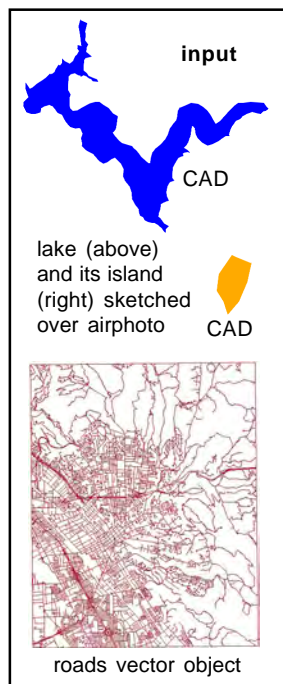
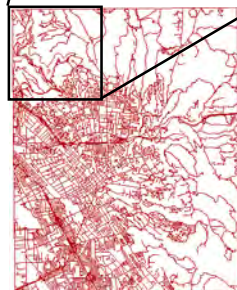
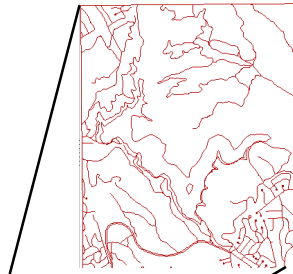
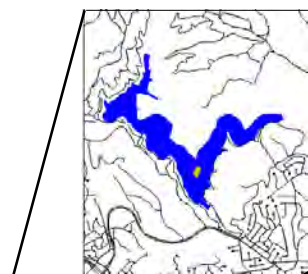


Copy/Paste between Geometric Objects

The Spatial Data Editor provides the ability to cut/copy and paste between geometric object types. If the receiving object is a vector, then pasted elements are automatically converted to and acquire the selected topology with reconciliation for any intersections introduced. If the receiving object is in CAD format, closed shapes from a source vector become CAD polygons if the source object had polygonal topology. Pasted regions also become polygons in CAD format.



Elements can be copied from editable or reference layers, but you can only paste into an editable layer. If you decide you want to paste into a layer that was added for reference,



simply convert it to an editable layer by clicking on the Edit Reference Layer icon.

The attributes come with the pasted elements using the table joining method you select in the Paste Placement Tool window. If tables are joined and if the attribute values of the copied elements are already in that table in the object pasted into and you are using that attribute for styling, the pasted elements will be drawn in the appropriate style. The CAD objects illustrated are styled by element, so the style comes through when pasted into a CAD object but not when pasted into a vector object.

The input objects can be in any coordinate reference system, which can be different for each object. You do not need to make any adjustments; any necessary transformations are made when the selected elements are pasted. The coordinate system of the object pasted into remains unchanged. The receiving object also determines the topology level for the elements pasted. If you paste closed shapes from any geometric source into a vector with polygonal topology, they become polygons and any intersections are resolved by the addition of nodes. If these same shapes are pasted into a vector with network topology, the shapes will become lines (any polygon attributes are lost) and intersections are not resolved.

Session Log Files

TNT applications now log various activities to a text file for aid in analyzing problems. The log files are named in the form of YYYYMMDD.log and are placed in the user-MicroImages folder, which for Windows is My Documents/MicroImages and on the Mac is library/logs/MicroImages in your home folder. For Unix/Linux this file is found in the .MicroImages folder in the user's home directory. The 10 most recent logs are retained, regardless of age. Once a process starts, it will continue to log to the same file until termination, even if its use spans multiple days.

Every log entry gets a timestamp, the "process" name, and associated text. The following additional information is presently logged for all applications (sample session log on back):

- Application startup time.
- Executable path and build date/time.
- MISYSTEM, RVCSYS, and GEOM libraries build date/time.
- All error messages actually displayed to user in error window.
- Progress window notifications unless created with "delay popup," including: operation started, all text notifications, including "time to ..." at end, and operation finished.
- Process termination if exited normally.

Sample from Session Log for a Day's Work

```

2004-11-29 09:08:52  intmenu      Application initialized
2004-11-29 09:08:52  intmenu      MISYSTEM built Nov 27 2004 02:52:49
2004-11-29 09:08:52  intmenu      C:\TNT\TNT70\intmenu.exe built Nov 26 2004 22:43:05
2004-11-29 09:08:52  intmenu      RVCSSYS built Nov 27 2004 03:06:16
2004-11-29 09:08:52  intmenu      geom library built Nov 27 2004 02:57:20
2004-11-29 09:21:55  intedit      Application initialized
2004-11-29 09:21:55  intedit      MISYSTEM built Nov 27 2004 02:52:49
2004-11-29 09:21:55  intedit      C:\TNT\TNT70\intedit.exe built Nov 26 2004 22:43:05
2004-11-29 09:21:55  intedit      RVCSSYS built Nov 27 2004 03:06:16
2004-11-29 09:21:55  intedit      geom library built Nov 27 2004 02:57:20
2004-11-29 09:38:59  intatlas     Application initialized
2004-11-29 09:38:59  intatlas     MISYSTEM built Nov 27 2004 02:52:49
2004-11-29 09:38:59  intatlas     D:\intatlasX\intatlas.exe built Nov 27 2004 04:28:40
2004-11-29 09:38:59  intatlas     RVCSSYS built Nov 27 2004 03:06:16
2004-11-29 09:38:59  intatlas     geom library built Nov 27 2004 02:57:20
2004-11-29 09:39:00  intatlas     Application terminated normally
2004-11-29 09:46:35  intatlas     Application initialized
2004-11-29 09:47:56  intatlas     MISYSTEM built Nov 6 2004 02:50:20
2004-11-29 09:47:56  intatlas     D:\intatlasX\intatlas.exe built Nov 7 2004 03:45:08
2004-11-29 09:47:56  intatlas     RVCSSYS built Nov 7 2004 02:45:53
2004-11-29 09:47:56  intatlas     geom library built Nov 9 2004 02:47:30
2004-11-29 09:52:18  intatlas     Application terminated normally
2004-11-29 09:54:34  intatlas     Application initialized
2004-11-29 09:54:34  intatlas     MISYSTEM built Nov 27 2004 02:52:49
2004-11-29 09:54:34  intatlas     C:\TNT\TNT70\intatlas.exe built Nov 27 2004 04:28:40
2004-11-29 09:54:34  intatlas     RVCSSYS built Nov 27 2004 03:06:16
2004-11-29 09:54:34  intatlas     geom library built Nov 27 2004 02:57:20
2004-11-29 09:55:33  intatlas     Application terminated normally
2004-11-29 10:06:36  combrast     Application initialized
2004-11-29 10:06:36  combrast     MISYSTEM built Nov 27 2004 02:52:49
2004-11-29 10:06:36  combrast     C:\TNT\TNT70\combrast.exe built Nov 26 2004 22:43:05
2004-11-29 10:06:36  combrast     RVCSSYS built Nov 27 2004 03:06:16
2004-11-29 10:06:36  combrast     geom library built Nov 27 2004 02:57:20
2004-11-29 10:07:26  MaintRVC     Application initialized
2004-11-29 10:07:26  MaintRVC     MISYSTEM built Nov 27 2004 02:52:49
2004-11-29 10:07:26  MaintRVC     C:\TNT\TNT70\maintdisp.exe built Nov 26 2004 22:43:05
2004-11-29 10:07:26  MaintRVC     RVCSSYS built Nov 27 2004 03:06:16
2004-11-29 10:07:26  MaintRVC     geom library built Nov 27 2004 02:57:20
2004-11-29 10:16:44  MaintRVC     Application terminated normally
2004-11-29 10:18:27  combrast     Operation started with progress window
2004-11-29 10:18:27  combrast     0.1 Opening Input Rasters...
2004-11-29 10:18:27  combrast     0.2 Creating Output Rasters...
2004-11-29 10:18:27  combrast     0.3 Processing rasters...
2004-11-29 10:18:27  combrast     0.5 Computing pyramid for raster: SCALE_OFFSET
2004-11-29 10:18:27  combrast     0.7 Computing histogram for raster 'SCALE_OFFSET'
2004-11-29 10:18:28  combrast     0.8 Copying subobjects...
2004-11-29 10:18:28  combrast     0.8 Copying object 1 of 4
2004-11-29 10:18:28  combrast     0.8 Copying object 2 of 4
2004-11-29 10:18:28  combrast     0.8 Copying object 3 of 4
2004-11-29 10:18:28  combrast     0.9 Copying object 4 of 4
2004-11-29 10:18:28  combrast     0.9 Time to process: 1 second
2004-11-29 10:18:28  combrast     Operation finished with progress window
2004-11-29 10:19:45  combrast     Application terminated normally
2004-11-29 10:19:59  intdisp      Application initialized
2004-11-29 10:19:59  intdisp      MISYSTEM built Nov 27 2004 02:52:49
2004-11-29 10:19:59  intdisp      C:\TNT\TNT70\intdisp.exe built Nov 26 2004 22:43:05
2004-11-29 10:19:59  intdisp      RVCSSYS built Nov 27 2004 03:06:16
2004-11-29 10:19:59  intdisp      geom library built Nov 27 2004 02:57:20
2004-11-29 10:48:21  intatlas     Application initialized
2004-11-29 10:48:21  intatlas     MISYSTEM built Nov 27 2004 02:52:49
2004-11-29 10:48:21  intatlas     D:\intatlasX\intatlas.exe built Nov 27 2004 04:28:40
2004-11-29 10:48:21  intatlas     RVCSSYS built Nov 27 2004 03:06:16
2004-11-29 10:48:21  intatlas     geom library built Nov 27 2004 02:57:20
2004-11-29 10:54:28  intatlas     Application terminated normally
2004-11-29 10:56:28  intatlas     Application initialized
2004-11-29 10:56:28  intatlas     MISYSTEM built Nov 6 2004 02:50:20
2004-11-29 10:56:28  intatlas     D:\intatlasX\intatlas.exe built Nov 7 2004 03:45:08
2004-11-29 10:56:28  intatlas     RVCSSYS built Nov 7 2004 02:45:53
2004-11-29 10:56:28  intatlas     geom library built Nov 9 2004 02:47:30
2004-11-29 10:58:13  intatlas     Application terminated normally
2004-11-29 11:29:05  intedit      Operation started with progress window
2004-11-29 11:29:05  intedit      0.1 Loading object to workspace...
2004-11-29 11:29:05  intedit      0.2 Copying CAD: Lake...
2004-11-29 11:29:05  intedit      0.2 Copying subobjects...
2004-11-29 11:29:05  intedit      0.2 Copying object 1 of 4
2004-11-29 11:29:05  intedit      0.2 Copying table 'Attribute'...
2004-11-29 11:29:05  intedit      0.2 Copying subobjects...
2004-11-29 11:29:05  intedit      0.3 Copying object 1 of 3
2004-11-29 11:29:05  intedit      0.3 Copying object 2 of 3
2004-11-29 11:29:05  intedit      0.3 Copying object 3 of 3
2004-11-29 11:29:05  intedit      0.3 Copying CAD attachment list...
2004-11-29 11:29:05  intedit      0.3 Building inverse lookup table
2004-11-29 11:29:05  intedit      0.4 Copying object 2 of 4
2004-11-29 11:29:05  intedit      0.4 Copying object 3 of 4
2004-11-29 11:29:05  intedit      0.4 Copying object 4 of 4
2004-11-29 11:29:06  intedit      0.5 Building search table...
2004-11-29 11:29:06  intedit      0.6 Finding related records...
2004-11-29 11:29:06  intedit      0.6 Finding related records...
2004-11-29 11:29:06  intedit      0.6 Updating table dialogs...
2004-11-29 14:44:13  intedit      Application terminated normally
2004-11-29 16:01:23  intdisp      Operation started with progress window
2004-11-29 16:01:23  intdisp      0.1 Reading layout...
2004-11-29 16:04:20  intdisp      Operation started with progress window
2004-11-29 16:04:20  intdisp      0.1 Generating cross section...
2004-11-29 16:04:20  intdisp      0.2 Searching for intersections...
2004-11-29 16:04:20  intdisp      0.3 Processing lines...
2004-11-29 16:04:20  intdisp      0.4 Building search table...
2004-11-29 16:04:20  intdisp      0.5 Building search table...
2004-11-29 16:04:20  intdisp      0.5 Building search table...
2004-11-29 16:04:21  intdisp      0.5 Building search table...
2004-11-29 16:04:21  intdisp      0.7 Checking lines...
2004-11-29 16:04:21  intdisp      0.7 Building search table...
2004-11-29 16:04:21  intdisp      0.8 Creating node line lists...
2004-11-29 16:04:21  intdisp      0.9 Saving node line lists...
2004-11-29 16:04:21  intdisp      0.9 Removing invalid lines...
2004-11-29 16:04:21  intdisp      0.9 Initializing nodes...
2004-11-29 16:04:21  intdisp      0.9 Locating matching lines...
2004-11-29 16:04:21  intdisp      1.0 Creating node line lists...
2004-11-29 16:04:21  intdisp      1.0 Saving node line lists...
2004-11-29 16:04:21  intdisp      1.1 Combining vertices...
2004-11-29 16:04:21  intdisp      1.1 Initializing nodes...
2004-11-29 16:04:21  intdisp      1.1 Searching for intersections...
2004-11-29 16:04:21  intdisp      1.2 Creating node line lists...
2004-11-29 16:04:21  intdisp      1.2 Saving node line lists...
2004-11-29 16:04:21  intdisp      1.2 Removing sliver angles...
2004-11-29 16:04:21  intdisp      1.3 Creating node line lists...
2004-11-29 16:04:21  intdisp      1.3 Saving node line lists...
2004-11-29 16:04:21  intdisp      1.3 Creating node line lists...
2004-11-29 16:04:21  intdisp      1.4 Saving node line lists...
2004-11-29 16:04:21  intdisp      1.4 Building vector polygons...
2004-11-29 16:04:21  intdisp      1.4 Creating node line lists...
2004-11-29 16:04:21  intdisp      1.5 Saving node line lists...
2004-11-29 16:04:21  intdisp      1.5 Processing lines...
2004-11-29 16:04:22  intdisp      1.6 Building line reference tables...
2004-11-29 16:04:22  intdisp      1.6 Building node reference tables...
2004-11-29 16:04:22  intdisp      1.6 Processing lines...
2004-11-29 16:04:22  intdisp      1.6 Building search table...
2004-11-29 16:04:22  intdisp      1.6 Depth-sorting vector polygons...
2004-11-29 16:04:22  intdisp      1.7 Scanning lines...
2004-11-29 16:04:22  intdisp      1.7 Scanning polygons...
2004-11-29 16:04:22  intdisp      1.7 Building temporary polygons...
2004-11-29 16:04:22  intdisp      1.7 Searching for islands...
2004-11-29 16:04:22  intdisp      1.9 Computing vector line standard attributes...
2004-11-29 16:04:22  intdisp      2.0 Computing vector polygon standard attributes...
2004-11-29 16:04:22  intdisp      2.1 Computing vector polygon island standard attributes...
2004-11-29 16:04:22  intdisp      2.1 Validating Database
2004-11-29 16:04:22  intdisp      2.1 Validating Database
2004-11-29 16:04:22  intdisp      2.1 Validating Database
2004-11-29 16:04:22  intdisp      2.2 Building inverse lookup table
2004-11-29 16:04:22  intdisp      2.2 Building inverse lookup table
2004-11-29 16:04:22  intdisp      2.2 Building inverse lookup table
2004-11-29 16:04:22  intdisp      2.2 Building inverse lookup table
2004-11-29 16:04:22  intdisp      2.2 Building inverse lookup table
2004-11-29 16:04:22  intdisp      2.2 Building inverse lookup table
2004-11-29 16:04:22  intdisp      2.2 Building inverse lookup table
2004-11-29 16:04:22  intdisp      2.2 Building inverse lookup table
2004-11-29 16:04:22  intdisp      2.3 Copying subobjects...
2004-11-29 16:04:22  intdisp      2.3 Copying object 1 of 10
2004-11-29 16:04:22  intdisp      2.4 Copying object 2 of 10
2004-11-29 16:04:22  intdisp      2.4 Copying object 3 of 10
2004-11-29 16:04:22  intdisp      2.4 Copying object 4 of 10
2004-11-29 16:04:22  intdisp      2.4 Copying object 5 of 10
2004-11-29 16:04:22  intdisp      2.4 Copying object 6 of 10
2004-11-29 16:04:22  intdisp      2.4 Copying object 7 of 10
2004-11-29 16:04:22  intdisp      2.4 Copying object 8 of 10
2004-11-29 16:04:22  intdisp      2.4 Copying object 9 of 10
2004-11-29 16:04:22  intdisp      2.4 Copying object 10 of 10
2004-11-29 16:04:22  intdisp      2.4 Searching For Attached Records...
2004-11-29 16:04:22  intdisp      2.5 Copying table 'CLASS'...
2004-11-29 16:04:22  intdisp      2.5 Copying subobjects...
2004-11-29 16:04:22  intdisp      2.5 Copying object 1 of 3
2004-11-29 16:04:22  intdisp      2.5 Copying object 2 of 3
2004-11-29 16:04:22  intdisp      2.5 Copying object 3 of 3
2004-11-29 16:04:22  intdisp      2.5 Copying index for field 'Class'...
2004-11-29 16:04:23  intdisp      2.6 Searching For Attached Records...
2004-11-29 16:04:23  intdisp      2.6 Copying table 'CAPRANGE'...
2004-11-29 16:04:23  intdisp      2.6 Copying index for field 'SYMBOL'...
2004-11-29 16:04:23  intdisp      2.7 Searching For Attached Records...
2004-11-29 16:04:23  intdisp      2.7 Copying table 'DESCRIPTN'...
2004-11-29 16:04:23  intdisp      2.8 Copying subobjects...
2004-11-29 16:04:23  intdisp      2.8 Copying object 1 of 2
2004-11-29 16:04:23  intdisp      2.8 Copying object 2 of 2
2004-11-29 16:04:23  intdisp      2.8 Copying index for field 'SYMBOL'...
2004-11-29 16:04:23  intdisp      2.9 Searching For Attached Records...
2004-11-29 16:04:23  intdisp      2.9 Copying table 'POTENTIAL'...
2004-11-29 16:04:23  intdisp      2.9 Copying subobjects...
2004-11-29 16:04:23  intdisp      2.9 Copying object 1 of 2
2004-11-29 16:04:23  intdisp      2.9 Copying object 2 of 2
2004-11-29 16:04:23  intdisp      2.9 Copying index for field 'SYMBOL'...
2004-11-29 16:04:23  intdisp      3.0 Searching For Attached Records...
2004-11-29 16:04:23  intdisp      3.0 Copying table 'YIELD'...
2004-11-29 16:04:23  intdisp      3.0 Copying subobjects...
2004-11-29 16:04:23  intdisp      3.1 Copying object 1 of 2
2004-11-29 16:04:23  intdisp      3.1 Copying object 2 of 2
2004-11-29 16:04:23  intdisp      3.1 Copying index for field 'SYMBOL'...
2004-11-29 16:04:23  intdisp      3.1 Searching For Attached Records...
2004-11-29 16:04:23  intdisp      3.2 Copying table 'YLDUNITS'...
2004-11-29 16:04:23  intdisp      3.2 Copying subobjects...

```