

Discovery-1 Software Region File Format

Abstract

This is the file format for the region of interest files used by all Meta Imaging Series applications and Discovery-1.

Instructions

Region File Format

This is the file format for the region of interest files used by all Meta applications: The file is an ASCII text file. There is one region per line. Each line is terminated with a carriage return and line feed. The format of each line is as follows:

0 t, 1 c, 2 x y, 3 cx cy, 4 r, 5 s, 6 data, 7 "n"

Explanation of symbols used in the region file format definition

Parameter	Symbol	Symbol Description	Parameters for this Symbol
0	t	t is the region type	1 = rectangle 2 = polyline 3 = polygon 4 = circle 5 = ellipse 6 = auto-traced
1	c	c is the color of the region	a 24-bit number, the high byte is blue, the middle byte is green, the low byte is red. For instance, "255" means the region is red, "65280" means the region is green, etc.
2	x y	x and y are the top left corner of the bounding rectangle of the region.	
3	cx cy	cx and cy are some point in the center of the region. This can be left as 0 0 since it is no longer used.	

Document ID
D10179

Product
Discovery-1 software

Created
04-Mar-1999

Last Reviewed
14-Jul-2003

Keywords: discovery-1 software reference
Issue Type: geninfo

Discovery-1 Online Support

4	r	r is the rotation angle of the region, currently not used. It should be left at 0	Leave at 0.
5	s	s is the scale (magnification factor) of the region, currently not used. It should be left at 1.	Leave at 1.
6	data	data is the point list that describes the region.	This depends on the type of region. See below.
7	n	n is the name of the region.	

An Explanation of the Data Parameters

If it is a rectangle (region type = 1) the data will consist of a 2 followed by the width and height of the region (for example 2 20 20).

For all the other types of regions, the data will consist of the number of vertices followed by the x y coordinate of each vertex. For example, 3 vertices with the following positions: (189, 285), (210, 2302) and (210, 315). Note that Ellipse and Circle regions always have 100 vertices.

Sample Region File

```
0 1, 1 65280, 2 121 85, 3 0 0, 4 0, 5 1, 6 2 152 81, 7 1
0 3, 1 255, 2 281 138, 3 0 0, 4 0, 5 1, 6 3 281 264 386 138 432 289, 7 2
0 5, 1 65535, 2 381 322, 3 0 0, 4 0, 5 1, 6 100 613 376 613 372 612 369 611 365 609 362 607 359 605
356 602 353 599 350 595 347 591 344 586 341 581 339 576 337 571 334 565 332 559 330 553 329 546
327 539 326 533 325 525 324 518 323 511 322 504 322 498 322 490 322 483 322 476 323 469 324 461
325 455 326 448 327 441 329 435 330 429 332 423 334 418 337 413 339 408 341 403 344 399 347 395
350 392 353 389 356 387 359 385 362 383 365 382 369 381 372 381 375 381 378 382 381 383 385 385
388 387 391 389 394 392 397 395 400 399 403 403 406 408 409 413 411 418 413 423 416 429 418 435
420 441 421 448 423 455 424 461 425 469 426 476 427 483 428 490 428 497 428 504 428 511 428 518
427 525 426 533 425 539 424 546 423 553 421 559 420 565 418 571 416 576 413 581 411 586 409 591
406 595 403 599 400 602 397 605 394 607 391 609 388 611 385 612 381 613 378, 7 3
```

The first region is a rectangle which is green, with top left position = 121, 85, width = 152, height = 81 and name = 1.

The second region is a polygon which is red, with top left position of bounding rectangle = 281, 138, 3 vertices: (281, 264), (386, 138), (432, 289) and name = 2.

The third region is an ellipse which is yellow, with top left position of bounding rectangle = 381, 322, 100 points along the ellipse and name = 3.