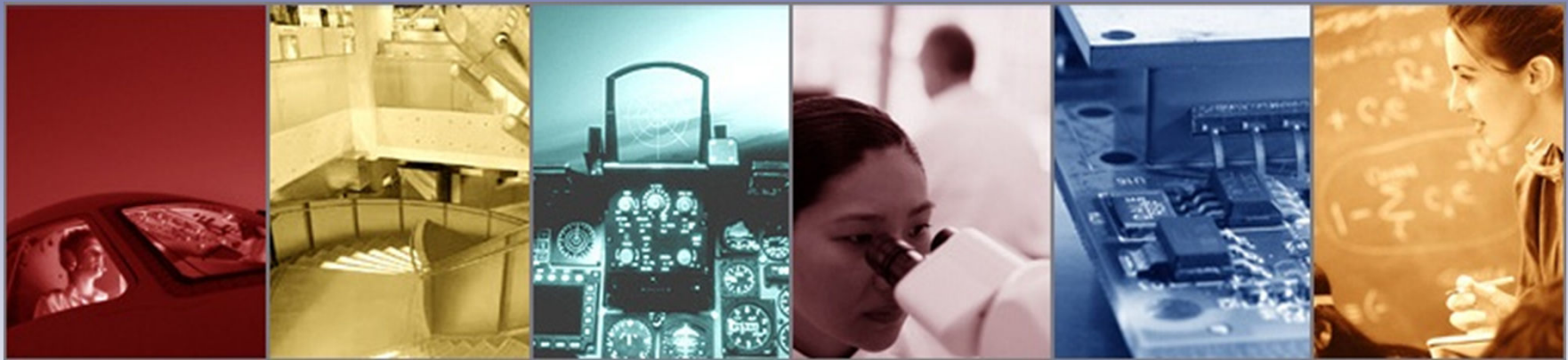


# An Introduction to OSLO 6.6

Presented by :  
Lambda Research Corporation  
25 Porter Rd.  
Littleton, MA 01460  
[www.lambdares.com](http://www.lambdares.com)





Moderator:  
Michael Gauvin  
Vice President of Sales  
Lambda Research Corporation

Presenter:  
Steve Eckhardt  
President  
Eckhardt Optics LLC

# Format

- A 25-30 minute presentation followed by a question and answer session
- Please submit your questions anytime using Question box in the GoToWebinar control panel



# An Introduction to OSLO 6.6

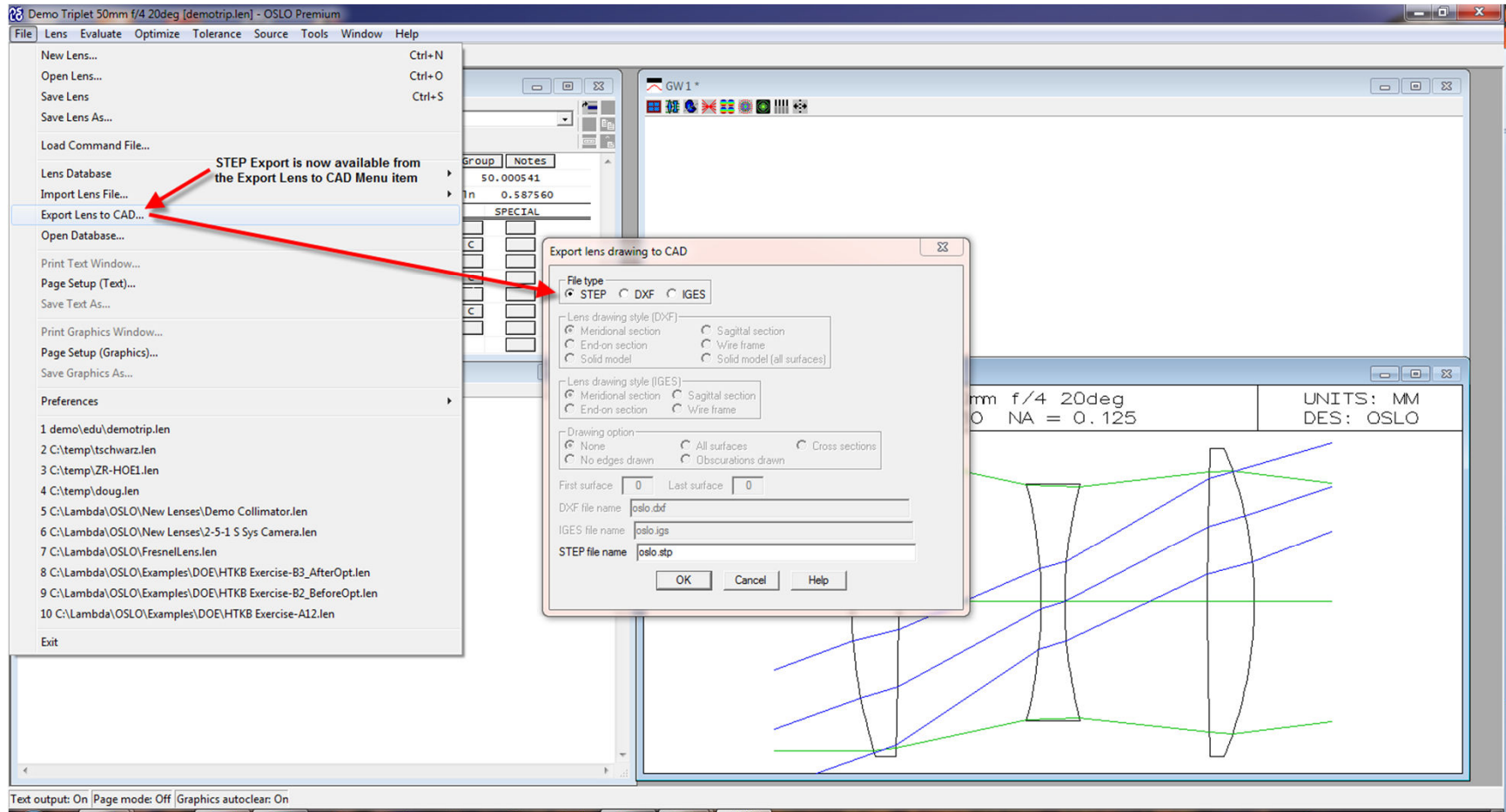
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# OSLO 6.6 Webinar Topics:

- New Features
  - STEP file export
  - TOPS merit function
  - User selectable private folder
  - Notepad++
- Updated Features
  - Updated Glass Catalogs
  - Updated Help System
  - Improved CodeV and Zemax translators
  - Numerous bug fixes

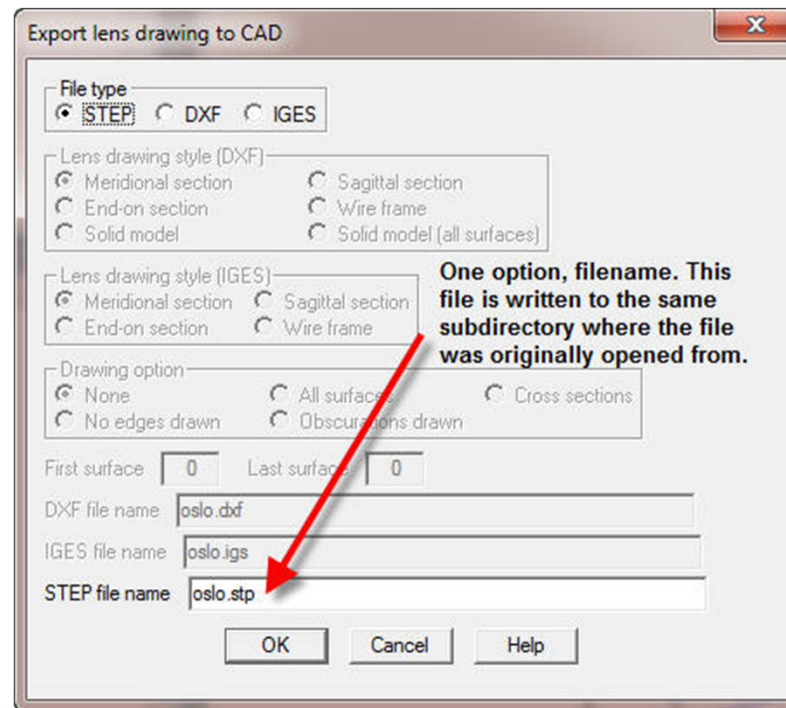
# STEP Translator



- The Step exporter currently supports any optical system with spherical surfaces.

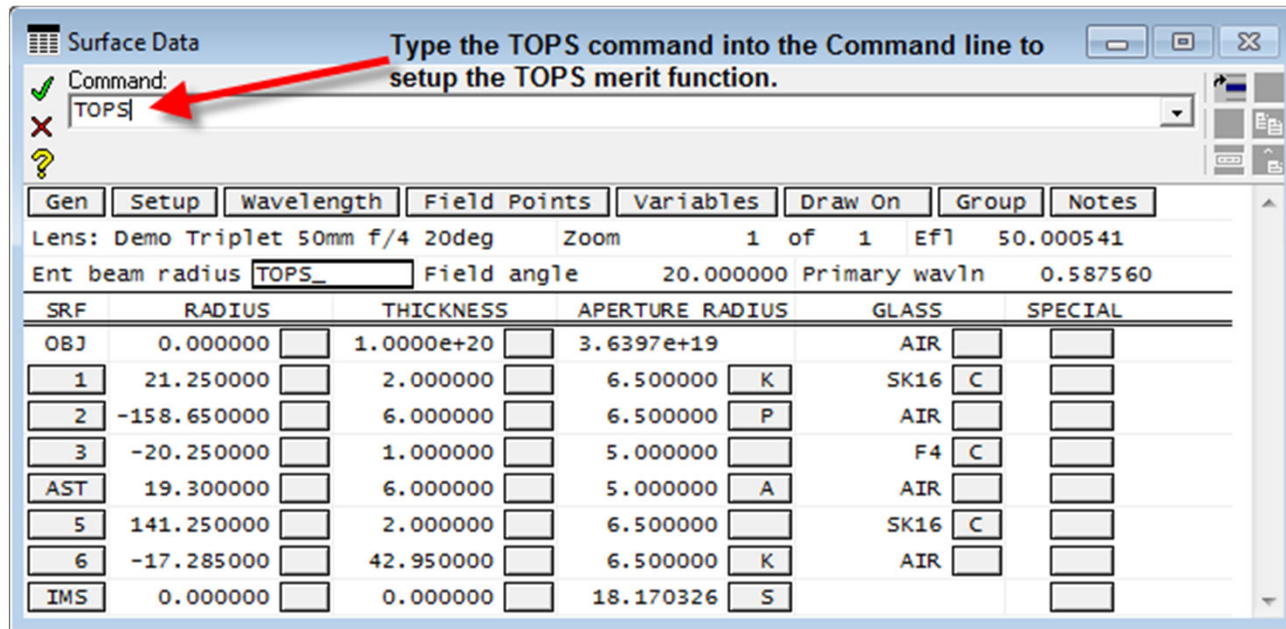


# STEP Translator



- The STEP export has one option, the name of the output file.
- This file will be written to the original subdirectory of the current lens.

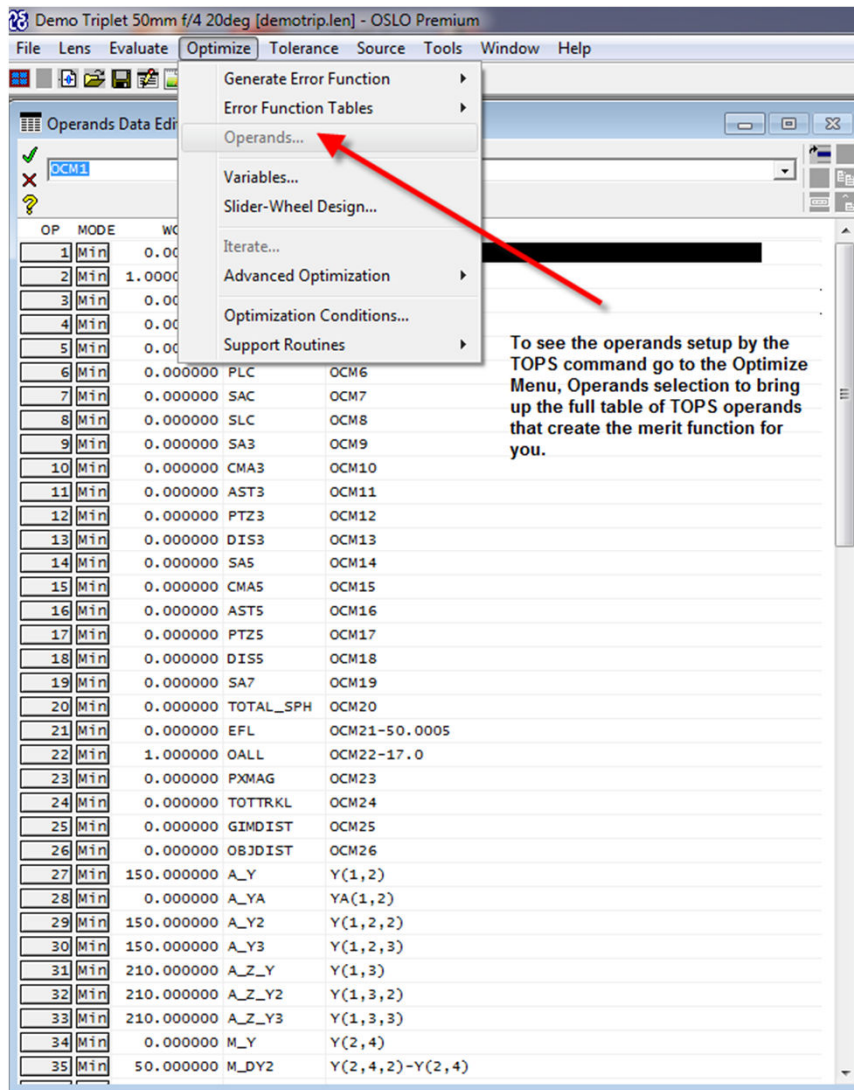
# TOPS Merit Function



This new merit function is based on those developed in the 1960s and 70s by Prof. Charles Wynne, Mrs. Prudence Wormell, Dr. Michael Kidger, David Freeman and others. One version (`tops`) will only work with the Standard and Premium editions of OSLO, but a simpler one (`tops_edu`) will work with OSLO EDU and OSLO Light. Both will generate an error function which can be used "off the peg" for rapid improvement of many types of rotationally symmetric lens, or tailored to finalize the design by adjustment of weights and targets.



# TOPS Merit Function

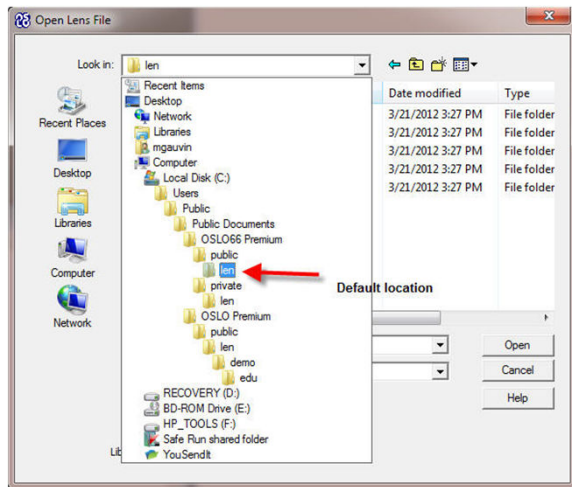


To see the operands setup by the TOPS command go to the Optimize Menu, Operands selection to bring up the full table of TOPS operands that create the merit function for you.

To use this merit function, simply open a lens, define some variables, and type `tops` or `tops_edu` on the command line.

The function will define all of the appropriate operands, and you will be ready to optimize.

# User Selectable Private Directory



- Earlier versions of OSLO always used the same location for all of OSLO's data files, for instance C:\Users\Public\OSLO EDU.
- Each version of OSLO has a corresponding set of compiled resource (.amo) files, so it is necessary to keep them separate, meaning that an optical designer could only operate one version at a time.
- Starting with version 6.6, OSLO will use a different directory for the data files that includes the version number, for example OSLO66 EDU. This will make it possible to compare the results from a new version with those of the old without uninstalling and reinstalling.

# User Selectable Private Directory

- OSLO 6.6 allows each user to choose the location of their private folder.
  - Several optical designers can use OSLO on one
  - Each designer can have an OSLO folder in their “My Documents”
  - Each designer can have a customized a\_menu.ccl file.
  - Lenses with the same name will not overwrite each other.
  - Best of all, this increases security for each user.
- When you launch OSLO 6.6 for the first time, you will be prompted to enter a location for the new private folder.
- A default path is provided, but you are free to put it anywhere.
  - You can change the location at any time when OSLO is not open
  - edit the oslo.ini file in %APPDATA%\Roaming\Lambda Research Corporation\Oslo
  - either move the folder to the new location
  - or allow OSLO to create a new one with the factory default files.

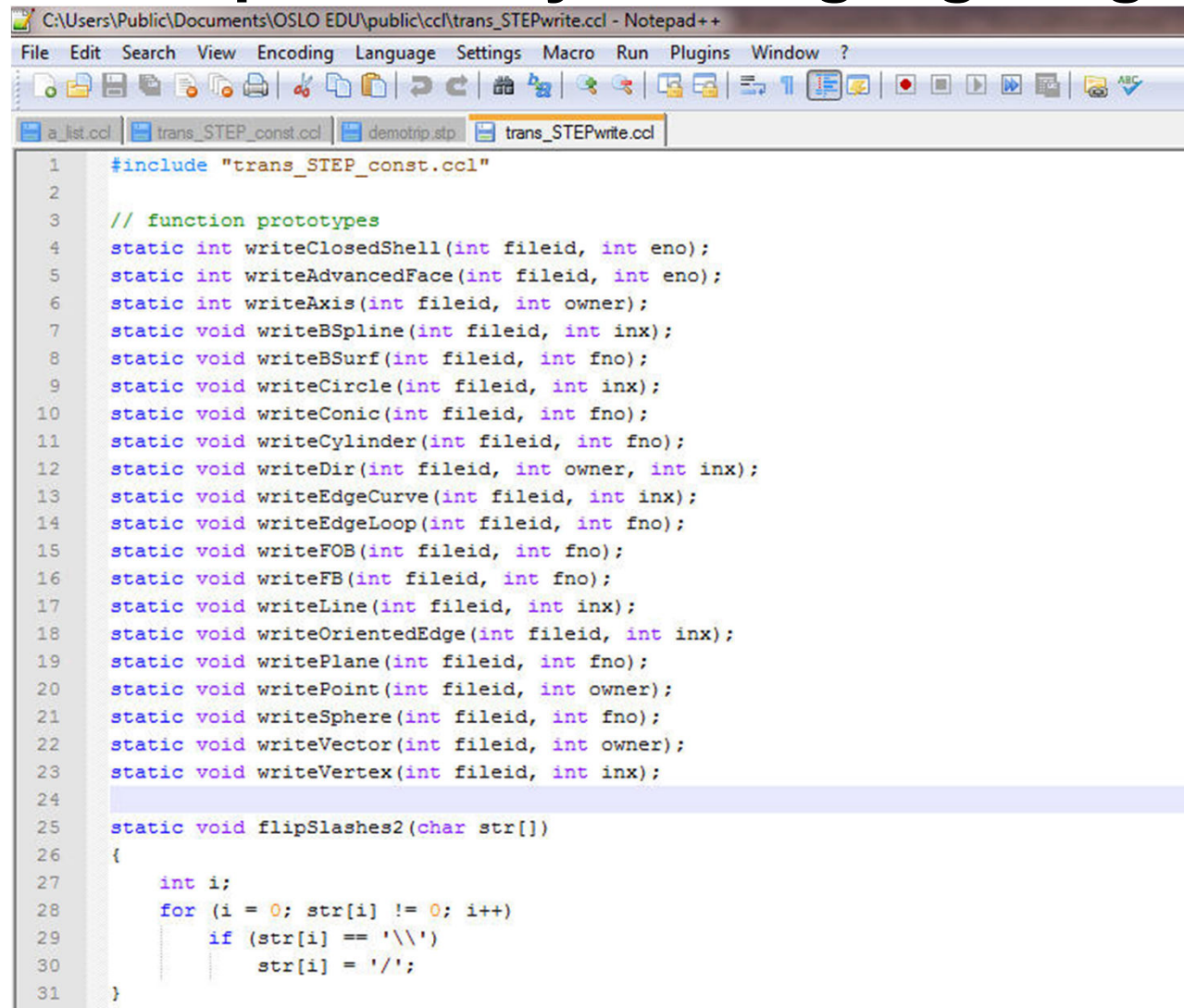
# Notepad++

- Notepad++ is directly available as an icon under the OSLO main menu



- Notepad++ is an open source text editor that is useful for many general tasks.
- Lambda Research has added language definitions to Notepad++ that enhance its usefulness for CCL programming.
- Support for Notepad++ capabilities that relate specifically to OSLO, such as CCL syntax coloring and function parameter hints, is provided by Lambda Research
- Support issues that relate only to Notepad++ should be addressed via the Notepad++ support forum. You can get to this forum through the Notepad++ Help menu.

# Notepad++ - Syntax Highlighting



```
1  #include "trans_STEP_const.ccl"
2
3  // function prototypes
4  static int writeClosedShell(int fileid, int eno);
5  static int writeAdvancedFace(int fileid, int eno);
6  static int writeAxis(int fileid, int owner);
7  static void writeBSpline(int fileid, int inx);
8  static void writeBSurf(int fileid, int fno);
9  static void writeCircle(int fileid, int inx);
10 static void writeConic(int fileid, int fno);
11 static void writeCylinder(int fileid, int fno);
12 static void writeDir(int fileid, int owner, int inx);
13 static void writeEdgeCurve(int fileid, int inx);
14 static void writeEdgeLoop(int fileid, int fno);
15 static void writeFOB(int fileid, int fno);
16 static void writeFB(int fileid, int fno);
17 static void writeLine(int fileid, int inx);
18 static void writeOrientedEdge(int fileid, int inx);
19 static void writePlane(int fileid, int fno);
20 static void writePoint(int fileid, int owner);
21 static void writeSphere(int fileid, int fno);
22 static void writeVector(int fileid, int owner);
23 static void writeVertex(int fileid, int inx);
24
25 static void flipSlashes2(char str[])
26 {
27     int i;
28     for (i = 0; str[i] != 0; i++)
29         if (str[i] == '\\')
30             str[i] = '/';
31 }
```

# Notepad++ - CCL Hints

```
40     str[strlen(tmpstr)]=0;
41     prin
42 }
43
44 cmd print start, i:
45 {
46     printf
47     print_point_spread_scans
48     str1[0] = 0;
```

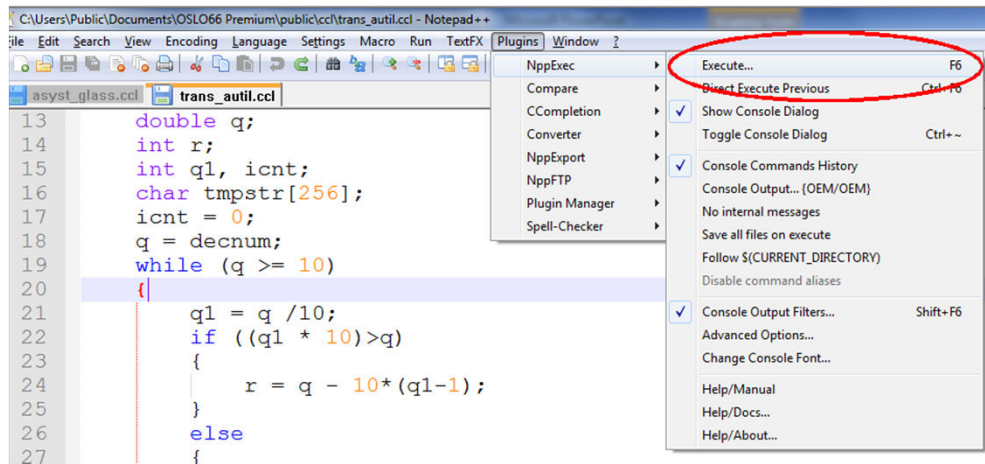
Command hints: start typing, and Notepad++ will list commands.

```
41 powell (
42 }
43 cmd powell (int Powell_initialization, int Nbr_iters)
```

Parameter hints: type the opening "(" and Notepad++ will display the function parameters



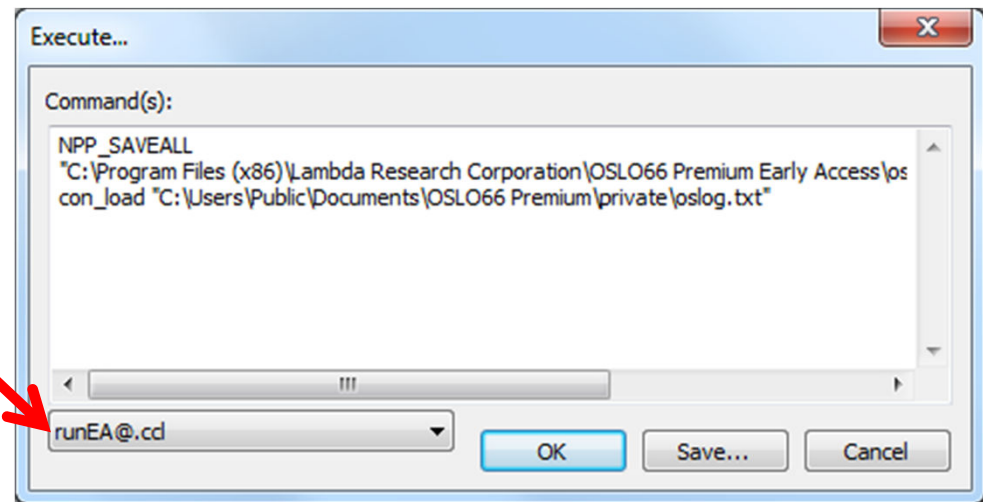
# Notepad++ - Compile CCL



Hit F6 or select  
Plugins > NppExec > Execute

Choose runEA@.ccl  
for early access  
or run@.ccl for release.

Results will be shown at  
the bottom of the main  
window.



# Updated Features

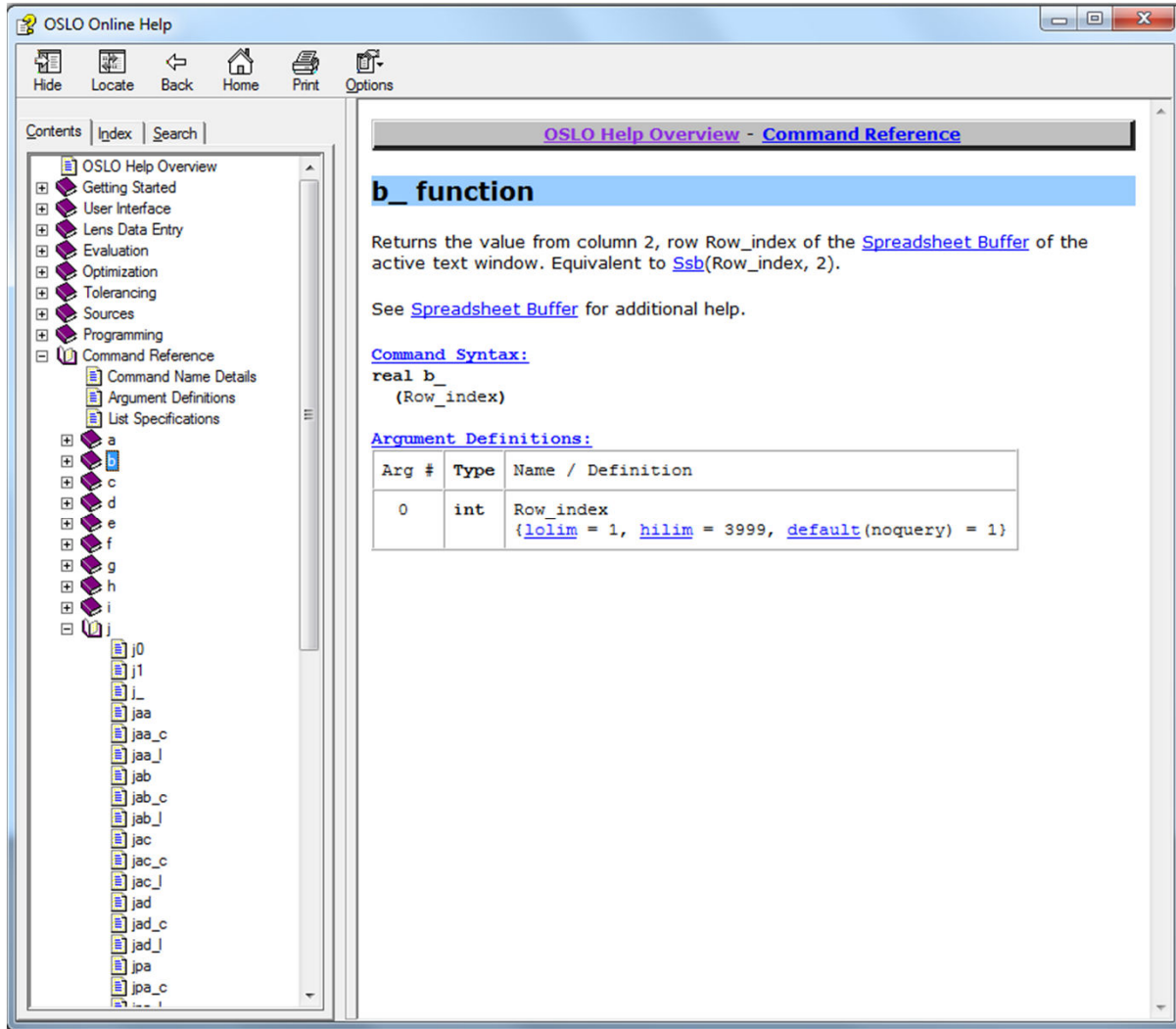
# Updated Feature – Q-type Aspheres

- By industry consensus, Forbes aspheres are now Q-type aspheres.
- This change has been incorporated into OSLO.
- Additional details are in the OSLO Help system.

# Updated Feature – Glass Catalogs

- Updated glass catalogs
  - CDGM
  - Hikari
  - Misc
  - Sumita
- All glass catalogs are now current.

# Updated Feature – Help System



All of the new features are documented in the radically improved OSLO Help system.

The Command Reference section in the Contents is now populated, so you can look up commands alphabetically.

# Updated Feature – Improved Lens Importers

- The CodeV and Zemax lens design importers are more robust.
- Specifically, importing glasses is much more effective.



# Current Promotions

**OSLO**

 **Lambda  
Research**  
Corporation

# OSLO Promotion

Customer who have purchased OSLO in the past, and are currently out of support, can update to the current release of OSLO, OSLO 6.6, with one free year of support, for one low price. The price will depending on their edition of OSLO. Details of the promotion are shown below:

OSLO PROMOTION LIMITED TIME : APRIL 1, 2012 THROUGH JUNE 30, 2012	
Note: * Good for anyone who previously owned OSLO * Multiple license discounts do not apply *	
OSLO Node Locked License	<u>OSLO Promotional Pricing</u>
OSLO PREMIUM	\$1,500
OSLO STANDARD	\$1,125
OSLO LIGHT	\$750
Example:	
OSLO Premium Node one year out of support -- Cost to customer \$1500.00	
OSLO Premium Node ten years out of support -- Cost to customer \$1500.00	
OSLO Network License	<u>OSLO Promotional Pricing</u>
OSLO PREMIUM	\$1,875
OSLO STANDARD	\$1,500

**OSLO**

 **Lambda  
Research**  
Corporation

**Thank You**

**OSLO**

The logo for Lambda Research Corporation, featuring a stylized Greek letter lambda (λ) in black and blue, followed by the text "Lambda Research Corporation" in a sans-serif font.

# Questions and Answers

# Additional Resources

- Past TracePro and OSLO Webinars
  - <http://www.lambdares.com/webinars/>
- Knowledgebase
  - [http://www.lambdares.com/technical\\_support/knowledgebase/](http://www.lambdares.com/technical_support/knowledgebase/)
- OSLO Training Classes
  - [http://www.lambdares.com/technical\\_support/training/](http://www.lambdares.com/technical_support/training/)

**For Additional Information  
Please Contact:**

**Lambda Research Corporation  
Littleton, MA  
978-486-0766  
[www.lambdares.com](http://www.lambdares.com)**