

Mascot Wizard



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Mascot Wizard

- Drag & drop peptide mass fingerprints
- Uses Mascot Distiller to process native files
- Free !



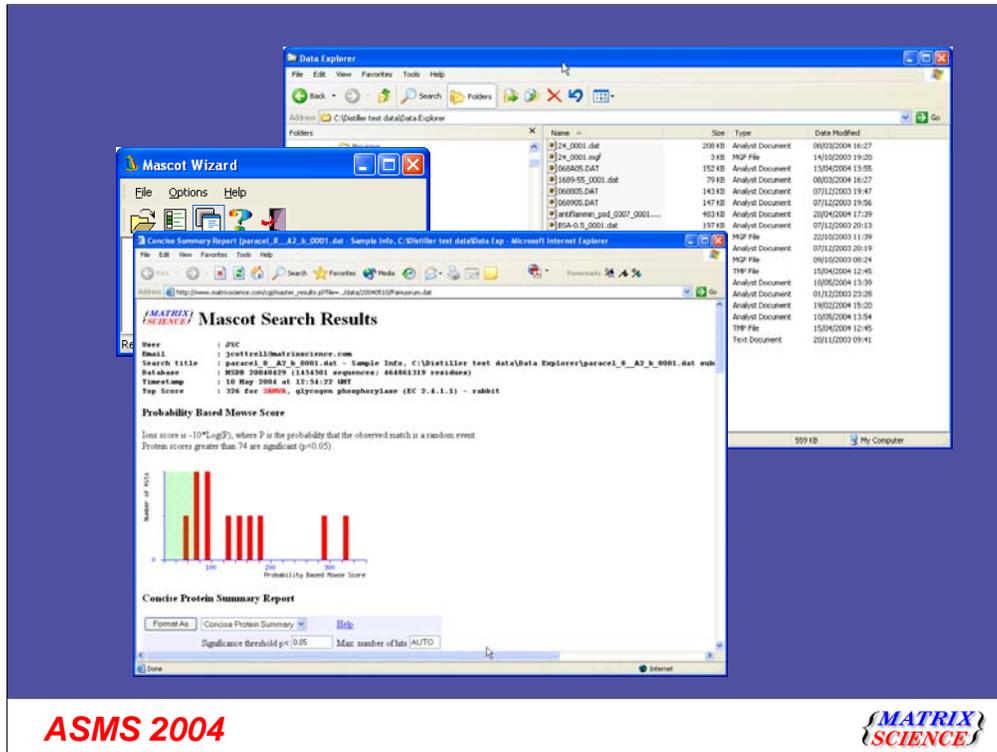
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Mascot Wizard is a simple desktop tool that provides a drag and drop interface for submitting peptide mass fingerprint searches to a Mascot server.

The smart thing is that it uses the Mascot Distiller libraries to process raw data files into peak lists.

And the really smart thing is that it is freeware!



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To illustrate how it works, imagine we have a file of Voyager data that we want to search. We just drag the file onto the Mascot Wizard window and drop it. First, we have a progress bar for the peak detection, then we have a progress bar for the Mascot search.

Finally, a browser window pops up with the search results.

Although you can only process one file at a time, everything is fully automated.

Supported formats

- Analyst (QStar, QTrap)
- Data Explorer (Voyager, 4700)
- Data Analysis (Esquire)
- Data Analysis (LC/MSD)
- MassLynx (QTof, M@Idi)
- Shimadzu (Axima)
- XCalibur (LCQ, LTQ)
- XTof/XMass (Autoflex, Ultraflex, Omniflex)
- Text



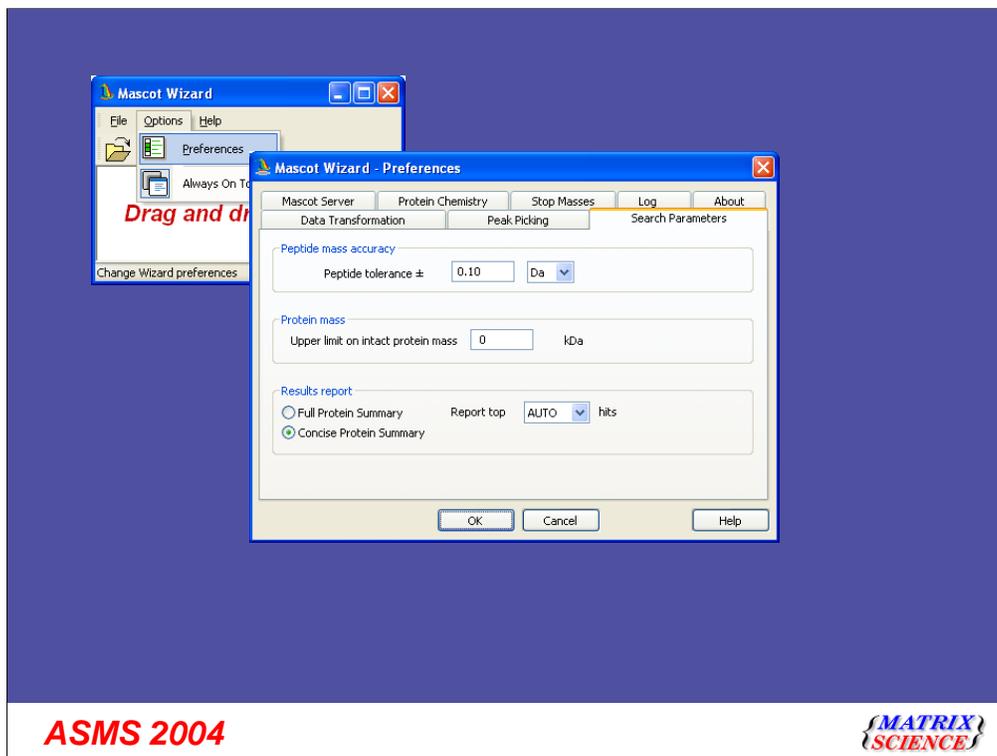
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Mascot Wizard uses the Mascot Distiller libraries to process raw files into peak lists. The formats currently supported by Distiller are listed here

In the case of text, the file can be either a peak list or profile data.

However, note that Mascot Wizard is only for peptide mass fingerprints. If your file contains MS/MS data, you have to use Mascot Distiller to process it.



The Mascot Wizard menus are very simple. All of the configuration options are in a single tabbed dialog. I'll run through this to point out some key features.

Mascot Server: The Mascot server can be either the Matrix Science public web site or your own in-house server. Note that, if you use the public web site, you must enter a valid user name and email address.

Protein Chemistry: Similar to a Mascot search form.

Stop masses: Lots of people ask us for the facility to define a list of stop masses, such as trypsin autolysis fragments. So, we added this to Wizard

Log: Can be useful for debugging any problems

About: The Update Wizard checks our web site to see if a newer version is available

Data Transformation: Controls processing of text files, such as a peak lists and compressed profile data (where zero intensity values have been omitted). Note that this is where you choose whether a text file will be treated as a peak list or profile data.

Peak picking: The best way to get a feel for these parameters is to use Mascot Distiller. If you don't have a licensed copy, you can download it from our web site and get a free 30 day trial.

Search Parameters: Again, similar to a Mascot search form.

The screenshot shows the Mascot Wizard application window. On the left is a 'Contents' pane with a tree view containing items like 'Introduction', 'Getting Help', 'Using this Help System', 'Getting Started', 'Reference', 'Menus', 'Toolbars', 'Preferences', 'Update Wizard', 'Peaks, Masses, Isotopes, etc.', 'Troubleshooting', and 'Contacting Matrix Science'. The main window displays help text about report formatting and the 'Mascot Server' preferences dialog. The dialog has tabs for 'Data Transformation', 'Peak Picking', and 'Search Parameters'. Under 'Mascot Server', there is a dropdown menu with 'http://www.matrixscience.com/cgi' selected. Below this are buttons for 'Add URL', 'Edit URL', 'Remove URL', and 'Test URL'. To the right of these buttons are input fields for 'HTTP timeout (seconds)' (7200), 'HTTP access' (Registry Default), 'HTTP proxy server', and 'HTTP protocol' (radio buttons for HTTP/1.0 and HTTP/1.1). At the bottom, there is a 'User Identification' section with 'Name' (Mascot Wizard) and 'E-mail' (v.demont@hogwarts.org) fields. Below the dialog, there is explanatory text about selecting and managing Mascot servers.

report. You can also swap formats later, using links within the reports. Default: Concise.
Report top specifies the maximum number of hits that should be displayed. Default: AUTO, which means that all hits with significant scores will be listed

Mascot Server

Select a Mascot server from the drop-down list of available servers. Default is <http://www.matrixscience.com/cgi> (the Matrix Science public web site)

To add a new URL to the list of available servers, choose **Add URL**. The URL must begin with `http://` or `https://` and end with `cgi`. For example `http://localhost/mascot/cgi`

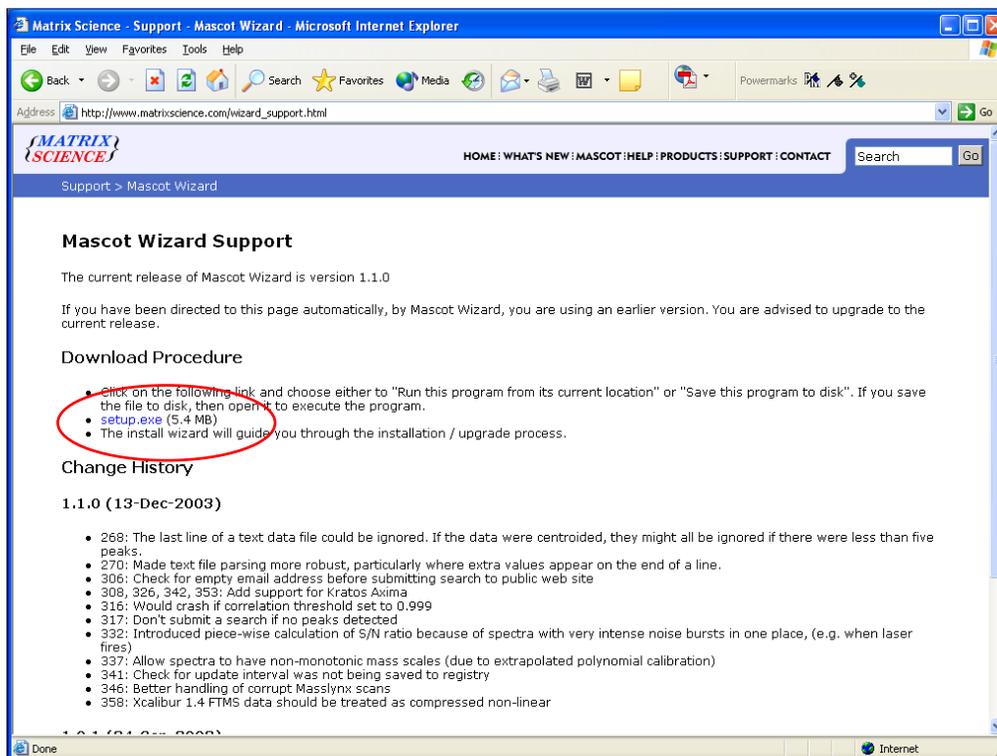
To edit the currently selected Mascot server URL, choose **Edit URL**.

To remove the currently selected Mascot server URL, choose **Remove URL**. Note that you cannot remove the entry for the Matrix Science public web site

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Mascot Wizard comes with full on-line help. So, if there is something you aren't sure about, please check this first



As I mentioned at the beginning, Mascot Wizard is freeware. You can download it from our web site. Choose Support from the main menu, then follow the link for Mascot Wizard.