

# ***READ ME FIRST!***

## **Installing Mascot for the first time**

If you are installing Mascot for the first time, please read the 'last minute additions' on page 2 and the 'platform specific notes' on page 3 before following the installation instructions in Chapter 3 of the Installation and Setup Manual. A complete, up-to-date copy of the Manual can be found in the Mascot installation files, (*manual.pdf*).

## **Installing as version update**

Licence files used for Mascot 2.7 and earlier will not work with Mascot 2.8. You will need to register online using the supplied product key. If you are moving to new hardware at the same time as making a version update, you'll need to contact Matrix Science support for a new product key.

## **Changes since last release**

Details of individual changes since the previous major release of Mascot are listed on page 4 of these notes.

## **Last minute additions to documentation**

See page 2

## ***Last minute additions to documentation***

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- Some third party applications require helper scripts to be installed on the Mascot web server. If Mascot security is enabled, you should be aware that such scripts may create security holes.

## *Notes for specific Windows Platforms*

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## *Changes since Version 2.7.0*

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<b>ID</b>	<b>Component</b>	<b>Description</b>
5326	Server	Remove the "MonitorTestTimeout" value
10897	Server	Modernise browser.pl
11120	Server	Number of entries searched in error tolerant mode is incorrect
11198	Server	Use decoy results to set FDR automatically
11228	Server	Make ms-createtime.exe multithreaded
11917	Server	Error tolerant decoy search using fusion decoy database
12002	Server	We should change the interpretation of REPORT for summaries other than family
12447	Parser	Calculate an expect value for error tolerant matches
12552	Server	mzTab glitches prevent PRIDE submission as complete submission
12559	Server	et_sequences set to a wrong total in cluster split by query
12628	Server	Perl relocation path has double slash
12666	Server	XML export fails to validate against mascot_search_results_2.xsd
12790	Server	ms-monitor.exe should bring fasta files with valid compressed files online first
12843	Server	Mascot Daemon does not report the top hit for a Spectral library search
12870	Server	Sign the installer
12969	Parser	Documentation changes roll up for msparser 2.8
13000	Server	Followup search fails to filter out matches from SL search.
13019	Server	CentOS 7: install1.pl says "Can't locate strict.pm: permission denied"
13084	Server	Getting more from Percolator
13129	Server	Remove browser.pl
13224	Server	Flaw in email verification on pubwww4
13317	Server	Full configuration editor for crosslinking methods
13325	Server	If SwissProt fails to compress, PRIDE_Contaminants prevents other databases from compressing
13357	Parser	Announce end of 32-bit Parser on Windows
13378	Parser	Section title "Using STL classes" should mention vectord, vectori, VectorString
13381	Server	Export doesn't fully support pepseq-based FDR
13386	Server	ms-status.exe doesn't accept a Mascot security session ID as a command line argument
13391	Server	Use OpenMP acceleration with Percolator
13396	Server	Export crosslinked matches in CSV and XML format
13404	Server	Remove maximum protein limit on intralinked searches
13406	Parser	getThresholdForFDRAboveIdentity() doesn't always work when Percolator is enabled

<b>13407</b>	Server	Possible bug with double downloading of databases_1.xml
<b>13424</b>	Server	Different Percolator results in Windows vs Linux
<b>13431</b>	Server	Save the build date in Mascot binaries
<b>13434</b>	Server	Changing only numbers in the XML of a quantitation method does not update it
<b>13470</b>	Server	Mascot Daemon does not report the protein description and protein mass for top hit for a Spectral library search
<b>13475</b>	Server	Product licensing POST request should use HTTPS
<b>13476</b>	Server	Multithread crosslink searches where number of accessions is fewer than number of available threads
<b>13477</b>	Daemon	Save as dialog when generating a quantitation summary export can appear behind window
<b>13491</b>	Server	When reference database of a spectral library is not online, ms-monitor.exe outputs 60 log messages every minute
<b>13501</b>	Server	Compile Mascot 2.8 with GCC 7
<b>13508</b>	Server	Remove the limit from linker arrangements
<b>13512</b>	Server	Crawled library compression warns about "2-succinyl (C"
<b>13514</b>	Parser	Parser 2.7.0 C# is built with VS2015, not VS2012
<b>13515</b>	Server	Confirm TLS1.2 is supported for database downloads
<b>13522</b>	Server	install1.pl stops with msparser version error
<b>13523</b>	Server	Remove hardcoded msparser version check from install1.pl
<b>13528</b>	Server	HTML footer of help pages says "Copyright 2016"
<b>13533</b>	Server	Optimise preprocessing and distribution of peak lists at the start of the search and within a chunk
<b>13536</b>	Server	Overflow checking is incorrect in add_with_no_overflow()
<b>13537</b>	Server	Allow ET + decoy to be selected in the search form
<b>13538</b>	Parser	Calculate FDR for ET decoy search in getThresholdForFDRAboveHomology()
<b>13540</b>	Server	Only search unassigned/unmatched queries in second pass of ET search
<b>13541</b>	Server	Protein selection in ET search could be based on target FDR
<b>13542</b>	Server	Protein Family Summary: display expect value for ET matches
<b>13543</b>	Server	Display FDR for ET decoy searches
<b>13544</b>	Server	Mascot 2.7 executables on Linux fail to work on certain AMD Opteron CPUs
<b>13550</b>	Server	Library import fails if start date left at default of --start-date 1970-01-01
<b>13552</b>	Server	Roll-up of changes to Manual, release notes, and HTML pages for 2.8
<b>13553</b>	Server	ms-getseq.exe fails to escape protein reference text; ms-gettaxonomy.exe prints an invalid ending tag in accession lookup mode
<b>13559</b>	Server	ms-gettaxonomy ignores ACCESSION parameter when TAXID is present
<b>13564</b>	Server	xiVIEW CSV export fails to encode fixed mods
<b>13566</b>	Server	Configuration Editor writes empty code and pairs_with attributes

		in usermod.xml
<b>13568</b>	Server	Search gives incorrect results when taxonomy filter specified and database update has stalled
<b>13586</b>	Server	Incorrect protein accessions in result file when in cluster mode, searching multiple databases and last database is smaller than the others
<b>13590</b>	Server	Ion mobility MGF field documentation is incorrect
<b>13592</b>	Server	Deactivate neXtProt and it cannot be activated again
<b>13595</b>	Daemon	Display database details as part of version update warning
<b>13600</b>	Server	Percolator flags can be incorrect when executed by ExecAfterSearch
<b>13601</b>	Server	Progress bar allocation for ms-createpip and Percolator should be 50:50
<b>13602</b>	Server	Update Percolator sources to 3.05
<b>13604</b>	Parser	New setting for number of input file parsing threads
<b>13605</b>	Daemon	Cannot toggle individual checkboxes of sample map
<b>13609</b>	Server	Occasional segfault on cluster node on Windows
<b>13618</b>	Server	Cannot export Fasta on pubwww4
<b>13624</b>	Server	Rare false positive disulfide bridge loopleft match, caused by applying doubled linker mass to calculated precursor mass
<b>13628</b>	Server	mzIdentML takes forever with this file
<b>13633</b>	Parser	updateForInstaller: replace PercolatorFeatures with new feature set
<b>13634</b>	Parser	New options PercolatorTargetRankScoreThreshold and PercolatorTargetRankRelativeThreshold
<b>13638</b>	Server	Bundle VC++ 2012 and VC++ 2015-2019 redistributables with Mascot installer
<b>13639</b>	Parser	Compile Parser 2.8 with VS2017
<b>13652</b>	Server	Add back ExecAfterSearch for ms-createpip.exe
<b>13653</b>	Server	Allow Get me to 1% FDR when Percolator is enabled
<b>13660</b>	Server	Compile Mascot 2.8 with VS2017
<b>13661</b>	Server	Instruments internal fragment size setting not used in search
<b>13662</b>	Server	mzIdentML export does not include internal ions over 700Da
<b>13663</b>	Parser	ms_aahelper never returns internal ions over 700 Da
<b>13664</b>	Daemon	Allow ET + decoy to be selected in search parameters
<b>13665</b>	Daemon	Extend the autoexport to export a merged result
<b>13666</b>	Server	Protein FDR reported incorrectly in CSV, XML, mzIdentML, mzTab export
<b>13668</b>	Server	Exported MGF reports outputs charge state as precursor intensity, plus incorrect charge state ambiguity handling
<b>13673</b>	Parser	ms_proteinsummary needs to check inference flags
<b>13676</b>	Server	Ignore SplitDataFileSize parameter in nph-mascot
<b>13679</b>	Daemon	Update MS Inc address in Daemon help
<b>13696</b>	Parser	New parameter for ms-createpip.exe multithreading
<b>13703</b>	Server	Update SwissProt, PRIDE_contaminants and taxonomy files in shipper package for 2.8

<b>13709</b>	Server	Use TARGET_FDR_PERCENT= at end of target-decoy search and write sigthreshold as first_pass_threshold=
<b>13714</b>	Server	Protein Family Summary should be the default report
<b>13715</b>	Parser	Only return false from getThresholdForFDRAboveHomology() if closest FDR is not within a factor of 2 of target FDR
<b>13724</b>	Server	Unnecessary work when modifications with 0 instances have same specificity
<b>13726</b>	Parser	Logging and error handling documentation is mostly missing
<b>13729</b>	Server	Precursor mass in results file can be wrong when match has looplinks
<b>13730</b>	Parser	Allow zero child elements in mxm:accessions, mxm:filters, mxm:scope, mxm:settings
<b>13732</b>	Server	percolate_rt doesn't work
<b>13734</b>	Server	Update example ET search (F981130.dat) and remove obsolete searches F981126.dat, F981127.dat, F981128.dat
<b>13746</b>	Parser	Remove ICC2016 shippers, add GCC7 internal shippers
<b>13750</b>	Server	Move target FDR selection into format controls
<b>13752</b>	Server	If the crosslinking method cannot be written, stop the search immediately
<b>13753</b>	Server	In cluster split by query, add the warnings from the master to the result file
<b>13757</b>	Server	Warnings from the error tolerant and crosslink pass are not added to the files
<b>13759</b>	Parser	New ms_peptidesummary parameters: target FDR and FDR type
<b>13761</b>	Server	Should looplinks count as +2 towards MaxPepNumModifiedSites?
<b>13762</b>	Server	Replace ActivePerl with own version of Perl
<b>13763</b>	Parser	Add willCreateCache methods which take a ms_mascotresults_params argument
<b>13769</b>	Parser	Update unimod.xml and unimod_xl.xml for 2.8.0
<b>13787</b>	Server	Missing crosslink match to a peptide pair with the same complete string as another match
<b>13790</b>	Server	mascot_search_results_2.xsd fails to compile with xmllint
<b>13803</b>	Server	Replace \$Config{perlpath} with \$^X in Database Manager
<b>13806</b>	Parser	Target FDR algorithm: maximise the number of target matches if FDR is 0%
<b>13808</b>	Parser	Update element descriptions in crosslinking schema for the crosslinking configuration editor
<b>13818</b>	Parser	If alpha and beta are in different proteins, one of them is not assigned to any protein
<b>13821</b>	Server	Precursor mass in results file can be wrong when monolink index > 9
<b>13848</b>	Parser	Add Parser targets for Perl 5.32 and 5.34