



The Prime Machine: Software Version History (inc. tPM HD)

The Prime Machine is a user-friendly corpus tool for English language teaching, linguistic analysis and self-tutoring based on the Lexical Priming theory of language; the software was developed by Stephen Jeaco.

For more details see www.theprimemachine.net

Latest 32 Bit Version	3.0.30.x
ZIP Folder	.EXE Modified 16 March 2021, 10:56:07
Windows Installer Package	16 March 2021, 11:00:37
Thumbprint	aae3f0fd42bf2bb9f061e06bc8c1114bf5183a04
Latest 64 Bit Versions	1.18
Windows 64 Bit ZIP Folder	.EXE Modified 27 March 2021, 20:53:18
Mac OS Notarization	15 March 2021
iOS Test Flight	15 March 2021
Android Package	16 March 2021
Current Server Version	tPM Server 3.30†

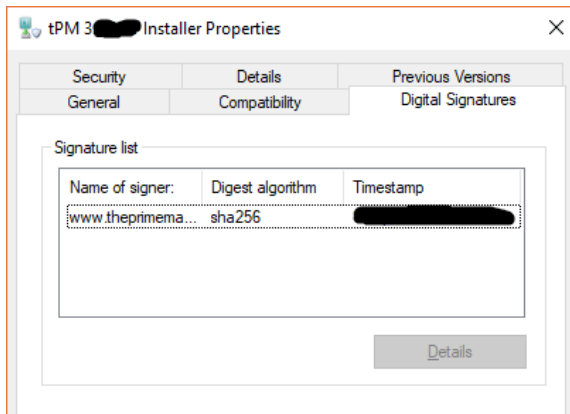
† The Server Version will be displayed when you connect.

tPM for iPhone, iPad and Android is currently in Beta testing.

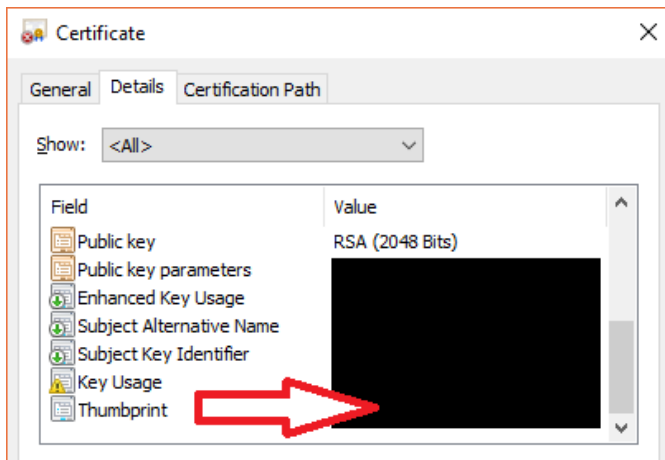
For information about tPM Permissions on Android see the end of this document.

Prior to Version 3, the software was only available to staff and students at Xi'an Jiaotong-Liverpool University, Suzhou, China.

To view the Digital Signature Thumbprint on Windows



1. Right-click on the file and select **Properties**.
2. Choose the **Digital Signatures** tab.
3. Select `www.theprimemachine.com` from the list of signers.
4. Click **View Certificate**.



5. Click the **Details** tab.
6. Scroll down to view the Thumbprint value.
7. The Thumbprint value should match the value on this document.

Previous 32 Bit Release	3.0.12.x
ZIP Folder	.EXE Modified 04 June 2018, 09:28:16
Windows Installer Package	04 June 2018, 09:32:33
Thumbprint before V3.0.19	f84bd5f57277ada537da8e9140db127029374eff
Previous Server Version	tPM Server 3.06 [†]

[†] The Server Version will be displayed when you connect.

Summary of developments and bug fixes:

<p>64 Bit (Windows) 1.18.2 27/03/2021</p>	<p>Fixed: Issue with redrawing clouds; Improved: Display of graphs on scaled displays</p>
<p>64 Bit: 1.18 15/03/2021; 32 Bit: 3.30 15/03/2021</p>	<p>New: Game Mode (64 Bit only) New: Case sensitive searches now possible for search inside; New: Make a “probe corpus” from any set of concordance lines (and load it as a DIY corpus). New: Search for multi-word units and single words in as one list on the Multiple Searches tab. Improved: Comparing two DIY corpora against online wordlists now provides results in both directions in two tables. New: Swap DIY Corpora button makes it easier to switch between two DIY corpora when wanting to search and compare. New (MacOS/iOS/Android): File associations now automatic for tPM HD DIY Corpora and tPM HD Search History files. New (64 Bit): Concordance lines and tables can be saved as Excel XLSX files; New (64 Bit): Concordance lines and tables can be saved as PDF files; Fixed: Issue on Mac when filtering A and B sets of concordance lines at the same time. Fixed: Issue on MacOS Big Sur when initial connection fails. Fixed: Issue with showing/hiding columns of results tables when using this feature a second time. Improved: Faster filtering of concordance lines and other speed improvements.</p>
<p>64 Bit: 1.09 08/05/2020</p>	<p>(Microsoft Store HD Version 1.9.2.0) Improved: The speed of importing text files for DIY corpora has been increased (mainly the word indexing stage); Improved: Greater support for Key Key Words and Key Associates for larger DIY corpora when comparing with an online corpus;</p>

	<p>Improved: Frequency data for Research Tools -> Key Labels now matches layout for 32 Bit version (for 'outside' frequencies);</p> <p>Fixed: Issue with radio button for Research Tools - > Key Labels.</p>
<p>32 Bit: 3.0.27.x</p> <p>64 Bit: 1.08</p> <p>05/05/2020</p>	<p>(Microsoft Store 32 Bit Version 0.0.16.0; HD Version 1.8.2.0)</p> <p>Corrected: Formula for DIY corpus Dice Collocations.</p> <p>Improved: Handling of "Form Feed" character in DIY Corpora (sometimes present in texts from other PDF text conversion software);</p>
<p>32 Bit: 3.0.26.x</p> <p>64 Bit: 1.07</p> <p>10/04/2020</p>	<p>If using DIY Corpus Tools, this update is highly recommended!</p> <p>(Microsoft Store 32 Bit Version 0.0.15.0; HD Version 1.7.2.0)</p> <p>Improved: Workflow for comparing two DIY corpora;</p> <p>Improved (64 Bit): Display of Frequency Tab graphs when there is only one category (Online and DIY corpora);</p> <p>New (64 Bit): Words entered in the DIY Multiple Searches boxes can be expanded to include other word forms using the online corpus;</p> <p>Fixed: Issue with DIY Clusters (previously some duplicates may have appeared);</p> <p>Fixed: Missing statistics when comparing two DIY corpora against online wordlists (previously, some datasets might not display LL or Bayes scores);</p> <p>Fixed (32 Bit): Possible issue with DIY Frequency Tab data if DIY corpus updated and cached data viewed.</p> <p>Fixed (32 Bit): Issue with copying or saving image from Card on Windows with system-wide scaling</p> <p>Fixed (64 Bit Mac OS): Issue when saving DIY Corpus on 64 Bit Mac OS.</p>
<p>64 Bit: 1.06</p> <p>25/03/2020</p>	<p>Fixed: Issue with Multiple Searches when node is set to position 3, 4 or 5. (In the previous release, optimizing the node could mean results would not be obtained).</p> <p>Improved: Icons for Marking A/B on Graphs Tab.</p> <p>Fixed (64 Bit): Possible issue with DIY Frequency Tab data if DIY corpus</p>

	<p>updated and cached data viewed.</p> <p>[Fixed in next release (32 Bit): Possible issue with DIY Frequency Tab data if DIY corpus updated and cached data viewed. (If using V3.0.25 or below and you change or update the DIY corpus, remember to search again before using the DIY Frequencies tab data; this does not affect online corpora)]</p> <p>Note (64 Bit): The timeout for connecting from outside tPM Home Network has been increased.</p>
Server update	An update to the server corrected an issue for searching for strings of >5 words using _.
32 Bit: 3.0.25.x	Fixed: Issue with sorting alphabetically when window contains double-spaces.
64 Bit: 1.05	Fixed (64 Bit): Drop-down boxes for categories.
13/03/2020	Fixed (64 Bit): Display of some characters in some research tool results.
	Fixed (64 Bit): Clusters for a single category.
64 Bit: 1.04	<p>Changed (Mac): Excel files currently not supported; CSV now default for saving sheets; hope to have an update in the future.</p> <p>Improved (64 Bit): Break Down tab scrolling</p> <p>Improved(64 Bit): Cloud displays</p>
32 Bit: 3.0.24.x	New: Highlight collocations in the sentence on the String Break Down tab.
64 Bit: 1.0.3	<p>Fixed (32 Bit): Permissions for highlighting collocations in sentences from outside tPM Home Network.</p> <p>New (64 Bit): Zooming now added to Concordance Cards and Graphs.</p> <p>Fixed (64 Bit) : Copying of concordance card images on HD screens</p> <p>Improved (64 Bit): Scaling of search screen for Mac users who have small screens. (Pressing Control + 1 will revert to no scaling; the columns of buttons on the Research and DIY tool tabs can be scrolled up and down)</p>
32 Bit: 3.0.23.x	New: Multiple searches with no gaps can now include * for one or more items. For online corpora, this has been added through an update to the server, but this version will explain that the node cannot be a wildcard. For DIY corpora, this function is new in this release.
64 Bit: 1.0.1	New (*experimental*): Highlight collocations in a single DIY Corpus Text by

	<p>comparing results with an online corpus (new button on the Corpus Files DIY Text Tools tab).</p> <p>New: Show online corpus statistics by clicking button on Corpus Info. tab.</p> <p>New: Moving window TTR (MTTR) available for DIY corpora and online corpora</p> <p>New: Compare corpus statistics by showing results on a single table.</p> <p>New: View frequency graphs/tables for single search items from DIY Corpora on the Frequencies Tab.</p> <p>Improved: Wording of items for Feeling Graphs.</p> <ul style="list-style-type: none"> • Positive environment -> Positive windows? • Positive meaning -> Solo positive matches • Negative environment -> Negative windows? • Negative meaning -> Solo negative matches <p>Improved: Improvements to graph displays</p> <p>New (64 Bit): Zoom on tables and clouds using Control Key with mouse wheel / Control Key with scrolling. Press Control 1 to restore all result displays to 100%.</p> <p>Improved (64 Bit): Timing of resizing of columns on Lines display.</p> <p>Improved (64 Bit): Other minor speed improvements.</p> <p>Fixed (64 Bit): Unicode characters in filenames for Average MWU function now display correctly.</p>
<p>tPM HD V1.0.0 09/11/2019</p>	<p>First public release of The Prime Machine HD for Mac OSX and Windows 64 bit.</p>
<p>3.0.22.x 09/10/2019</p>	<p style="text-align: center;">*** Please upgrade to this version ***</p> <p>New: Changes to connection properties (default server address changed to avoid issues with DNS).</p> <p>Improved: Checkboxes now appear when lines are highlighted using the Graphs Tab.</p> <p>Fixed: Issue with display of the number of selected lines when toggling display of checkboxes.</p> <p style="text-align: center;">*** Server should be tpm.xjtlu.edu.cn (until further notice); other server</p>

	addresses are in case of unexpected connection issues and will only be activated if necessary ***
3.0.21.x 11/09/2019	<p>New: Changes to connection properties (in readiness for server upgrade on 14th October 2019).</p> <p>Name change: “Research Tools” Tab renamed “DIY and Research Tools” due to popularity of the DIY Text Tools.</p> <p>New: Hide columns in tables from Research Tools and DIY Text Tool results.</p> <p>New: DIY Text Tools Wordlist Statistics can now use a second DIY corpus for the reference corpus.</p> <p>New: Perform comparisons on main search page using “OR” or “VS” (e.g. “make OR do haste” compares “make haste” with “do haste”).</p> <p>Improved: Display of speakers on cards (client now ready to display these as spoken corpora are updated)</p> <p>Improved: Chart labels on for Corpus Info. and Frequencies across categories when window is small.</p> <p>Improved: Maximum number of key words for online corpora increased.</p> <p>Fixed: Issue with capitalized single word searches</p> <p>Fixed: Issue with frequencies for Label Keywords in reference corpus.</p> <p>From 08/05/2019, server side fixed: Issue with sorting/ranking of DIY Text Tools Key Words function when large number of results.</p>
3.0.20.x 25/04/2019	<ul style="list-style-type: none"> • Fixed: Issue with DIY Clusters on Windows 7 • Improved: DIY Corpus Tools work with larger datasets • Fixed: Issue with adding texts to an existing DIY Corpus
3.0.19.x 19/04/2019	<ul style="list-style-type: none"> • New: Filter Lines by Category and Text Name with these two new options under “Range” (these fields are typically directory names and filenames for DIY corpora); • Improved: Display of paragraphing on Cards for DIY Corpora; • Fixed: Issue with Multisearch Frequency function when using advanced filters. • Improved: Handling of hyphens, dashes and spaces for DIY Text Tools. • Fixed: Issue with ideographic space characters and other Unicode symbols when using the DIY Key Words Tool (also involved a server-side fix). • Improved: Suggested filenames when saving data. • Improved: Captions for DIY Multisearch using Wordlists.

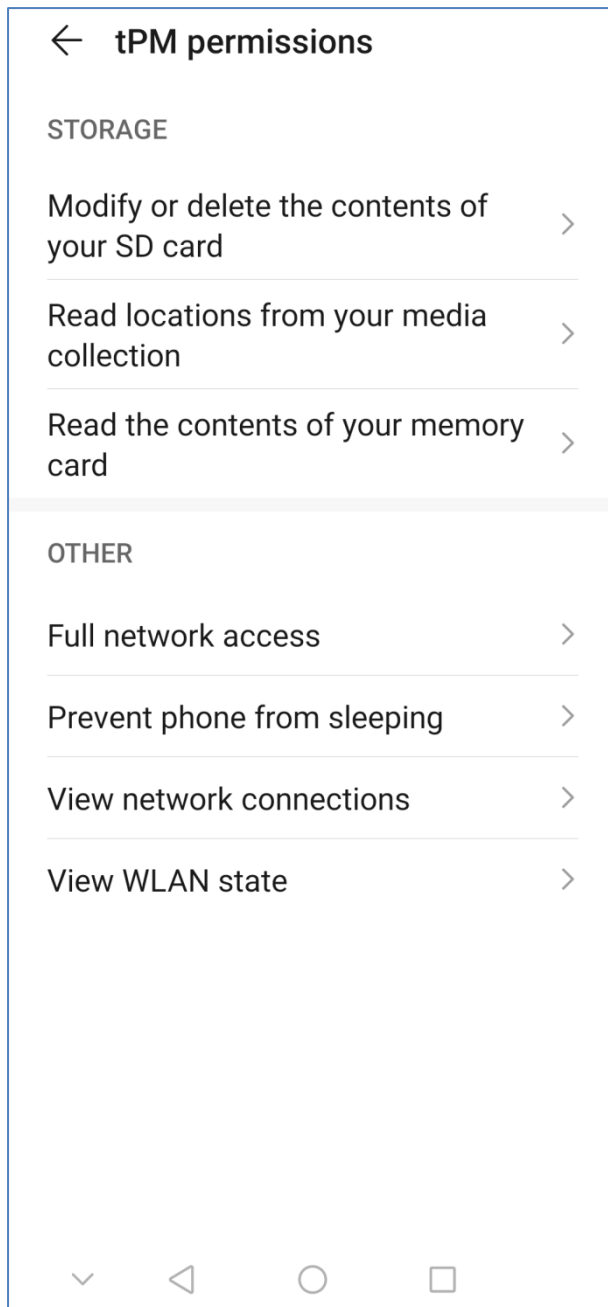
<p>3.0.18.x 08/03/2019</p>	<ul style="list-style-type: none"> • New: Option to hide the node on the display settings (useful for making handouts and quizzes) • Improved: Right-click popup menus (copy text more prominent) • Improved: Cloud display for LL Collocations (also new option on cloud settings page to select statistic or frequency for item size). • Improved: Corpus changed to match search history when using Search History entry and working online. • Improved: Handling of problems loading an invalid search history file. • Fixed: Issue with copying picture of cards on Windows 10 • Fixed: Issue with Graphs Tab table view when performing a raw or multiple item search. • Fixed: Issue with list of empty categories on Associates Tab
<p>3.0.17.x 17/02/2019</p>	<ul style="list-style-type: none"> • New: View setting to add small spaces around punctuation. • Fixed: Results settings on Options Tab now also update view settings. • Fixed: Issue with table covering graph when comparing results on the Frequencies Tab. • Fixed: Issue with Dictionary Style Ranking. • Fixed: Theme/Rheme icons.
<p>3.0.16.x 01/11/2018</p>	<ul style="list-style-type: none"> • Fixed: Minor bug fixes.
<p>3.0.15.x 30/10/2018</p>	<ul style="list-style-type: none"> • Enhanced: Columns in main results tables can now be resized. • Fixed: Width of columns in tables on Frequencies Tab. • Fixed: Problem with line numbers when using up/down arrow keys. • Fixed: Refreshing of data on results tabs. <p>From 30/10/2018, server side fixed: Issue with DIY Text Tools Average MI/LL Score function when accessed from tPM Home Network.</p>
<p>3.0.14.x 05/10/2018</p>	<ul style="list-style-type: none"> • Fixed: Change of port for offsite access (to overcome some issues when connecting from public libraries, etc.). • New: DIY Text Tools now allows the user to get frequencies for matching clusters from the online corpus. • New: Normalized frequencies can be displayed per thousand or per million. • New: User prompt for file encoding if the encoding for the first DIY text being imported does not seem to be correct. • Fixed: Issue with long text names in plot displays. <p>From 26/09/2018, Key Words for DIY Text Tools now include items not found in the reference corpus (previously these only appeared for Key Key Words).</p>
<p>3.0.13.x 12/09/2018</p>	<p>Improvements to user interface and processing speed:</p> <ul style="list-style-type: none"> • Greatly Improved: Speed of importing DIY texts. • Greatly Improved: Speed of DIY corpus concordancing. • Greatly Improved: Speed of calculating DIY corpus clusters. • New: DIY Text Statistics added to text file list table.

	<ul style="list-style-type: none"> • New: Buttons for importing all TXT files from a folder. • New: Option to use folder name as DIY Text Category. • New: Option to convert simple entities to characters. • New: Filtering of DIY Wordlist Tools to remove those containing numbers. • New: Option to use random samples of DIY concordance lines when there are more than 500 results. • New: Button to copy current wordlist to use in a DIY corpus search. • Fixed: Initial sorting of concordance lines for DIY searches. • Fixed: Issue with Key Associate categories in V3.0.x. • Fixed: Issue with average MI for DIY corpus. • New: Average LL Collocation score added to DIY Corpus measure. • New: Get spelling support for correctly spelled words using new button on right-click menu (includes frequencies in other corpora). • New: Research Tool table results now displayed as multiple tabs on the Search History Tab. • New: Plots for Multisearch, WordList and DIY Multisearch tabs. • New: Wildcard * searches on Multisearch and DIY Multisearch as well as Search Inside (Filter Menu). • New: Expand a DIY Multiserach term search using word families from an online corpus • New: Arrow indicators for Key Word and DIY Wordlist Statistics tables. • Improved: Search suggestions for main search page and string breakdown. • Various other improvements to the speed of the user interface.
<p>3.0.12.x 04/06/2018</p>	<p>Fixes for connections “distant” or with greater network latency, and other fixes:</p> <ul style="list-style-type: none"> • Fixed: The “quicker notification” function introduced in 3.0.11 unfortunately meant that users without high speed connections through to the server in Suzhou were unable to connect¹; this has therefore been made less sensitive, but will mean the App may take 20 seconds or so to timeout on the (hopefully rare) occasions when the server is inaccessible, or if the user selects “Try tPM Home Network” when not connected to the tPM Home Network. • Fixed: The DIY Corpus Tool feature allowing users to create lists of clusters containing a specific word now does display correct values for frequency and category counts. • Fixed: Issue with scrolling through texts in DIY Corpus after using the Average MI Score feature. • Enhanced: The DIY Corpus Tools now convert space-like characters to a normal space; this is particularly useful for texts from websites which may have included non-breaking space characters, etc.
<p>3.0.11.x 14/05/2018</p>	<p>Minor bug fixes and enhancements:</p> <ul style="list-style-type: none"> • New: Error message displayed if connection fails; • Enhanced: List of servers extended to include theprimemachine.net; • Enhanced: Quicker notification of connection issue (if attempt to

	<p>connect fails);</p> <ul style="list-style-type: none"> • Fixed: Issue with priming tendency icons when application window is covered by another window; • Minor bug fixes
3.0.10.x 10/04/2018	Minor bug fixes
3.0.1.x 28/12/2017	<p>V3 Major new release:</p> <p>This new version allows external (offsite) access for the first time, along with a host of new features:</p> <ul style="list-style-type: none"> • Off-site access available • Offline mode (previously saved search results can be viewed offline) • Frequencies Tab added • Lines/Cards tab re-vamped; Lines + available for both sides • Cards redesigned (Lines/Cards Tab now more responsive) • Filtering re-vamped • Concordance line sorting updated (user now receives a fixed random sample; sorting works locally without needing to retrieve new results) • Range of LL Collocation patterns increased • Delta P Collocations added • Additional contextual environment patterns (on Graphs Tab): <ul style="list-style-type: none"> ○ Quotations ○ Part-of-Speech (based on pre-tagging by CLAWS) ○ Complexity (Projecting Sentence added) ○ Meanings (Wordlists updated; UCREL Semantic Tagger also used) ○ Repetition (now measures repetition in window one sentence before/after sentence containing the node) • Labels Tab: Neighbourhood labels added based on UCREL Semantic Tagging • Wordlists updated • DIY Text Tools <ul style="list-style-type: none"> ○ DIY Text Import ○ DIY Corpus Save/Load ○ DIY Wordlist Tools <ul style="list-style-type: none"> ▪ Wordlist ▪ MI Collocations ▪ LL Collocations ▪ Clusters ▪ Key Associates ▪ Wordlist Statistics ▪ Keywords ▪ Key Keywords ▪ Concordance lines ▪ Multiple Searches ▪ Clusters ▪ Compare with other DIY Corpus or with online corpus

	<ul style="list-style-type: none"> • LL Calculator • Corpus Text List • Improvements to Search Screen • Search History functional when offline
2.07 28/03/2017	Minor bug fixes
2.05 23/03/2016	Minor bug fixes
2.01 24/02/2016	<p>V2 Major new release (XJTLU only): Version 2 included many enhancements including a range of research-related features:</p> <ul style="list-style-type: none"> • Additional contextual environment patterns (on Graphs Tab): <ul style="list-style-type: none"> ○ Voice (near basic <i>to be</i> and near basic <i>to have</i> added) ○ Meaning (positive and negative words from wordlists in nearby context) • Research Tools added <ul style="list-style-type: none"> ○ Multiple Searches ○ Wordlists ○ Clusters ○ Key words based on priming features
1.0 16/05/2014	<p>V1 (XJTLU only) This version is the version described in the doctoral thesis, and is the version used for the initial evaluation in May 2014. Jeaco, S. (2015). The Prime Machine: a user-friendly corpus tool for English language teaching and self-tutoring based on the Lexical Priming theory of language. Unpublished Ph.D. dissertation, University of Liverpool. Thesis available for immediate download from:</p> <ul style="list-style-type: none"> • The University of Liverpool repository: https://livrepository.liverpool.ac.uk/2014579/ or • The British Library: http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.658124

Android APP permissions and explanation:



a) This is to allow you to share images, sheets and PDFs of results and to save results for offline reading, to create DIY corpora and to keep your game progress.

b) This is related to sharing (tPM does not use location data)

c) This is the same as (a)

d) This is to access tPM server

e) This is only activated if you perform long running tasks (like getting wordlist statistics for DIY texts). It stops your phone sleeping only while completing these tasks so the internet connection is not interrupted if your phone goes to sleep.

f) Network connections and WLAN state are simply to check whether internet access is available.

Last updated: 27 March 2021

¹ Thanks to those who tried the first public release of tPM and helped me narrow down the cause of this problem.