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Quest[®] Client Profile Updating Utility 5.9.0

Release Notes

September 2022

These release notes provide information about the Quest® Client Profile Updating Utility release.

Topics:

New features and resolved issues

Known issues

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Upgrade and installation instructions

About this release

The Client Profile Updating Utility (CPUU) is used to update end-user Microsoft Outlook profiles settings, migrate additional features of user mailboxes and finally switch the profiles from the source to the target Exchange server once the user's mailbox is migrated and switched either manually or by the Migration Manager's Mail Agent.

CPUU supports Microsoft Outlook 2013/2016/2019 and Outlook for Office 365. It can be used only in conjunction with the following products:

- Migration Manager 8.15 or later
- On Demand Migration for Email

Refer to the Supported Configurations for details

Supported Configurations

Mail Clients

- Microsoft Outlook 2013
- Microsoft Outlook 2016
- Microsoft Outlook 2019
- Microsoft Outlook for Office 365

NOTE: Microsoft Outlook for Office 365 (installed as a part of Office 365 ProPlus suite) is also supported.

Operating Systems

- Microsoft Windows 8
- Microsoft Windows 8.1
- Microsoft Windows 10
- Microsoft Windows 11

Additional Software Requirements

• The Client Profile Updating Utility Configuration wizard requires Microsoft .NET Framework 4.7.2 or later to be installed.

Important Considerations

- Processing profiles for Microsoft Virtual Desktop Infrastructure (VDI) environments is not supported.
- CPUU does not support Outlook installed using application virtualization systems such as Microsoft App-V.
- Outdated versions of Outlook 2013 which do not support MAPI Over HTTP (KB3114349) should be updated for migration to Office 365 or to Exchange 2016/2019

New features and resolved issues

This release introduces the following new feature:

End of support for Basic Authentication. Previous releases of CPUU supported Modern Authentication, but relied on the Basic Authentication protocols for access to Autodiscover. This version of CPUU replaces this process with use of a modern Microsoft Authentication library. A future release of CPUU will make further changes to this area, as Microsoft continues to make changes and improvements to authentication libraries and processes.

Two new INI file parameters are provided in case the default authentication URLs need to be overridden, see the CPUU Administrator Guide > Technical Reference for details if necessary.

The "Logon Through Outlook" mode, formerly activated by the -LogonThroughOutlook command line parameter, is now the default behavior. Should it be necessary to disable this behavior for any reason, the new - DisableLogonThroughOutlook command line parameter can be used.

Release History

New in 5.8.7 version

The following issue is fixed in this release:

• To address an issue where the utility could not switch profiles because it could not open online target message stores, the utility no longer attempts to open the online message stores when the **Use Cached Exchange Mode for new and existing Outlook profiles** Group Policy is enabled.

New in 5.8.6 version

This release introduces the following enhancement for CPUU:

• The UPN and primary SMTP address do not need to match if the **Manually provide credentials** option is selected when using the -LogonThroughOutlook command line parameter. The restrictions for the - LogonThroughOutlook parameter have been updated. Refer to Known Issues for details.

New in 5.8.5 version

This release introduces the following new feature:

• Added Microsoft Windows 11 to Supported Configurations.

New in 5.8.4 version

IMPORTANT: After this update is installed, CPUU.ini should be recreated for existing projects due to deprecation of the following configuration parameters:

- BypassModernAuthentication
- CleanupCredentialManager

Or the parameters mentioned above should be removed from existing INI file.

The following known issues are fixed in this release:

Defect ID	Issue Description	
CPUU-1541	Addresses two cases where CPUU would fail to open the mailbox store even with - LogonThroughOutlook:	
	 where UPN was not equal to the user's SMTP address 	
	when admin credentials were used instead of the user's own credentials.	
CPUU-1529	In the ClientProfileUpdatingUtilityConfiguration Wizard, the Help button on the Encryption Modes dialog now opens the Encryption Modes topic in the help file.	

Defect ID Issue Description

CPUU-226152 - Minor optimizations to performance and stability, to handle unusual edge cases identified by static code analysis.

New in 5.8.3 version

This release introduced the following new feature:

 Support for migration to Microsoft Office 365 tenants with modern authentication enabled and optionally Multi-Factor Authentication (MFA) enabled.

Previously this functionality was partially supported by means of disabling modern authentication in Outlook settings for the time of profile processing, but this method cannot be used now due to recent changes made by Microsoft in updates for Microsoft Outlook for Office 365 / Outlook 2016 and in Outlook 2019. Now authentication process can be delegated to Outlook that allows Client Profile Updating Utility to access target mailbox with modern authentication and MFA. To enable this behavior the -LogonThroughOutlook command line parameter is introduced in this release. If this parameter is specified in Client Profile Updating Utility command line, Client Profile Updating Utility is allowed to initiate start of Outlook for prompting target user credentials and performing authentication process. Some restrictions may apply. Refer to the Workaround 1 specified in Known Issue CPUU-1266 for details.

The following known issues are fixed in this release:

Defect ID	Issue Description
CPUU-1415	Source display name may retain in switched profile on the target in the account properties and in From field.
	Fix: Now correct target email address is displayed.
CPUU-1426	Profile cannot be processed, when the Prompt for credentials option is selected in case of source and target user passwords does not match.
	Fix: Now profile will be processed in the case of source and target user passwords does not match.
CPUU-1416	In case of unsuccessful access to the target in case the Prompt for credentials option is selected, rollback will be started and CPUU asks for source credentials again.
	Fix: Now rollback does not require credentials for the case.

New in 5.8.2 version

This release introduces the following new feature:

• Quest Migration Manager version 8.15 support.

New in 5.8.1 version

This release introduces the following enhancements for CPUU:

Defect ID	Enhancement
CPUU-1360	CPUU disables Autodiscover SCP lookup for all Outlooks by default. DoNotModifyExcludeSCPLookup (previously ExcludeScpLookupNewer) parameter can be used to turn off this behavior, if necessary.
CPUU-1319	Now the Switch Message handling procedure has been optimized, and CPUU uses the following parameters retrieved from the message:
	Version of the Switch Message
	Target mailbox DN
	Target mailbox SMTP address
	Parameter that specified whether the target server is the Office 365 server
	The rest of the Switch Message data is skipped.
CPUU-1327	If the source and target domain part of SMTP addresses match, CPUU now checks that the UseLocalAutodiscoverXMLs parameter is set to 1 . Otherwise CPUU stops and the error is reported.
CPUU-1287	In case of any issues with getting Autodiscover response for the target Public Folders and Additional mailboxes, CPUU now makes three attempt to get Autodiscover response.
N/A	SkipPing is now removed from configuration parameters.
CPUU-1343	Switch Message section format in SwitchResMB.ini is now simplified. It is recommended to re-create configuration files from previous versions of the product, but obsolete SwitchResMB.ini is still workable, you can use whatever you want.
CPUU-1269	Client Profile Updating Utility is now enhanced to pre-check if MAPI is disabled on the target to stop profile processing in this case. As a result, time is saved and redundant errors in log are prevented.
CPUU-1265	Client Profile Updating Utility Configuration wizard may not preserve some advanced tuning settings in case these settings were selected and then cleared. Configuration wizard is now enhanced to avoid the issue.
CPUU-1371	If UseLocalAutodiscoverXMLs=1, target user mailbox and public folders SMTP domain part names are not specified in ProcessedDomainsFQDNs, CPUU now stop processing and the error is reported.
The following kno	own issues are fixed in this release:

Defect ID	Issue Description	
CPUU-1379	CPUU cannot process more than one profile at a time if it was launched without the SkipAutodiscoverChecking parameter. Fix: Now CPUU can process several profiles at the same time.	
CPUU-1380	CPUU does not update links pointed to any objects in "Outlook contact groups" for Nicks (Autocomplete list) on the target.	
	Fix: Now CPUU clears links pointed to any objects in "Outlook contact groups" for Nicks (Autocomplete list) on the target.	
CPUU-1321	In case CPUU is redirected to another Autodiscover URL, CPUU repeats Autodiscover URL	

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Defect ID	Issue Description	
	discovery procedure instead of Autodiscover response usage. Fix: The value of the stored Autodiscover URL now is updated if the CPUU is redirected to another Autodiscover URL using Autodiscover response.	
CPUU-1317	CPUU uses target credentials instead of source credentials for sending notification under a default profile after Rollback. Fix: CPUU chooses credentials for sending notification depending on result of default profile update.	
CPUU-1292	In some rare cases CPUU cannot update AutoComplete List for the processed profile. The following error message is reported: Cannot get Nicks from the source. Unspecified exception Fix: Now CPUU makes up to 5 attempts to resolve the recipient in the Address Book in case of an error if Exchange limits are exceeded or some user environment prevents Autocomplete list processing.	
CPUU-1251	Public Folder processing may fail for Outlook 2013. Scope :Migration to Office 365 in case MAPI Over HTTP is disabled (MapiHttpDisabled is set to 1) on the client host. Fix: Public Folder processing now works for all supported configurations.	
CPUU-254	In case the DlgHookHandler.dll is not found this results in log on errors only without any record that this module is missing. Fix: If Prompt for credentials or Manually provide credentials are selected, before profile processing is started, CPUU checks if DlgHookHandler.dll (or DlgHookHandler_x64.dll for Outlook x64) is located in the CPUU installation folder (ClientProfileUpdatingUtility.exe/ ClientProfileUpdatingUtility_x64.exe). In case this module not found, CPUU stops and the error is reported.	

New in 5.8 version

This release introduces the following new features and enhancements for CPUU:

- Microsoft Outlook 2019 is now supported by CPUU.
- CPUU can now process profiles across Microsoft's cloud offerings, including tenants in Germany and China.
- MAPI over HTTP support for Outlook 2013 for on-premises migration scenarios
- · Validity of provided service account's credentials is now checked by CPUU before attempting to log to the profiles. The validity check result is reported to log file for troubleshooting purposes.

- CPUU.ini usability is now improved due to extended Autodiscover usage, the following settings are no longer required because CPUU gets necessary data automatically:
 - **RPCOverHTTP section:**

ConnectUsingHTTP ProxyServer SSLOnly **MutualAuth** PrincipalName **HTTPFirstOnFast HTTPFirstOnSlow** AuthType FirstLogonOverTCP DomainCfg section: PublicFolderPrimarySmtpAddress PublicFolderPrimaryMailboxGuid

- TargetO365AutodiscoverEndpoint
- Domain
- Servers
- IMPORTANT: Configuration files created in previous versions of CPUU are no longer supported and should be re-created.
- New configuration parameter ProcessedDomainsFQDNs is now used instead the following obsolete parameters:
 - AutodiscoverDomainsFQDNs
 - ApprovedSMTPAddressDomainParts
 - T2TDomainNamesOfMailboxesAllowedToSwitch

Now profiles with Multiple Exchange accounts can be configured for processing in configuration wizard.For details see Configuration Parameters section of Client Profile Updating Utility Administrator Guide.

- New management parameter -SkipAutodiscoverChecking is now added to prevent CPUU from checking that an autodiscover URL is on a source domain and a target autodiscover URL is on a target domain. For details see Management Parameters section of Client Profile Updating Utility Administrator Guide.
- RPC over HTTP limited support (Public Folders processing is not supported) for migration to Office 365 in case of Outlook 2013. For details see Known issues.

This release introduces the following new features and enhancements for Switch Resource Mailboxes utility (SwitchResMB):

- Microsoft Outlook 2019 is now supported by SwitchResMB.
- New configuration parameter LeaveTemporaryProfiles is now added for troubleshooting purposes to prevent deleting of MAPI temporary profiles created by SwitchResMB utility for CPUU. For details see Using the Utility section of Client Profile Updating Utility Administrator Guide.

The following known issues are fixed in this release:

Defect ID	Issue Description
CPUU-1234 4397567-1	AutoComplete list (formerly Nicks) processing is now enhanced to support migration in rare case of duplicated nick properties.
CPUU-1058, 4334806-1	Tenant to tenant migration scenario with domain name transfer does not work due to incorrect server name handling.
CPUU-1056, CPUU-1210	CPUU does not restore EnableADAL to original value after Cleanup.
CPUU-1030, CPUU-1179, CPUU-1129	Failed to access Autodiscover URL if Negotiate and NTLM are not specified as the first entries in the supported authentication method list returned by the Autodiscover service server. Scope : Scenarios where Use the currently logged in user option is selected

New in 5.7.9 version

IMPORTANT: Henceforth, we terminate the support of Microsoft Outlook 2007 due to the fact that Microsoft does not support Microsoft Office 2007 since October 2017, but we do not limit the use of Client Profile Updating Utility for Microsoft Outlook 2007 profile switching.

This release introduces the following new features:

- CPUU-867: ApprovedExchangeDomains parameter is now replaced with ApprovedSMTPAddressDomainParts parameter to process profiles containing multiple Exchange accounts. ApprovedSMTPAddressDomainParts parameter contains selected domain parts of source SMTP addresses in space-separated list to specify which primary accounts are allowed to be switched. See Configuration Parameters for details.
- CPUU-1026: Modern Authentication for Outlook 2013 and 2016 is now bypassed by default while Client Profile Updating Utility process Outlook profiles. See BypassModernAuthentication parameter in Configuration Parameters for details.

Defect ID	Enhancement
CPUU-699	Though shared folder matching was unsuccessful, Calendar feature can be displayed as OK. Now the case is handled correctly.
CPUU-431	Client Profile Updating Utility may not preserve last logged on account name in case User principal name (UPN) doesn't match the email address. Now Client Profile Updating Utility preserves the last logged on account name in such user environments.
CPUU-108	Client Profile Updating Utility may hang in case of incorrect credentials for target service account.
CPUU-1017	In rare cases additional mailbox matching may fail and the following message is displayed: Cannot match the folder Reason: Source StoreIDS matching failure.

Known issues

The following is a list of issues, including those attributed to third-party products, known to exist at the time of release.

Table 1: General known issues

Known Issue		Issue ID
Client Profile Updating Utility failed to process profile. The following events are logged:		CPUU-1266
MAPI_E_LOGON_FAILED error		
Outlook could not logon error after failed attempt to open the store		
Scope: Microsoft Outlook 2016 / Microsoft Outlook for Office 365/ Microsoft Outlook 2019 installed on the local computer and target mailbox located in Microsoft Office 365 tenant with Modern Authentication enabled		
Root-cause: Client Profile Updating Utility cannot log on to the target mailbox using Outlook MAPI due to changes made by Microsoft in recent updates for Microsoft Outlook for Office 365 / Outlook 2016 and in Outlook 2019.		
The following	g workarounds can be used to fix the issue:	
Workaround 1: Use new command line parameter -LogonThroughOutlook to start Client Profile Updating Utility in the case. This parameter initiates start of Outlook to prompt for target user credentials during first access to target mailbox and to perform authentication process.		
i	NOTE: Consider the following behavior changes in case the – LogonThroughOutlook command parameter usage:	
	 If Manually provide credentials option is selected, standard behavior is now changed and profile processing cannot be performed without requesting user credentials. Microsoft Outlook will be automatically started by CPUU to request user credentials for target mailbox and perform authentication process. 	
	 If Prompt for credentials option is selected, Microsoft Outlook will be automatically started to request user credentials for target mailbox. In case the source and target passwords do not match, or UPN of target user does not match with primary SMTP address, the target user credentials may be requested twice during profile processing. 	
Work	around 2: Turn off Modern Authentication in the target Microsoft Office 365 tenant.	
The value of the stored Autodiscover URL may not be updated if the CPUU is redirected to another CPUU Autodiscover URL using Autodiscover response.		CPUU-1321
Configuration file cannot be changed and the following message is displayed when Use existing configuration file option is selected on the Welcome step of configuration wizard: Unknown key "AutodiscoverDomainsFQDNs' in section "Parameters" in configuration file.		N/A
Root-cause: Configuration files created in previous versions of CPUU are no longer supported and should be re-created.		
Workaround: Select Create a new configuration file option on the Welcome step of configuration wizard to re-create configuration file.		

Known Issue	Issue ID
Profiles cannot be updated in case RecreateSwitchMsg is set to 1 in SwitchResMB configuration file.	CPUU-1252
Scope:Microsoft Outlook 2016/2019	
Workaround: Use management parameter - SkipAutodiscoverChecking to prevent CPUU from checking that an autodiscover URL is on a source domain and a target autodiscover URL is on a target domain. For details see Management Parameters section of Client Profile Updating Utility Administrator Guide.	
In case of mailbox switch under Tenant to tenant migration scenario with domain name transfer , additional mailboxes connected to the main mailbox may not work at the first attempt to open them after Outlook profile switching.	
Workaround: To restore the accessibility of additional mailboxes restart Outlook.	
CPUU does not support Outlook profiles with any third-party Add-ins installed.	TF351792
After the switch of a profile with multiple Exchange accounts, a list of address books of a non- default account may not contain the local contacts	TF319769
If the primary SMTP address of an Office 365 user contains the onmicrosoft.com suffix, Client Profile Updating Utility may not be able to log on to the target if the target is the hybrid Exchange organization with Single Sign-On. In this case, this profile cannot be switched.	TF318923
After the switch of a profile that contains multiple Exchange accounts, the Move option from the shortcut menu of the profile messages may not be displayed on the target.	TF318234
During processing of a profile that contains multiple Exchange accounts, Client Profile Updating Utility disables all rules that belong to the switched account. This may happen if links to the folders in these rules point to the folders in another account.	TF318648
CPUU cannot be installed via Migration Manager suite if the Exchange MAPI Collaboration Data Objects 1.2.1 or later is not installed on the workstation.	TF218851
Client Profile Updating Utility does not support Citrix terminal connections.	TF212381
Client Profile Updating Utility cannot roll back changes to Microsoft Outlook profiles that were made by the earlier versions of CPUU.	TF213587
After the switch, the Auto-reply to people outside my organization option in the Automatic Replies dialog becomes selected on the target even if this option is deselected on the source. This may happen if the schedule is not set and the text message fileld is empty in the Automatic Replies dialog on the source.	ST81330
Client Profile Updating Utility stops all processes that lock Microsoft Outlook profiles. If the process was not stopped immediately, you may receive the following warning: "Microsoft Outlook (or another MAPI client) is using a dialog box for selecting a profile to log on. Please close this dialog box before Migration Manager for Exchange Client Profile Updating Utility starts processing the profile(s)."	ST80424, ST80301
Outlook Address Book (OAB) contacts lose their Distribution List membership after the migration, if they were added to OAB from the Global Address List.	-
After the utility switches profile of a user migrated in a Remote User Collection, a message containing switch log with error may appear in the Sync Issues folder after first synchronization.	-
If the account used by the utility to log on to the target is configured to change password after the first logon, such profile will not be switched.	-

Known Issue	Issue ID
If you run the utility locally or by a logon script, Windows Firewall displays a warning. However, the warning does not interfere with profile updating.	-
After the switch, Out of Office Assistant works only if you log on to the mailbox using the same credentials, as you use to log on to your computer.	-
After migrating to Microsoft Exchange 2007, users may experience errors during the Offline Address Book download. To resolve the issue, open the Offline Address Book Properties dialog in the Exchange Management Console and select the Outlook 98 SP1 or earlier (Version 2) option on the Distribution tab. Note that the issue is applicable to all Microsoft Outlook versions.	-
During the rollback, changed public folder favorites are not restored to the initial state.	-
CPUU does not support localized versions of Microsoft Outlook, Microsoft Exchange Server, or the Microsoft Windows operating system. CPUU may fail to update a profile if the corresponding code page is not supported by the target Exchange server. For details, see the Microsoft Knowledge Base article at http://support.microsoft.com/default.aspx?scid=kb;en-us;251719.	-
CPUU may fail to update a profile if Microsoft Outlook is not the default mail client on the computer.	-
The DIgHookHandler.dll library must be located in the same folder as ClientProfileUpdatingUtility.exe .	-
If any message boxes are displayed when the user starts Microsoft Outlook, the same message boxes may appear when CPUU processes the user's profile.	-
CPUU performs automatic Undo only if Migration Manager Console supports this operation. To rollback a profile manually, use the Rollback mode of the CPUU Configuration Wizard.	-
If you enable updating of offline profiles even if the target mailbox was not recreated by the Migration Manager or Exchange Migration Wizard agents, in cases when the mailbox could not be recreated, CPUU will remove the OST files for the updated profiles. The OST files will be automatically re-created by Microsoft Outlook when the user logs on to the Microsoft Exchange 2000/2003 mailbox for the first time.	-
Profiles with authentication set to Distributed Password are not updated.	-
Microsoft Outlook Search Folders are created as disabled folders. Click on the folder to enable it.	-
Rolling back a profile update may not work correctly if the same PST file is assigned to several profiles.	-
If the Exception List rules are set in a Microsoft Outlook XP/2003 profile, no rules will be updated.	-
The filters created for the offline folder copy synchronization are not preserved while updating the profile.	-
If a user uses offline profile with the cached mode turned on but the mailbox is not migrated in a Remote Users Collection, it is recommended to synchronize the offline folder (OST) file before CPUU updates the profile. Otherwise CPUU may rewrite the unsynchronized changes in the OST file with the newer information contained in the online profile.	-
If the Synchronize forms option in the Send/Receive Settings is selected for a source offline profile, a Microsoft Outlook error may appear after the profile has been updated by CPUU and the user has performed OST file synchronization with the target profile. To resolve the issue, clear the Synchronize forms option in the target profile's Send/Receive Settings.	-
If after a mailbox was migrated in a Remote Users Collection and the OST file was successfully preserved after profile update you delete the x500 address that is equal to the distinguished name of the source mailbox from the proxy addresses of target mailbox, the OST file is no longer accessible. You will need to re-create and re-synchronize the whole OST file from the target	-

server.

Even if a mailbox was migrated in a Remote Users Collection and the OST file was successfully _ preserved, the offline address book (OAB) file is not preserved and is automatically downloaded from the target server when a user logs on to the target mailbox for the first time after profile update. Note that download of the address book may take considerable time.

Currently, the following Outlook 2013 features are not processed by CPUU: linked contacts, favorite contacts.

System requirements

Before installing Client Profile Updating Utility 5.9.0, ensure that your system meets the following minimum hardware and software requirements.

Table 2: System requirements

Requirement	Details
Platform	x86, x86-64
Operating system	Any of the following:
	Microsoft Windows 8
	Microsoft Windows 8.1
	Microsoft Windows 10
	Microsoft Windows 11
Additional Software	Any of the following:
	Microsoft Outlook 2013
	Microsoft Outlook 2016
	Microsoft Outlook 2019
	Outlook for Office 365

Product licensing

Use of this software is governed by the Software Transaction Agreement found at www.quest.com/legal/sta.aspx. This software does not require an activation or license key to operate...

Upgrade and installation instructions

Client Profile Updating Utility 5.9.0 supports upgrade from version 5.2, 5.3, 5.4, 5.5, 5.6 and 5.7.

To upgrade Client Profile Updating Utility, run the CPUU 5.9.0 setup and follow the Configuration wizard. If you are not use the CPUU configuration file with **Use the following user account** option selected, no action is required, otherwise you might need to perform the additional steps:

For CPUU user profile processing

It is recommended to switch to **Prompt for credentials**option for migration from / to Microsoft Office 365. For all other migration processes it is recommended to switch to **Use the currently logged in user** or **Prompt for credentials** options. Those options ensure much safer credential handling.

In case you still need to use **Manually provide credentials** option (previously named **Use the following user account**), it is necessary to reenter the previously saved passwords on **Credential** step of Configuration wizard.

For mailbox processing using SwitchResMB

Please, pay attention, now you have **Manually provide credentials** option (previously named **Use the following user account** option selected on **Credential** step of Configuration wizard. It is necessary to reenter the previously saved passwords here. We recommend to select one of the restricted encryption modes (**Restricted to current user and host** or **Restricted to current host**). While we have implemented the reliable encryption algorithm, it is theoretically possible to reverse-engineer CPUU code and use the knowledge to decrypt credentials data stored in CPUU configuration file when **Unrestricted (not recommended, security risks should be reviewed)** encryption mode is used. Thus, using **Unrestricted (not recommended, security risks should be reviewed)** encryption mode has a chance that your credentials might be compromised. We strictly not recommend to use this mode in the production environment and for administrative credentials. It is only acceptable for evaluation purposes in the test environment.

For more details about encryption modes see Encryption modes section of CPUU Administrator Guide.

Contents of the Release Package

The Client Profile Updating Utility release package contains the following products:

- 1. Client Profile Updating Utility 5.9.0
- 2. Product Documentation: Administrator Guide
- 3. ClientProfileUpdatingUtility_5.9.0_ReleaseNotes.pdf-this file.

Installation Instructions

To install Client Profile Updating Utility, run the CPUU.5.9.0.*.msi installation package provided in your distribution of the product.

The latest version of the product is available for download at https://support.quest.com/download-installdetail/6117163

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

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- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- · View services to assist you with your product

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IMPORTANT, **NOTE**, **TIP**, **MOBILE**, or **VIDEO**: An information icon indicates supporting information.

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Third-party contributions

This product contains the following third-party components. For third-party license information, go to https://www.quest.com/legal/license-agreements.aspx. Source code for components marked with an asterisk (*) is available at https://opensource.quest.com.

Table 3: List of Third-Party Contributions

Component	License or Acknowledgement
Loki 2001	Copyright (c) 2001 by Andrei Alexandrescu
Microsoft.IdentityModel.Clients.ActiveDirectory 5.2.9	MIT License (MIT) Copyright $@$ Microsoft Corporation. All rights reserved.

Copyright Notice - Loki 2001

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