

Support Information:

Ensure Technologies Technical Support is available to provide any needed assistance. Please contact us at (734) 547-1600 or at support@ensuretech.com.

Compatibility:

- ❑ The XyLoc client is compatible with Windows 2000, XP and XPe.
- ❑ XyLoc 8.4.9 (and later) includes some additional detail in the messaging to the XSS to allow the XSS to prioritize “new” key lookups (see details below). These require XSS version 4.2.8.
- ❑ XyLoc is available in the English and French language versions only.
- ❑ If used in conjunction with the XSS-AD, the XSS must be at least version 4.2.4 before upgrading to XyLoc client version 8.3.9 or greater. NOTE: If used in conjunction with XSS-SQL, or if as a Solo, then the client is backward compatible, except where noted otherwise.
- ❑ XyLoc supports fingerprint authentication (instead of a password) in conjunction with the XyLoc badge (when using “Must Enter Password” mode of authentication). As of XyLoc 8.5.0 the following readers are supported:
 - Authentec AES3500 and AES4000 (supported in previous versions of XyLoc)
 - Authentec AES3400 (added in 8.5.0)
 - Digital Persona “U_{are}U” 4000 series sensors (added in 8.5.0)

Formatted: Bullets and Numbering

General Client Notes:

- ❑ **Microsoft Signed Driver:** The latest version of the drivers for both the USB and PC Card lock are now [Digitally Signed](#) by Microsoft.
- ❑ **Windows XPe Thin Client:** At this time only the English language installation is supported on the XyLoc client install for XPe.
- ❑ **Windows Firewall:** If using the XyLoc Security Server software (XSS) the communication to the XyLoc client will be blocked by the firewall. An exception must be created for TCP Port 3510, or the firewall must be disabled for communication to be restored.
- ❑ **Windows XP Fast-User Switching:** Microsoft disables Fast-User Switching when XyLoc is installed (reference Microsoft TechNet article [Q294739](#)).
- ❑ **Screen Saver:** The “Password Protect” check box in the Screen Saver will no longer have any effect once XyLoc is installed. The XyLoc client now handles the security of the desktop. A screen saver can still be used, but the password protection feature will no longer work.
- ❑ **Command Line or “push” installations of the client:** The client has command line installation options that are available to define some specific registry settings:
 - **fpOverrideFilter:** “msiexec /i XyLoc.msi FP_DLG_FILTER=1
 - Used to set the flag as to whether or not to prompt a user for fingerprint when performing an override (see specific enhancements below)
 - **FPRType:** “msiexec /i XyLoc.msi FPR_TYPE=x
 - Used to define the type of Fingerprint reader being used (“x” is the number that corresponds to the fingerprint reader type)
 - 0 = None
 - 1 = Authentec 3500/4000
 - 2 = DP UareU 4000
 - 3 = Authentec 3400

Enhancements:

XyLoc version 8.5.1 includes the following enhancements from the previous release:

- 1) **Modified the installation script and service to leave the AutoAdminLogon registry value (for winlogon) intact.**
- 2) **Fixed an issue when using FQDN for the XSS address.**
 - a) Original Issue: If one changes the server's IP address to a DNS name in the server database, the machine record with this information is not propagated to the client database. However, if another field is also changed (such as the number of log records to upload) then the DNS name shows correctly in the client's configuration manager along with the new value for log records to upload.
- 3) **Fixed an issue where a message appeared erroneously, stating the key could not be found and to check the battery.**
- 4) **Enhanced local database handling of large user databases.**
 - a) Add "maximum key list" counter in the registry with range from 1-1000 (default.eq.1000)
 - i) HKLM\SOFTWARE\Ensure Technologies\XyLoc - Serial Version (Multi key)
 - ii) Value: maxKeyList
 - iii) Type: DWORD
 - iv) Data: 000003e8 (Decimal = 1000)
 - b) Add debug registry key to log current key counts
 - i) HKLM\SOFTWARE\Ensure Technologies\XyLoc - Serial Version (Multi key)
 - ii) Value: xylocLogMode
 - iii) Type: DWORD
 - iv) Data: 00000001
- 5) **Removed some excessive output to the exception log**
- 6) **Modified the handling of Fingerprints in Password Override to allow a customer to turn off the Fingerprint ability in override.**
 - a) New registry value must be configured;
 - i) HKLM\SOFTWARE\Ensure Technologies\XylocFPR]
 - ii) Value: fpOverrideFilter
 - iii) Type: DWORD
 - iv) Data:
 - (1) 1 = FP is disabled for override
 - (2) 0 = FP is enabled for override
 - b) This is set to "1" by default and is also added as an argument to the MSIEXEC command line install
 - i) "msiexec /i xyloc.msi FP_DLG_FILTER=1"
- 7) **Fixed an issue in the Gina introduced in version 8.5.0 where the password override prompt was displayed during "Hands Free" unlock.**
- 8) **Fixed an error message stating "XyLoc Service not Started. Please wait" that was displayed at boot up on Windows XP.**
- 9) **Added additional debugging in XyLoc AIT to capture dump information if the XyLocAIT.exe process crashes.**
- 10) **Add a series of enhancements to XyLocAIT to correct or address reported script errors**

Ensure Technologies – Software Release Notes, XyLoc Client ver 8.x.x
Drawing#: 540-0101-003 Drawing Rev: 8.5.1 Rev Date: 07-01-2008

For reference, this client version also includes the following features, changes and bug fixes from earlier releases:

- 1) **Added Low Battery warning (Requires 8.5.0 or later)**
 - a) If status packet is detected below the battery voltage threshold the existing Status pop-up message from the system tray will show a “Low Battery” message in red.
 - b) Once the appropriate status packet with a voltage reading back above the threshold is received, the notification will disappear.
- 2) **Added support for additional Fingerprint devices (Requires XyLoc 8.5.0 or later)**
 - a) Added support for Digital Persona reader and Authentec AES3400.
 - b) The type of reader in use is defined by a new registry value
 - i) HKLM\Software\Ensure Technologies\XyLoc\FPR\
 - ii) Value: “FPRTYPE”
 - iii) Type: DWORD
 - iv) Data:
 - (1) “0” = no FP device in use
 - (2) “1” = Authentec AES3500 and AES4000 (legacy reader support)
 - (3) “2” = Digital Persona
 - (4) “3” = Authentec AES3400
- 3) **Modified the client to include additional information in the Key Lookup messaging to the XSS to differentiate between “new” key lookups and lookups for “existing” keys.**
 - a) “New” key lookups are for keys that do not currently have a record in the local XyLoc database.
 - b) This additional detail will be used by an upcoming release of the XSS (version 4.2.8 or greater) to prioritize the “new” key lookups to ensure the fastest possible response vs. updates to existing records.
- 4) **Modified the functionality of the “XSSLookupRetry” time setting in the system registry to reduce the number of redundant lookups to the XSS.**
 - a) Previously this timer was conditional on the key being in continuous communication to the lock.
 - b) Regardless of what the timer was set for, if the key went “out of range” (meaning the power dropping below a static threshold as defined in code or was turned off or dropped out entirely) and then came back in range, the timer was reset and an immediate lookup was performed again.
 - c) With this modification, the timer is static. Once a lookup is performed, another lookup is not done until at least the specified time has elapsed, regardless of key activity and signal strength
 - d) This time uses the same DWORD value in the Registry as before under HKLM\Software\Ensure Technologies\XyLoc - Serial Version (Multi key)\XSSLookupRetry and is defined in seconds (in decimal).
- 5) **Includes additional messaging on the override screen to remind the user to put their name in parenthesis if they are unlocking in the kiosk.** ← - - - - Formatted: Bullets and Numbering
 - a) This process is only valid when using XSS-AD, so the feature checks the “XSSType” registry key to verify that the AD version is being used.
 - b) If this is set to SQL or not defined at all, the extra messaging will not appear.
- 6) **Provides automatic lock after an auto logon is done.** ← - - - - Formatted: Bullets and Numbering
 - a) Configure the Auto Logon as has been supported in previous versions.
 - b) In the past, once the system logs in, XyLoc would be in a Password Override state and would not lock until the “Lock in Password Override” timer had expired.
 - c) Now XyLoc will automatically lock the workstation immediately upon login.

- d) **NOTE:** The automatic lock will only occur if a login is detected under the name defined in the Winlogon settings.
 - i) If the Auto Logon is interrupted and a user logs in with a different username, XyLoc will NOT automatically lock and will stay in Password Override mode as before.
 - ii) If the same account defined in the Winlogon registry is logged in manually (instead of letting the Auto Logon do it for you), XyLoc will recognize that as the same account and WILL automatically lock the workstation.

- 7) Modified the USB and PC Card drivers to provide a digital signed driver**
 - a) The version number for the USB driver is 3.0.0
 - b) The version number for the PC Card driver is 5.0.0

- 8) Fixed issue with rights to the installation folders when installing on non-English OS.**

- 9) Integrated PC Card Lock installation into the client install package.**
 - a) Previously the PC Card lock had to be installed separately.
 - b) USB Lock has always been integrated.

- 10) Separated the different language version of the client into different install packages.**
 - a) This will help simplify the large enterprise deployment.
 - b) Reduces the overall size of the install package

- 11) Restored the ability to use DNS names for the XSS of longer than 15 characters**
 - a) This has inadvertently been disabled in v8.4.6 on installation and has been corrected.

- 12) The Auto Calibration default caps have been changed in the registry.**
 - a) ShortCap – 110 (was 130 as of v8.4.2)
 - b) MidCap – 105 (was 120 as of v8.4.2)
 - c) HighCap – 100 (was 116 as of v8.4.2)
 - d) If referencing log files, note that the values are without the decimal point. So, 110 is actually a value of 1.10 and so on.
 - e) The value of 100 is 1.00 which is effectively “Off”.

- 13) Added the ability to change the timeout on the password field at login and unlock.**
 - a) When a user selects their name at the login/unlock screen, they have 5 seconds to start typing or the field times out and the screen refreshes back to the list of keys. This time is now adjustable with a registry value.
 - i) Value Name: DialogTimeout
 - ii) Type: DWORD
 - b) The time is in seconds, and the default is “5” (in Decimal)
 - c) **NOTE:** The longer the time, the longer the user will have to wait if the wrong name is selected before the list returns to where they can select the correct name. However, there is still the “Refresh” button on the screen that can be used and not wait for the timeout.

- 14) Removed the “XSS Server Search Order” field.**
 - a) There is now only one box to enter an XSS address.
 - b) Multiple addresses were never supported. This was to clean up the UI to match functionality.

- 15) Removed the drop down for “Mode” under the PC Setup tab**

- 16) Grayed out the XyLoc preferences in the config manager when used with an XSS**
 - a) All settings are managed by the XSS once attached.
 - b) The buttons for “Range Refinement” and “Advanced Settings” in the “User Setup” tab can still be clicked to view the defined settings.

- c) Historically a user could make changes to settings, but the XSS would change them back at the next authentication, causing confusion for the user.

| **17) Added the ability to use longer domain names for the XSS Address in both the configuration manager and the installation wizard.**

← - - - - Formatted: Bullets and Numbering

- a) This was previously limited to 15 characters.

| **18) Improved support for Remote Logins and Auto Logon.**

← - - - - Formatted: Bullets and Numbering

- a) Issue where the XyLoc client would misinterpret a remote user as the kiosk user and when it locked and the administrator tried to unlock, it would ask to logoff the current user.
- b) Issue where the Auto Logon did not work properly with the Legal Notice Caption enabled
- c) Issue where the "DefaultUsername" setting in the registry would get overwritten when a remote user logged in.

| **19) Added additional debug logging to trace WSS-SDK issues.**

← - - - - Formatted: Bullets and Numbering

- a) There are two registry values that can be created in the XyLoc registry for the ETWSS debug logging.
 - i) ETWSSDebugLogging
 - (1) Type: DWORD
 - (2) Value: 1 – turn on debug logging, 0 – turn off debug logging
 - ii) ETWSSLogPath
 - (1) Type: String
 - (2) Value: Specify the full path for the debug log, for example, "C:\Log"
- b) The path specified in the ETWSSLogPath must have appropriate permission for the log to be created/written.
- c) If the ETWSSLogPath registry value is missing, the log file's default path is the common application data folder: C:\Documents and Settings\All Users\Application Data

| **20) Added the "Citrix Lock-On-Roaming" feature.**

← - - - - Formatted: Bullets and Numbering

- a) Added support to monitor the Citrix process (wfica32.exe). If the Citrix process disappears, the XyLoc client will lock automatically. XyLoc will note in the log that a Citrix roaming event caused the lock.
- b) Note the following functionality:
 - i) This process is killed when a session is disconnected manually or when it is "pulled" by the user logging into it at another workstation (if supported in the version of Citrix that is being used).
 - ii) The Locking will only occur when the XyLoc service detects the Citrix process is terminated and the current logon XyLoc key is still the same as the XyLoc key when the Citrix process started
 - iii) If the XyLoc service detects the termination of Citrix process but the logon key is different than the XyLoc key that starts the process (change of user), XyLoc will not lock.
 - iv) XyLoc will reset the AI Auto Launch scripts after locking due to a Citrix roam.
 - (1) With this change, if the same user returns to a PC after locking due to a Citrix roam, the user's Auto Launch script will run again and log them into Citrix.
 - v) The user's grace period is cancelled when a system locks due to the "Lock-on-Roam" feature.
 - (1) This prevents the system from inadvertently unlocking hands-free if the key is still in the vicinity of the workstation.
- c) A new registry value 'CitrixLockOnRoaming' is used to enable/disable this feature.
 - i) The default setting is '0' (disabled).
 - ii) Set to '1' to enable.

| **21) Added a registry value to specify the path for the Exception.txt file.**

← - - - - Formatted: Bullets and Numbering

- a) This is so that it can be created in a folder which the necessary XyLoc processes have permission to write debug logging to the exception.txt file.
- b) Name: ExceptionLogPath
- c) Type: String
- d) Value: Specify the full path for the debug log, for example, "C:\Log"
- e) If this registry value is missing, the default path is XyLoc installed folder (i.e. C:\Program Files\Ensure Technologies\XyLoc)

| **22) Improved support for Standby / Hibernate in Windows XP**

← - - - - Formatted: Bullets and Numbering

- a) Modified the GINA to handle the case when the PC is coming out of standby/hibernate, so XyLoc can still function.
- b) **NOTE:** There are still cases when the PC resumes from Hibernate mode where the lock device may not get recognized initially. The user will need to hit Ctrl-Alt-Del and cancel out the override screen to re-activate the lock device. This issue is being investigated further.

| **23) Fixed previous Security issues with other manual lock methods**

← - - - - Formatted: Bullets and Numbering

- a) A <Window key> + L keystroke combination will now act as a manual lock and XyLoc can now unlock normally without disabling the XyLoc functionality.
- b) Fixed an issue with using the LockWorkStation API that caused XyLoc to stop functioning after the PC was unlocked.
- c) XyLoc now treats these locks as manual locks.

| **24) Fixed an issue with Forced Logoff**

← - - - - Formatted: Bullets and Numbering

- a) Added code to handle a XyLoc SAS sent to WinLogon during "force logoff".
- b) The extra SAS would cause the GINA to display a message box indicating the user cannot be authenticated, however the user would be allowed in anyway.

| **25) Added Support for PC Card version of the XyLoc lock (XyLoc Mobile Lock)**

← - - - - Formatted: Bullets and Numbering

| **26) Added support for the AD account lockout/disable functionality (requires XSS-AD)**

← - - - - Formatted: Bullets and Numbering

- a) Previously if a user's AD account was locked out or disabled, the user could still authenticate in XyLoc.
- b) This has been resolved.

| **27) "Blank out" AI Credential in the credential reset tool**

← - - - - Formatted: Bullets and Numbering

- a) The password field in the application credentials for AI is now blank for security purposes.
- b) The username is still visible.
- c) When any changes are made, the user will have to click "Update" on that window to save the credentials.

| **28) Added retention of Auto Calibration value when a key unlocks within the Grace Period.**

← - - - - Formatted: Bullets and Numbering

- a) XyLoc only calibrates when a user is required to authenticate (after grace period is expired)
- b) Added new registry key 'AutoCalAtEachUnlock'.
- c) There are two supported settings for this registry key:
 - i) "0" (default) indicates that we will not perform an auto calibration when unlocking within the grace period. Under any other unlock, we will perform an auto calibration.
 - ii) "1" indicates that we will perform an auto calibration any time we unlock, regardless of grace period.

| **29) Changed the GINA so that the password field/fingerprint dialog is no longer displayed automatically at login.**

← - - - - Formatted: Bullets and Numbering

- a) With this change, the user has to select their name from the list in order for the password field/fingerprint dialog to appear.

- b) **NOTE:** In previous versions, if not using Must Enter Password, and if a user's key was the only one displayed, they could simply hit the <Enter> key on the keyboard to select their name. As a result of this change, the user must **always** select their name to logon.

- | **30) PIN synching is performed based on information received from the XSS (requires XSS 4.2.4 or greater)** ← --- Formatted: Bullets and Numbering
- a) In an XSS environment, PIN synching is performed for unique accounts when the 'Enable PINs for Unique Accounts' setting is disabled on the XSS (unique/kiosk determination is made by examining the XSS database of users).
 - b) In a non-XSS environment (or with XSS prior to 4.2.4), PIN synching is performed for all unique accounts (unique/kiosk determination is made by examining the local cache of users).
 - c) In either environment the PIN does not sync in the Kiosk Account.
- | **31) Client now uses information from the XSS to enable the PIN reset tool (requires XSS 4.2.4)** ← --- Formatted: Bullets and Numbering
- a) If the client detects it is communicating with XSS 424, it uses the information received from the XSS to determine if the PIN reset button is enabled.
 - b) If the client is communicating with a pre-XSS 424, then the client examines the local cache to determine if the PIN reset button should be enabled.
- | **32) Starting with v835 the client will communicate the version number to the XSS.** ← --- Formatted: Bullets and Numbering
- | **33) Added XyLoc version information to exception log on startup** ← --- Formatted: Bullets and Numbering
- | **34) XSS version number and XSS database type to the exception log on startup** ← --- Formatted: Bullets and Numbering
- | **35) Add functionality to support auto logon to the PC without user's action (bypass XyLoc login) during the logon.** ← --- Formatted: Bullets and Numbering
- a) To set up this, add a DWORD value "UseAutoLogon" in HKLM\Software\Microsoft\Windows NT\CurrentVersion\Winlogon and set it to 1.
 - b) This will also require that Microsoft AutoAdminLogon information to be set up in HKLM\Software\Microsoft\Windows NT\CurrentVersion\Winlogon as per Microsoft specifications.
 - c) The following registry values are needed for setup:
 - i) "AutoAdminLogon" String value set to 1
 - ii) "DefaultUserName" String value set to the login account name
 - iii) "DefaultPassword" String value set to the login account's password
 - iv) "DefaultDomainName" String value set to the login domain name
 - d) For more information on Auto Logon, please review the following Microsoft KB Article: <http://support.microsoft.com/kb/310584/en-us>
- | **36) Created option to enable/disable scripts to run while in Password Override Mode** ← --- Formatted: Bullets and Numbering
- a) Added the registry setting 'RunScriptsInPwdOverride' that controls whether or not scripts will run while in password override mode.
 - i) The default setting of 'RunScriptsInPwdOverride' is '1', indicating that AI scripts will run while in password override mode.
 - ii) To turn them off, change the setting to '0' and restart the PC.
 - b) **NOTE:** For security reasons, the logoff scripts always run regardless of the registry setting.
- | **37) Require a Save when enabling or disabling AI Scripts** ← --- Formatted: Bullets and Numbering
- a) The code has been changed to require a save when a script is checked/unchecked to enable/disable the script.

- b) **NOTE:** When the AI Toolkit is installed the AI Utility is overwritten. This will require AI Toolkit 2.0.4 or later to retain this new feature.

| **38) Added support for a DNS Hostname for XSS Address**

← --- Formatted: Bullets and Numbering

- a) The XSS server field will now accept the DNS/Computer name.
- b) When a DNS name is used, XyLoc will do a lookup on the IP address and use the IP address for XSS connection.

| **39) Added ability to customize Logo at Login or Unlock screen**

← --- Formatted: Bullets and Numbering

- a) The logo bitmap is in a separate resource (LogoRes.dll), so the logo is independent from the main code.
- b) This will allow Ensure to be able to create the custom resource dll with a customized logo bitmap for a customer.

| **40) Remove XyCrypt setup selection dialog from installation**

← --- Formatted: Bullets and Numbering

| **41) Remove the code to force the Ensure GINA on top**

← --- Formatted: Bullets and Numbering

- a) **NOTE:** There still may be situations where it would be better for XyLoc's GINA to be the topmost GINA. In these cases, XyLoc should be installed last, which will ensure that the XyLoc GINA will be on top.

| **42) Added registry setting to hide the XyLoc status popup.**

← --- Formatted: Bullets and Numbering

- a) A registry entry can be created to disable the XyLoc Status Popup on the screen:
 - i) The registry value is "HideXyLocStatus".
 - ii) Type: DWORD
 - iii) To **not** show the status, set this value to 1. If it is set to 0, the status will continue to display.
- b) **NOTE:** This registry entry is not created by default and will need to be created manually.

| **43) User Configurable display position for the XyLoc status and Lock button**

← --- Formatted: Bullets and Numbering

- a) The offset is relative to the lower right corner, so when a value of 100 is specified, it means 100 pixels from the lower right corner.
- b) For the XyLoc Status, modify the registry value "StatusOffset". The default is 0.
- c) For the Lock button, modify the registry value "LockButtonOffset". The default is 50.
- d) **NOTE:** These values are Decimal values (not Hexadecimal) in the registry.
- e) The changes will not take effect until the logoff and logon again.

| **44) Sync AD credential with AI credential (requires XSS-AD)**

← --- Formatted: Bullets and Numbering

- a) Allows using AD credential for the AI credential and automatically sync when the AD credentials changes.
- b) Must be using XSS-AD software and must be set to Must Enter Password.
- c) Please contact Technical Support for more details.
- d) Credential fields are automatically filled in with the variables "%USERNAME%" and "%PASSWORD%"
- e) There is a check box for "%ADUSERNAME%" and "%ADPASSWORD%" to have them synchronize.

← --- Formatted: Bullets and Numbering

Revision History:

Revision	Date	Description	Author
8.2.3	04-06-05	Created	RS
8.2.4	07-15-05	Added enhancements for XyLoc 8.2.4 and cleaned up grammar in previous notes	RS
8.2.8	10-27-05	Added enhancements for XyLoc 8.2.5 through 8.2.8.	RS
8.2.9	01-05-06	Added enhancements for XyLoc 8.2.9	RS
8.3.0	01-13-06	Added enhancements for XyLoc 8.3.0	RS
8.3.2	02-17-06	Added enhancements for XyLoc 8.3.1 and 8.3.2. Added note under Compatibility regarding changes in fingerprint support.	RS
8.3.4	03-07-06	Added enhancements for XyLoc 8.3.3 and 8.3.4 and changed the note regarding the new fingerprint changes.	RS
8.3.6	04-25-06	Added enhancements for XyLoc 8.3.5 and 8.3.6. Also added note regarding different language versions in Windows XPe	RS
8.3.7	05-01-06	Added enhancements for 8.3.7 including a "Compatibility Note" regarding new fingerprint feature in 8.3.7.	RS
8.3.9	05-26-06	Added enhancements for 8.3.9	RS
8.4.0	07-17-06	Added enhancements for 8.4.0	RS
8.4.2	08-23-06	Added enhancements for 8.4.1 and 8.4.2 and new compatibility notes	RS
8.4.3	09-20-06	Added enhancements for 8.4.3 and also added compatibility information for XSS-AD and latest client	RS
8.4.6	03-02-07	Added enhancements for 8.4.4 through 8.4.6.	RS
8.4.8	06-11-07	Added enhancements for 8.4.8. Consolidated enhancements from previous versions. Added additional compatibility notes and Signed Driver information.	RS
8.4.9	11-13-07	Added enhancements for 8.4.9. Added note about messaging priority in "Compatibility" section.	RS
8.5.0	02-13-08	Added enhancements for 8.5.0. Added note in "Compatibility" regarding new Fingerprint support	RS
8.5.0	02-26-08	Fixed some formatting issues in text	RS
8.5.1	07-01-08	Added enhancements for 8.5.1	RS