



VERSION COMPARISON CHART

Have you taken a good look at your Reflection lately?

Maybe it's time for an update. Find your Reflection product in the chart below to see what you might be missing. (AttachmateWRQ™ Maintenance customers receive free updates of each major release.)

FEATURES IN REFLECTION® FOR IBM®	14.X	13.X	12.X	11.X
Support for Microsoft® Windows® XP x64 Edition	✓			
IBM Express Logon Feature (ELF) support for single sign-on to mainframe applications	✓			
Automatic Kerberos sign-on for signing on to IBM iSeries hosts using Windows credentials	✓			
Reflection Certificate Manager	✓			
Option to show/hide operator information area (OIA)	✓			
Clickable URLs in host sessions	✓			
Smart card support through PKCS #11 interface	✓			
FTP client enhancements for configuring, deploying, and starting FTP sessions	✓	✓		
Session order feature (allows users to work in pre-selected sessions while other sessions are loading)	✓	✓		
SSL encryption for AS/400 LIPI file transfers	✓	✓		
Customizable screen sizes (to accommodate host apps with varying screen sizes; e.g., 60x132)	✓	✓		
Ability to browse TSO host file lists without sending Reflection script files to the host	✓	✓		
FIPS 140-2 validated cryptographic module	Pending	✓	✓	
One session file for settings and macros	✓	✓	✓	
Font-sizing option, 3270 word wrap, and FTP toolbar button	✓	✓	✓	
Metering capabilities for usage tracking	✓	✓	✓	
Simplified management of VBA macros created with Reflection	✓	✓	✓	
Increased security (SSL) for FTP client file transfers	✓	✓	✓	
Templates for duplicating competitive products' user interfaces	✓	✓	✓	✓
Management of web- and Windows-based sessions from a single console	✓	✓	✓	✓
Variety of group policies that support Microsoft Active Directory®	✓	✓	✓	✓
One easy shortcut for opening groups of preconfigured sessions	✓	✓	✓	✓
Ability to transfer preconfigured groups of files simultaneously	✓	✓	✓	✓
CUSTOMERS WITH PRE-11.X VERSIONS DO NOT HAVE:				
<ul style="list-style-type: none"> • Ability to update deployed settings files • Saving of settings in HTML or XML formats • Ability to run Reflection as an ActiveX control • Automatic display of the Euro character in IBM applications that support it • Migration of settings to and from Reflection for the Web • Windows XP theme manager • <i>Designed for Windows XP–Optimized</i> logo • Migration tools for moving from competitive products to Reflection • Templates for duplicating competitive products' user interfaces • Management of web- and Windows-based sessions from a single console • Variety of group policies that support Microsoft Active Directory 				

✓ Feature available in this version.

FEATURES IN REFLECTION FOR HP WITH NS/VT	14.X	13.X	12.X	11.X
Support for Microsoft Windows XP x64 Edition	✓			
Reflection Certificate Manager	✓			
Reflection Key Agent accepts certificates for single sign-on authentication	✓			
Secure Shell connection reuse	✓			
Integrated multi-hop SSH configuration support	✓			
Smart card support through PKCS #11 interface	✓			
FTP client enhancements for configuring, deploying, and starting FTP sessions	✓	✓		
Session order feature (allows users to work in pre-selected sessions while other sessions are loading)	✓	✓		
SSH key agent	✓	✓		
PKI support in the Reflection Secure Shell and SSL/TLS clients	✓	✓		
SSH command line utility for SSH tasks	✓	✓		
Enhanced support for Windows Terminal Server APIs	✓	✓		
Support for IPv6 networks and SOCKSv5	✓	✓		
FIPS 140-2 validated cryptographic module	Pending	✓	✓	
Enhanced support for Unicode-enabled hosts	✓	✓	✓	
Expanded connection options via TAPI 3.0	✓	✓	✓	
Metering capabilities for usage tracking	✓	✓	✓	
Enhanced macro recording options for .NET environments	✓	✓	✓	
Simplified management of VBA macros created with Reflection	✓	✓	✓	
Management of web- and Windows-based sessions from a single console	✓	✓	✓	✓
Variety of group policies that support Microsoft Active Directory	✓	✓	✓	✓
Secure access to HP e3000 applications using NS/VT and SSL/TLS	✓	✓	✓	✓
<p>CUSTOMERS WITH PRE-11.X VERSIONS DO NOT HAVE:</p> <ul style="list-style-type: none"> • Industry-standard scripting with VBA • Ability to save settings and record macros in XML • Data protection with: <ul style="list-style-type: none"> - Integrated Kerberos client - SSL/TLS Telnet encryption - Integrated SSH Client (works with Reflection FTP Client) • Authentication and encryption enhancements • Integrated Reflection security components • Ability to update deployed settings files • <i>Designed for Windows XP–Optimized</i> logo • Migration of settings to and from Reflection for the Web • Windows XP theme manager • One easy-to-access location for all management tools 				

FEATURES IN REFLECTION FOR UNIX AND OPENVMS	14.X	13.X	12.X	11.X
Support for Microsoft Windows XP x64 Edition	✓			
Reflection Certificate Manager	✓			
Reflection Key Agent accepts certificates for single sign-on authentication	✓			
Secure Shell connection reuse	✓			
Integrated multi-hop SSH configuration support	✓			
Smart card support through PKCS #11 interface	✓			
SSH key agent	✓	✓		
PKI support in the Reflection Secure Shell and SSL/TLS clients	✓	✓		
SSH command line utility for SSH tasks	✓	✓		
SSH configuration scheme support for configuring both clients and servers	✓	✓		
Easy uploading of users' public keys to an SSH server	✓	✓		
Support for IPv6 networks and SOCKSv5	✓	✓		
Ability to migrate from F-Secure SSH Windows Client to Reflection emulation products without losing configuration settings	✓	✓		
FTP client enhancements for configuring, deploying, and starting FTP sessions	✓	✓		
Session order feature (allows users to work in pre-selected sessions while other sessions are loading)	✓	✓		
New emulation options, including QNX4 and xterm	✓	✓		
X11 mouse style support	✓	✓		
Enhanced support for Windows Terminal Server APIs	✓	✓		
SFTP downloads resume if interrupted	✓	✓		
FIPS 140-2 validated cryptographic module	Pending	✓	✓	
Enhanced support for Unicode-enabled hosts	✓	✓	✓	
Drag-and-drop file transfers to the desktop	✓	✓	✓	
Metering capabilities for usage tracking	✓	✓	✓	
Enhanced macro-recording options for .NET environments	✓	✓	✓	
Simplified management of VBA macros created with Reflection	✓	✓	✓	
Management of web- and Windows-based sessions from a single console	✓	✓	✓	✓
Variety of group policies that support Microsoft Active Directory	✓	✓	✓	✓
Updated Reflection Profiler for improved administrative control	✓	✓	✓	✓
Ability to copy and paste Unicode to the Windows clipboard	✓	✓	✓	✓
Emulation of IBM 3151, 3153, 3101, and 3161 terminals	✓	✓	✓	✓
CUSTOMERS WITH PRE-11.X VERSIONS DO NOT HAVE:				
<ul style="list-style-type: none"> • Ability to save settings and record macros in XML • Migration of settings to and from Reflection for the Web • Data protection with: <ul style="list-style-type: none"> - Integrated Kerberos client - SSL/TLS Telnet encryption - Integrated SSH Client (works with Reflection FTP Client) • Ability to update deployed settings files • <i>Designed for Windows XP–Optimized</i> logo • Windows XP theme manager • One easy-to-access location for all management tools 				

FEATURES IN REFLECTION X	14.X	13.X	12.X	11.X
Native 64-bit support for Microsoft Windows XP x64 Edition	✓			
X11R6.9 compliance	✓			
Reflection Certificate Manager	✓			
Reflection Key Agent accepts certificates for single sign-on authentication	✓			
Secure Shell connection reuse	✓			
Integrated multi-hop SSH configuration support	✓			
Smart card support through PKCS #11 interface	✓			
Support for DOUBLE-BUFFER and XF86_Bigfont extensions	✓	✓		
Support for 3Dconnexion SpaceBall® 5000 and SpaceMouse® Plus	✓	✓		
Support for multiple X screens	✓	✓		
Downloadable server and connection templates	✓	✓		
Application-specific icons	✓	✓		
XKB extension support	✓	✓		
Support for any local window manager	✓	✓		
Secure remote troubleshooting capability	✓	✓		
Secure Shell enhancements, including a new SSH key agent	✓	✓		
Automatic image pasting to graphics editor	✓	✓		
Support for multiple XDMCP sessions	✓	✓		
Secure font retrieval function	✓	✓		
X Client Wizard enhancements	✓	✓		
FIPS 140-2 validated cryptographic module	Pending	✓	✓	
Support for all types of Windows fonts, including TrueType	✓	✓	✓	
Support for Multicast (IPv6)	✓	✓	✓	
Consolidated view of all configuration settings	✓	✓	✓	
Metering capabilities for usage tracking	✓	✓	✓	
Management of multiple X clients and servers in the same window	✓	✓	✓	✓
Customization of X client launching methods using the RunRX utility	✓	✓	✓	✓
Integrated secure FTP with site-to-site file transfer support	✓	✓	✓	✓
Scroll and mapping support for mouse-wheel users	✓	✓	✓	✓
Support for OpenGL 1.4 and GLX 1.3	✓	✓	✓	✓
CUSTOMERS WITH PRE-11.X VERSIONS DO NOT HAVE:				
<ul style="list-style-type: none"> • Deployment of Reflection X via Microsoft Active Directory • Integrated VPN functions (enable remote PC users to connect to X Window applications through NAT) • Integrated security, including Secure Shell and Kerberos clients • Improved graphics rendering • Running of multiple X desktops simultaneously (e.g., CDE, GNOME, and KDE) • Support for Microsoft Terminal Server and Citrix MetaFrame • <i>Designed for Windows XP–Optimized</i> logo • Running of X clients on 64-bit platforms 				

FEATURES IN REFLECTION NFS CLIENT	14.X	13.X	12.X	11.X
New LDAP search capabilities	✓			
Option to enable/disable NFS Client Print Provider	✓			
“Anonymous” logon option	✓			
LDAP support	✓	✓		
Host access control list	✓	✓		
Enhanced pcscript capabilities	✓	✓		
Support for the WNet API	✓	✓		
Improved support for multi-user password caching	✓	✓	✓	
Faster recovery from server failure using monitored locks	✓	✓	✓	
<i>Designed for Microsoft Windows XP–Optimized logo</i>	✓	✓	✓	
Support for Windows Terminal Server	✓	✓	✓	✓
Faster browsing for Automount users	✓	✓	✓	✓
Enhanced symbolic links for navigating file systems without knowing physical locations	✓	✓	✓	✓
Settings for password caching, logging, and quota checking	✓	✓	✓	✓
Enhanced encryption for saved NFS passwords	✓	✓	✓	✓
CUSTOMERS WITH PRE-11.X VERSIONS DO NOT HAVE:				
<ul style="list-style-type: none"> • Ability to provide subnet control over broadcast for NIS logon servers • Auto-detection of fastest-responding NFS server in replicated file systems • Viewing and editing of NFS Client properties from the NFS utility • Ability to import and export NFS settings via XML • Use of Windows Event Viewer for NFS logging • Easy restoration of default NFS settings to aid troubleshooting 				

FEATURES IN REFLECTION FOR THE WEB	9.X	8.X	7.X	6.X
Certificate revocation list (CRL) support	✓			
Certificate policy support	✓			
Automatic Kerberos sign-on for signing on to IBM iSeries hosts using Windows credentials	✓			
SSH SFTP (secure file transfer) support	✓			
Browse host files for IND\$FILE	✓			
Cursor ruler support	✓			
Mouse mapping	✓			
Dockable keyboard, button, and toolbar palettes	✓			
Option to view/hide OIA	✓			
End-to-end SSL/TLS encryption from the client, through the security proxy server, to the host	✓	✓		
Smart card support	✓	✓		
Single sign-on to IBM mainframes via Express Logon Feature	✓	✓		
Integration with IBM WebSphere Portals	✓	✓		
IBM WebSphere browse-away support	✓	✓		
Centrally managed FTP client for standalone use	✓	✓		
FTP command line interface for file transfers	✓	✓		
Macro enhancements for users and administrators	✓	✓		
FIPS 140-2 validated cryptographic module	Pending	✓	✓	
More secure FTP file transfers to and from any host or FTP server	✓	✓	✓	
Faster authentication for Microsoft Active Directory users starting web or Windows sessions	✓	✓	✓	
Improved metering for tracking usage levels	✓	✓	✓	
Enhanced printing capabilities, based on Java 2 support	✓	✓	✓	
Management of web- and Windows-based sessions from the same console	✓	✓	✓	✓
Integration with BEA and Plumtree portals	✓	✓	✓	✓
Web single sign-on using Netegrity SiteMinder	✓	✓	✓	✓
Secure token authorization	✓	✓	✓	✓
Secure Shell (SSH2) support	✓	✓	✓	✓
AES encryption	✓	✓	✓	✓

CUSTOMERS WITH PRE-6.X VERSIONS DO NOT HAVE:

- Triple-DES encryption
- SSL/TLS encryption for Telnet
- Centralized deployment, configuration, troubleshooting, and security
- Ability to print to HPT (Host Print Transform) or nonHPT printing devices using 3812 printer emulation
- Transfer of data to and from AS/400 hosts using SQL, an SQL wizard, or ASCII files
- Quick automation of tasks with our macro recorder—no programming required
- Use of FTP to transfer files between FTP servers and Reflection for the Web terminal sessions
- Printing from HP systems using local or host control; network, local, or print to disk; top, bottom, and record mode logging support; and line drawing characters
- Ability to print using TN3287 transport for 3270 printer sessions
- Ability to link a terminal session to a printer session using TN association
- Use of IBM 3270 features, such as cut to clipboard, word wrap, smart insert, and error reset
- Support for Microsoft Active Directory and LDAP Directory Services
- Protection of sensitive data with advanced encryption and authentication features, such as SSL client authentication, key lengths up to 2048, and support for SSL with RSA and DSS/Diffie-Hellman standards
- Customization of terminal sessions using Java and a new API, the Reflection Emulator Class Library (with HACL support)
- One-time installation of management tools, with switching to English, French, German, or Japanese at any time

FEATURES IN REFLECTION FOR SECURE IT, WINDOWS CLIENT	6.1	6.0	5.4
Reflection Certificate Manager	✓		
Reflection Key Agent accepts certificates for single sign-on authentication	✓		
New command line switches and scp options	✓		
FIPS 140-2 validated cryptographic module	Pending	✓	✓
Consolidated user key dialog for certificates and keys	✓	✓	
Automatic conversion of keys to correct format upon upload	✓	✓	
Deployment of SSH client using the Microsoft Installer	✓	✓	
Support for Windows Terminal Server and Citrix® MetaFrame™	✓	✓	
<i>Designed for Windows XP</i> logo	✓	✓	
Migration wizard for converting F-Secure profiles to Reflection settings	✓	✓	
Key codes removed	✓	✓	
Authentication agent (key agent) for safely storing private and public keys	✓	✓	✓
Ability to connect to several SSH servers without entering a passphrase	✓	✓	✓
SFTP downloads resume if interrupted	✓	✓	✓
Unattended scheduled file transfers	✓	✓	✓

FEATURES IN REFLECTION FOR SECURE IT, WINDOWS SERVER	6.1	6.0	5.3
Enhancements to domain name authentication	✓		
Windows Domain authentication	✓	✓	
Maximum password feature	✓	✓	
Key codes removed	✓	✓	
Time-limited evaluation extended from 30 to 60 days	✓	✓	
FIPS 140-2 Level 2 validated cryptographic module	✓	✓	✓
Support for Windows 2003 Server	✓	✓	✓
Server hostkey fingerprint dialog box to enable hostkey verification for first connection	✓	✓	✓
New ways to specify folders for file transfers: single root (=c:\sftp) and drive list (/=\$DRIVE)	✓	✓	✓
Password authentication with RADIUS servers	✓	✓	✓

FEATURES IN REFLECTION FOR SECURE IT, UNIX CLIENT	6.1	6.0	5.0
Support for Red Hat Enterprise Linux 4 for x86	✓		
Support for Red Hat Enterprise Linux 4 on zSeries	✓		
Support for SUSE Enterprise Server 9 on zSeries	✓		
DOD PKI certification	✓	✓	
Key codes removed	✓	✓	
60-day evaluation copy available	✓	✓	
SSH certtool utility for creating PKCS #10 certificate requests	✓	✓	
SSH certview displays more certificate extensions	✓	✓	
Platform support:			
- Red Hat Enterprise Linux 3 for x86-64	✓	✓	
- Sun Solaris 10 for x86-64	✓	✓	
- Sun Solaris 10 for x86	✓	✓	
- Sun Solaris 9 for x86	✓	✓	
- SUSE Linux Enterprise Server 9 for x86-64	✓	✓	
- SUSE Enterprise Linux 9 for Itanium	✓	✓	✓
- Sun Solaris 10 for SPARC	✓	✓	✓
- IBM AIX 5.3 for POWER	✓	✓	✓
- Red Hat Enterprise Linux 3.0 for Itanium	✓	✓	✓
Standard installation directories (all executables installed under /usr on all platforms)	✓	✓	✓
Compatibility enhancements for Connect: Enterprise SFTP servers	✓	✓	✓
Recording of failed login attempts in /var/adm/loginlog	✓	✓	✓
Logging of public key fingerprints and the subject name of certificates via the syslog facility	✓	✓	✓
SFTP client supports wildcard expansion in the sftp shell	✓	✓	✓
FIPS 140-2 validated cryptographic module	✓	✓	✓

FEATURES IN REFLECTION FOR SECURE IT, UNIX SERVER	6.1	6.0	5.0
Support for Red Hat Enterprise Linux 4 for x86	✓		
Support for Red Hat Enterprise Linux 4 on zSeries	✓		
Support for SUSE Enterprise Server 9 on zSeries	✓		
Maximum password feature	✓	✓	
DOD PKI certification	✓	✓	
Key codes removed	✓	✓	
60-day evaluation copy available	✓	✓	
SSH-certtool utility for creating PKCS #10 certificate requests	✓	✓	
SSH-certview displays more certificate extensions	✓	✓	
Platform support:			
- Red Hat Enterprise Linux 3 for x86-64	✓	✓	
- Sun Solaris 10 for x86-64	✓	✓	
- Sun Solaris 10 for x86	✓	✓	
- Sun Solaris 9 for x86	✓	✓	
- SUSE Linux Enterprise Server 9 for x86-64	✓	✓	
- SUSE Enterprise Linux 9 for Itanium	✓	✓	✓
- Sun Solaris 10 for SPARC	✓	✓	✓
- IBM AIX 5.3 for POWER	✓	✓	✓
Server-side plug-ins for RSA SecurID authentications	✓	✓	✓
Standard installation directories (all executables installed under /usr on all platforms)	✓	✓	✓
Compatibility enhancements for Connect: Enterprise SFTP servers	✓	✓	✓
Recording of failed login attempts in /var/adm/loginlog	✓	✓	✓
Logging of public key fingerprints and the subject name of certificates via the syslog facility	✓	✓	✓
FIPS 140-2 Level 2 validated cryptographic module	✓	✓	✓

FEATURES IN REFLECTION FOR SECURE IT, Z/OS CLIENT AND SERVER *	6.1
scp file transfer	✓
sftp file transfer	✓
Ability to route traditional FTP file transfers through an SSH tunnel	✓
Full ASCII-EBCDIC translation for all types of file transfers	✓
Secure transfers for BSAM/QSAM data sets, PDS and PDS-E members, and HFS files	✓

* Version 6.1 introduces Reflection for Secure IT running on IBM z/OS with the HFS or zFS file system.



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