



PatchLink
3370 N. Hayden Road #123 - 175
Scottsdale, AZ 85251
T: 480.970.1025
F: 480.970.6323

PatchLink Update Server v5.0

User's Manual



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PatchLink Update Server

1. PatchLink Update Overview

The PatchLink Update Server (PLUS) provides a complete solution for proactive reporting, patching and updating of your network. The product includes:

- ? A subscription service that keeps your PLUS up to date with the latest available vulnerability reports (fingerprints and signatures) and their corresponding patch files (bundled into packages).
- ? Using the Detection Agents throughout your network, PLUS will quickly give you a detailed analysis of these fingerprints and signatures. You will quickly be able to determine the patch status of your computers.
- ? Based on the results of the analysis, you can easily create deployments of the report's Packages to the computers that need them. Deployments are carried out by the Deployment Agents.
- ? With this extensive detection mechanism, a comprehensive Inventory system is also available. You will be able to detect what operating systems, software, hardware, device drivers and services are installed on your computers.
- ? PLUS features an enterprise-wide distribution mechanism. Through the use of Deployment (Client) Agents, Package Editor, and Deployment Wizard, you can securely send software, documentation, scripts (SW, HW and Services) or any other content across your network; from small Intranets to huge Extranets, or even the Internet itself.
- ? The grouping feature allows you to group computers together so that they function as one entity. With this feature, you may:
 - ✍ View the analysis of the vulnerability reports (fingerprints and signatures) based solely on the group membership.
View the **Inventory** based on the group membership.
 - ✍ **Deploy** patch files (or any other packages) to the entire group. The group's membership can continually change up until the start of the deployment. At that point in time, as the members of the group connect to the system, they are given the deployment.
 - ✍ **Lock** a group for a set of vulnerability reports, software inventory, hardware inventory, or service inventory.
 - ✍ Set a **Mandatory Baseline** for a group, so that if the compliancy analysis of vulnerability reports for a group member results in not being patched, the computer will automatically have the vulnerability's patch file deployed to it.
 - ✍ Customize the group's computer member's behavior based on the group's **Agent Policy Set** (Agent Polling Interval and Hours of Operation). An easy mechanism to allow a group's computer members to act in a specific way while not affecting the other computers registered to the system.
- ? **System Groups** (groups based on an operating system's abbreviated name) will automatically be populated with the computers whose operating system matches the system groups' name. Groups defined by the User can be based upon any category, including operating system, geographic location, platform, application, etc.

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- ? PLUS contains a complete role-based security layer. A role determines what rights a user has to perform PLUS functionality to the computers and groups of computers the role is assigned to. PLUS contains 4 role templates to assist PLUS Administrators in designing security for the many users your PLUS System.
- ? There are many different Agent Installers available to assist in administrators in installing the agent on to your network computers. There are 3 types of Agent Installers:
 - ✍ Single machine install via the User Interface
 - ✍ Domain-wide or Enterprise-wide install via the User Interface
 - ✍ Via the Client Login Script
- ? PLUS is a multi-platform, with support for:

Vendor	Operating System Platform	Deployment Agent	Detection Agent
Microsoft	Windows Server 2003, Web Edition	X	X
Microsoft	Windows Server 2003, Standard Edition	X	X
Microsoft	Windows Server 2003, Enterprise Edition	X	X
Microsoft	Windows Server 2003, Datacenter Edition	X	X
Microsoft	Windows XP Professional	X	X
Microsoft	Windows XP Home (Personal)	X	X
Microsoft	Windows 2000 Datacenter Server	X	X
Microsoft	Windows 2000 Advanced Server	X	X
Microsoft	Windows 2000 Server	X	X
Microsoft	Windows 2000 Professional	X	X
Microsoft	Windows NT Server 4.0, Datacenter Edition	X	X
Microsoft	Windows NT Server 4.0, Terminal Server Edition	X	X
Microsoft	Windows NT Server 4.0, Enterprise Edition	X	X
Microsoft	Windows NT Server 4.0	X	X
Microsoft	Windows NT Workstation 4.0	X	X
Microsoft	Windows ME	X	X
Microsoft	Windows 98 SE	X	X
Microsoft	Windows 98	X	X
Microsoft	Windows 95 OSR2.5	X	X
Microsoft	Windows 95 OSR2	X	X
Microsoft	Windows 95	X	X
Novell	NetWare 4.11	X	X
Novell	NetWare 4.2	X	X
Novell	Netware 5.0	X	X
Novell	NetWare 5.1	X	X
Novell	NetWare 6.0	X	X
Red Hat	Red Hat Linux 6.2	X	X
Red Hat	Red Hat Linux 7.0	X	X
Red Hat	Red Hat Linux 7.1	X	X
Red Hat	Red Hat Linux 7.2	X	X
Red Hat	Red Hat Linux 7.3	X	X
Red Hat	Red Hat Linux 8.0	X	X
Red Hat	Red Hat Linux 9.0	X	X
Sun	Solaris 2.6	X	X
Sun	Solaris 7	X	X
Sun	Solaris 8	X	X
Sun	Solaris 9	X	X

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2. What's new with PatchLink Update version 5.0?

PatchLink Update 5.0 incorporates many new features ranging from the very subtle to the very obvious. They fall in to two separate categories: Display and Performance.

2.1 Display Changes:

2.1.1 PatchLink User-based Security

A new security layer has been introduced into PLUS. This allows individual PatchLink Users to have completely "tailorable" accounts with specified roles and rights. In order to accommodate this, User Roles and Security Access Rights are introduced.

A **Security Access Right** allows the user the ability to view a page or perform an action.

A **User Role** is a grouping of Security Access Rights and a list of Groups of Computers and/or Individual Computers on which those rights are available to (Computers are ones which exist outside the computer members of the assigned groups).

Each user may be given a User Role. Without a User Role, a user has no access to view any pages, perform any actions, or act upon any computers and/or groups.

2.1.2 Assessment Graphs

Assessment Graphs allows the user to create a visual graphical analysis of the underlying data inside of PLUS. There are four different graphs located on the PLUS Home Page, with three of the four also found on the Group Information and Properties page (of a group). The graphs are:

2.1.3 Comprehensive PLUS Graphs:

Patch Status for all Computers:

- ? The total numbers of computers in each patch state for all of their applicable vulnerability reports:

- o **Completely Patched**
- o **Partially Patched**
- o **Completely Not Patched**
- o **Detecting** or those which are in the process of determining their patch status
- o Computers which are **pending** their **Initial Detection** to start.

This report can also be created on the Group Information page for results based on the results of the group's computer membership.

- ? Patch Status for all Vulnerability Reports

The total numbers of vulnerability reports which have their assigned computers in each patch states:

- o **Completely Patched** for all assigned computers
- o **Partially Patched** for all assigned computers
- o **Completely Not Patched** for all assigned computers

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- **Detecting** (the applicable computers are in the process of determining their status)
- Patches which have **No Computers** applicable to them

This report is also duplicated on the Group Information page for results based on the group's computer membership.

? Status for all Computers

The total number of computers which are in each state:

- **Sleeping** or outside their assigned hours of operation
- **Offline** or computers which have not communicated with PatchLink Update in over 2 of their intervals (intervals smaller than 10 minutes are defaulted to 15 minutes)
- **Running** or computers which are running the Detection Agent without having a registered Deployment Agent.
- **Idle** or computers which are working properly without any tasks current to do.
- **Working** or computers which are working on a task
- **Disabled** or computers which are not able to be given tasks.

This report can also be created on the Group Information page for results based on the group's computer membership.

? Baseline Status for all Groups

This displays the Compliancy Status for all Groups.

- **Compliant**
- **Non-Compliant**
- **Detecting** (at least one of the group's members are in process of determining their status)
- **No Baseline** (groups which have no Mandatory Baseline)

2.1.4 Pagination

Allows the PatchLink Administrator to populate user interface with a specified list of Computers by Name – such 1 – 100 of the 1,500 computers. This optimizes the display capabilities of the user interface.

2.2 Performance Changes:

2.2.1 Global Deployment Limit

Deployment Throttling to limit the maximum number of active deployments a PatchLink Update Server can serve at any time. This is accomplished on the PLUS Defaults Tab of the Advanced Options Page. The Concurrent Deployment Limit parameters can be configured there.

2.2.2 Agent Policies

Agent Policy creation and validation enhanced to increase the efficiency of agent communication with PLUS.

2.2.3 .NET Integration



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Integrated into the .NET Development Environment

2.2.4 Windows

Update Server support along with client agent and patch support for the Windows 2003 Server platform.

2.2.5 Computer Grouping

Computer Group creation and population based upon manually entered data.

2.3 Major Displays of PatchLink Update Server

2.3.1 PLUS Home

- ? Links to various articles and documentation to assist you in making the most out of your PatchLink Update Server.
- ? PatchLink News gives some basic security and patch related news direct to your PLUS.
- ? Comprehensive Graphical Assessments displaying graphs depicting various the statuses of your PLUS system.
- ? Current Status displays the overall status of your PLUS.

2.3.2 Vulnerability Reporting (for all registered computers)

- ? A patch consists of a fix for a known vulnerability (software, operating system, hardware, etc.). Each vulnerability has a series of vulnerability reports and from this display you can view the analysis results for these reports.
- ? View the specific computer results of the analysis for a vulnerability report.
- ? Create a deployment based on the results of the vulnerability report analysis.
- ? View the distribution packages for the vulnerability.

2.3.3 Inventory (for all registered computers)

- ? View the list of detected operating system platforms.
- ? View the list of detected software.
- ? View the list of detected hardware.
- ? View the list of detected services.

2.3.4 Packages & Deployments

- ? View the entire list of available distribution packages.
- ? View the deployments for a distribution package.
- ? View the specific computer and group statuses for a deployment.
- ? Create a new distribution package.
- ? Create a deployment for a distribution package.

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2.3.5 Computers

- ? View the list of all registered computers.
- ? View a computer's detailed information.
- ? View the computer's vulnerability report analysis.
- ? View a computer's inventory (operating system, software, hardware and services).
- ? View the deployments that have been created for the computer.
- ? View the various agent installers that PLUS has available.

2.3.6 Computer Groups

- ? View the list of computer groups.
- ? View a group's detailed information including assessment graphs for the various statuses concerning the membership of a group.
- ? View a group's vulnerability report analysis.
- ? View a group's inventory (operating system, software, hardware and services).
- ? View a group's computer membership.
- ? View a group's mandatory baseline and the status of each item in the baseline.
- ? View the deployments that have been created for the group.

2.3.7 Users

- ? View the list of users whom have access to PLUS and the user roles applicable to that user.
- ? View the list of user roles that are available for account definition.

2.3.8 Advanced Configuration Options

- ? View the subscription service information and its history relating to the synchronization of PLUS with PatchLink Update Host Server (PLHOST).
- ? View the licenses that have been assigned to your PLUS serial number and the expiration date.
- ? View the default agent configuration values.
- ? View the various agent policy sets which can be assigned to a group.
- ? View the list of e-mail addresses and their assigned notifications.
- ? View additional PLUS related data that may be asked for when talking with PatchLink's Technical Support department.

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3. Getting Started

3.1 Using This Guide


Use this guide as a reference to describe PLUS as in what it is, what it does, and how to do it. It is best to follow this guide sequentially as you begin using PLUS, as certain sections pertain to and reference others that are documented later in the manual.

The screenshots in this guide were taken using Windows XP as an operating system set with the default color scheme. The color schemes, buttons, and other items may vary slightly on your operating environment depending on what operating system you are running and your selected theme.

3.2 Understanding the Interface

Contained in each section of PLUS, as illustrated by this document, are certain page functions and features designed either to aid the user's tasks, or to simply enhance other functions. Certain pages contain specific functions and features and these various functions and features may or may not be present depending on what page you are on. Note the **Page Functions** heading in each section to view which features are present. The standard page functions and features are broken down as follows:

3.2.1 Help

The PatchLink Update Server (PLUS) is a very comprehensive, web-based interface, designed to provide PatchLink Users the information for what they need in a timely manner to properly patch and manage your network. It assists new users in learning the product, yet keeping all of the core functionality available for advanced users. Throughout PLUS, context sensitive help is provided by clicking on the **Help** located in the top menu or the  icon found on the top of every wizard and property page. Many of the user interfaces have fields that contain additional information that is displayed when your mouse moves over one of those fields.

3.2.2 Navigation Menu



The user interface provides a consistent and easy to use navigation menu, which is always present across the top portion of the screen. This navigation menu quickly takes you to the various major sections of PLUS, as well as providing secondary notification of what section you are currently in. This navigation menu will behave differently based on your defined access rights associated with your user role. A section's name will not highlight or take you to the section if you do not have access to that section.

3.2.3 Action Menu



A variety of context sensitive actions are always located along the bottom of the page. These buttons provide quick access to all the common actions available for each page. Like the navigation menu, the action menu functionality also depends on your user role (and its defined access rights) and the view you are working in (if a filter

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dropdown selection is applicable). If you do not have access to a button, the button will be grayed out and non-functional. Note the **Action Menu** heading in each section to view which actions are present.

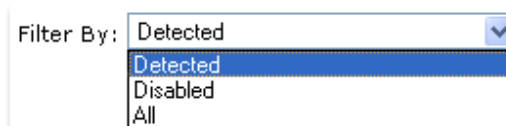
3.2.4 Display and Hide

The display more information (+) and hide (-) information functions appear regularly throughout PLUS. If the display and hide function is present on a certain page, it will be identified each section's **Page Functions**. Click on the + to display additional information and statistics about the represented item. Click the - to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (-, +) is only available for Microsoft Internet Explorer at this time.

3.2.5 Filter

The filter dropdown menu function appears in various PLUS pages.

Depending on what page you are viewing determines your ability to filter your viewable results. For instance, the Reports results may be filtered by All, Detected, and Disabled, where the Computers screen results may be filtered by Enabled, Disabled, and All. Select the desired **Filter by** drop down menu function where applicable to view the desired results.



3.2.6 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

3.2.7 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

3.2.8 Display (Pagination)

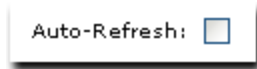
Depending on the amount of items available for display and what page you are viewing, determines the display function. The Display function, if enabled, is located at the bottom above the Action Menu.



- ? Next: To display the next page of computers, click on the next button. If the last computer is displayed, the next button is disabled.
- ? Previous: To display the previous page of computers, click on the previous button. If the first computer is being displayed, the previous button is disabled.
- ? Computers per Page: The computer list initially displays up to 100 computers per page. To change the number of computers to display per page, enter a new number in to the Computers per Page input field. To display all computers enter a zero in the input field.

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3.2.9 Auto Refresh



Where present and when selected, the Auto Refresh function automatically refreshes the page every 15 seconds.

3.2.10 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

3.3 Defining Access

Determining who gets access to PLUS, what they can see, and what they can do is completely user-configurable. The goal of PLUS Security is not to mandate how you define your security policies, but only to allow you the ability to institute your security policies effectively for PLUS. Security access is determined by two mechanisms: Windows-based authentication and PLUS access rights.

3.3.1 Windows-based Authentication

Authenticating to PLUS is handled by the Windows operating system. Any user(s) who are members of a local Windows group, PLUS Administrators, will gain all the necessary rights and abilities to log on to the web site. Authorization of what users can and can not do is handled by Access Rights (see below). Upon installation, the PatchLink user (who is created during the installation) is given the Administrator user role, but you may remove this at any time, as long as there exists at least one user who belongs to the Administrator user role.

3.3.2 PLUS Access Rights

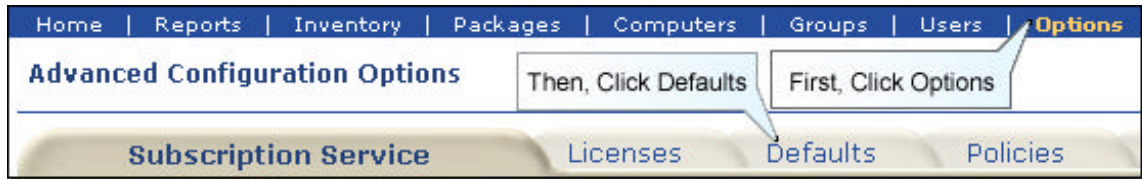
Once a user has authenticated into PLUS, their assigned user role is checked to see what features (sections of PLUS) and functionality (actions they can perform in those sections) they have. Each user role is assigned its own set of groups and computers (computers outside of the membership of the assigned groups) on which their access right-based functionality can perform actions on. If a user manages to get past the Windows security (Domain User who is not a member of the local PLUS Administrators group for example), they will be unable to view any sections of PLUS, see any groups or computers or perform any actions on them. If a user does not have access to a given section, they will be given an access denied error message.

In the Users Section, the Roles tab is where these roles are defined, while the Users tab is where you can add or remove users to PLUS and assign them a user role.

3.4 Agent Behavior – Defining Your Policies

Before getting into the installation of agents on to the client computers of your network, the behavior of how those agents will act needs to be defined. At installation, the only single mechanism that defines this is found in the **Options** section, under the **Defaults** page. Since all of the groups are installed using the **Empty Agent Policy Set**, this is the single place that will affect your agent's behavior.

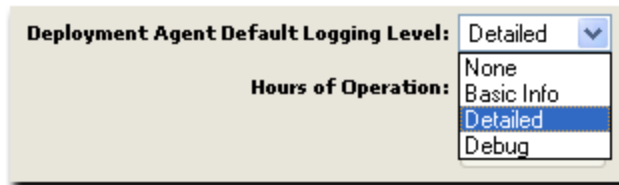
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There are only four individual items that make up an agent's behavior and they are all easily configurable from this page. Of the four items, three can be overridden by a group's **Agent Policy Set**.

3.4.1 Logging Level

Determines how much data you want your agents to save to their log files. The four options are:



- ? None: only errors are logged.
- ? Basic Info: errors and the very basic information is saved. Example: when it is performing a deployment it will indicate that it had a deployment to do.
- ? Detailed: errors and more explanation of what the agent is doing is saved. Example: deployments, including what they deployments are, and when agent policies are changed, including what they are, are logged.
- ? Debug: log everything and every step the agent does. This should only be used when you are validating the agent's behavior or its actions. This mode will generate megabytes worth of data on a busy system.

Note: The agent log files are deleted every time the Refresh Inventory Data System Task is deployed to an agent.

3.4.2 Communication Interval

Determines how much time the agent will sleep between communication with PLUS. When it communicates with PLUS it is checking to see if it has any policy updates or if it has any deployments to do. This interval is critical to PLUS; if the interval is too high, the agents will not get their tasks in a reasonable amount of time. If the interval is too low, PLUS (and your network traffic) will constantly be busy and other agents will not be able to get their tasks. Interval rates typically vary between 15 and 60 minutes depending upon number of nodes, network architecture and bandwidth.

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3.4.3 Hours of Operation

When enabled, this value determines when the agents shall start and stop communicating with PLUS. If the agent is in the middle of a deployment and the agent's hours of operation expire (exceeds the designated stop time) it will finish what it is currently working on and continue the rest of the deployment at the next Hours of Operation interval.

3.4.4 Concurrent Deployment Limit

This value determines how many deployments can be given to the agents at any given time (if a deployment is scheduled for more than an hour for a particular agent, that deployment is no longer counted). This is a safeguard that will reduce the chance of any of your PLUS' systems from being overloaded. This is the only value that cannot be overridden by a group's **Agent Policy Set** as it limits deployments for all agents.

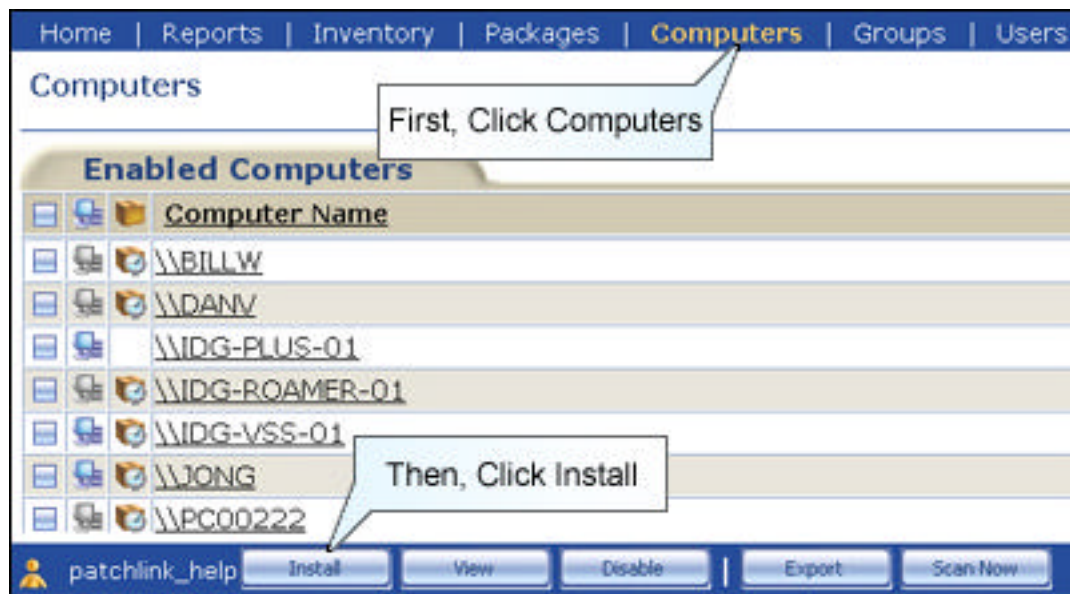
3.5 Agents and Installing Them

Both the deployment (also known as **Deployment Agent**) and **Detection Agent** are bundled together and installed at the same time. The deployment agent is a service that is constantly running to ensure that when deployments are ready to start, policy changes, etc., the agent will act on them in a timely manner. The behavior of this agent is entirely defined by the agent's policies, whether the agent is using the default agent policies for PLUS or the superset of the group's agent policy sets the agent is a member of. The detection agent will run only when the user on the individual computer initiates it, or the deployment agent deploys the **Discover Applicable Updates System Task**.

Installing agents is a simple function and there are various installers available to install agents on to your computers. They can be found by clicking on the **Add** button in the **Computers** section. This will initialize a screen showing the available PatchLink Update Agent Installers.

Note: If you cannot access the Computers section or do not have access for the Install button speak with your PLUS Administrator on obtaining access to those sections of the product.

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The **Agent Installers** page displays the various installers you can use to register computers to PLUS. For each agent installer, there is useful information you should read first to determine which one to use for which computers. Each agent installer is different from the operating systems it works under in pertinence to its requirements or behavior. Read each section carefully to determine the best options for your needs. If one does not work for a particular computer, check the others or access the PLUS Forums to see if there is a better option available for you. Without the agents installed on your computers, you will not be able to determine what is patched and what is not patched, nor will you be able to deploy any patches.

The various agent installers are::

- ? Single Agent Installer for Windows (Win95 to Win2k3)
- ? Silent Agent Installer for Windows (Win95 to Win2k3)
- ? Domain-wide Agent Deployment Wizard for Windows (Win2k to Win2k3). Available computers are captured from the Primary Domain Controller.
- ? MSI Agent Installer for Windows (Win95 to Win2k3)
- ? Single Agent Installer for UNIX (Solaris, Red Hat Linux)
- ? Single Agent Installer for NetWare (4.11 to 6)

Once a computer has registered its agent against PLUS, the PLUS Administrator can assign it to various user roles so others can access or view it.

4. Known Issues & Resolutions

The homepage of PLUS has a section that relates the latest changes from the last major release of the product, any outstanding issues the product is still experiencing, and other useful links to assist you in the use of the PatchLink Update Server. Additionally, the PatchLink Update Forums (<http://www.patchlink.com/forums/>) contains the latest information on any of these items.

5. PatchLink Update Home Page

PatchLink Update gives you the ability to detect and patch your workstation and servers across your entire network. The **Home Page** gives you latest information and status about your PatchLink Update Server (PLUS). If PLUS licenses have expired, the License Expiration page will be displayed instead.

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Home | Reports | Inventory | Packages | Computers | Groups | Users | Options | Help | Server Time: 7/16/2003 10:42:36 AM (GMT-07:00)

PatchLink Support Forum
Get support and the latest information about patches....

What is PatchLink Update
Select this link to see an overview of PatchLink Update including its features and benefits...

New Users Start Here
If you are new to PatchLink Update, select this link to see how to get up and running fast...

Help Info
Select this link for full comprehensive help documentation about PatchLink Update...

Known Issues & Resolutions
Select this link to see a list of known issues and release notes about this version of the PatchLink Update Server.

Latest News:

July 3, 2003
Patches Not Downloading?

There may be a communication problem between your PatchLink Update Server (PLUS) and the Repository Data Center for Updates and Patches (RDCUP). As the result, you may not be receiving some or all critical patches necessary for the security of your network.

This issue may also show itself as not being able

Comprehensive Graphical Assessments:

Patch Status for all Computers

91.7% 8.3%

Select to Change Graph:
Patch Status for all Computers
Patch Status for all Reports
Status for all Computers
Baseline Status for all Groups

Patched: 0
 Partial: 11
 Not Patched: 0
 Detecting: 1

Pending Initial Detection: 0
Total Computers: 12

Current Status

Company: SUPPORT-W2K2
 Serial Number: 9942DA24-90122B71
 Non-Expired Licenses: 25
 Licenses In Use: 12
Licenses Available: 13
 Last Update: 7/16/2003 9:04:45 AM

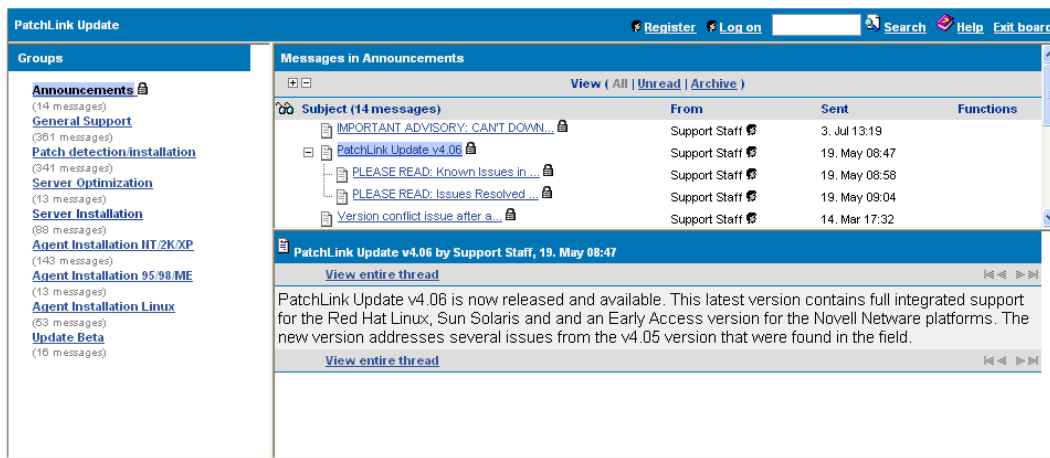
patchlink

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5.1 PatchLink Support Forum



The PatchLink Support Forum provides a location where the latest information and technical support about PLUS, its processes, functions and features are displayed. You can search through other customer questions and answers to see if their answers can assist you. Additionally you can post your own questions and PatchLink Customer Service will assist you in a timely manner. Registered users can select to receive notifications when any of the different forum topics receives new activity. Select the **Patchlink Support Forum** link to open the Support Forum.



5.1.1 Register

Select the Register link on the Support Forum Homepage Toolbar.



You will be prompted to enter a username, a valid email address, and a password. (Remember your password; you will be prompted for it upon login) Select the password authentication options at your discretion. If you forget your password, you can have it emailed to you.

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Register

Name

Email (used for logging on)

Note: passwords are case sensitive

Password

Password again

Remember my name and email

Autologon (remembers password)

If you have registered already you can [log on](#)

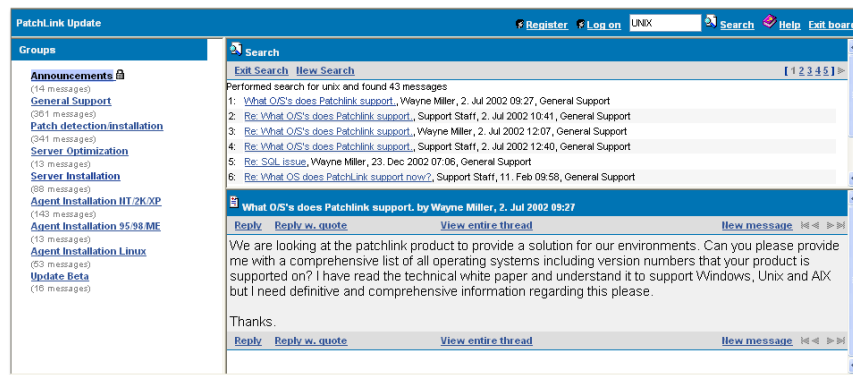
If you have lost your password you can [have it send to your email.](#)

5.1.2 Search

Enter in a keyword in the upper right hand corner text field and click on the icon to propagate the search results. For example, enter in the keyword, "UNIX" (search is NOT case sensitive.) and click on the icon.



All instances containing the word "UNIX" in its title or text appear in the results window.



Select the Search **Link** on the Support Forum Homepage Toolbar for a more detailed search.

Input a keyword, select the attributes for which to search, and select the button to initialize a more detailed search capability.


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For the string


Search in Search messages Search the group(s)

<input checked="" type="checkbox"/> Subjects	<input checked="" type="checkbox"/> Active	<input type="radio"/> Search All groups
<input checked="" type="checkbox"/> Author names	<input type="checkbox"/> Archived	<input checked="" type="radio"/> Search only these groups
<input checked="" type="checkbox"/> Message bodies		<input type="checkbox"/> Announcements
		<input type="checkbox"/> General Support
		<input type="checkbox"/> Patch detection/installation
		<input type="checkbox"/> Server Optimization
		<input type="checkbox"/> Server Installation
		<input checked="" type="checkbox"/> Agent Installation NT/2K/XP
		<input type="checkbox"/> Agent Installation 95/98/ME
		<input type="checkbox"/> Agent Installation Linux
		<input type="checkbox"/> Update Beta

All instances containing the selected keyword in its string appear in the results window.


Clicking on the  icon will launch a help window for the discussion forum with specific instructions on how to navigate and participate in the discussion forums.

5.2 What is PatchLink Update?

 **What is PatchLink Update**
Select this link to see an overview of PatchLink Update including its features and benefits...


What is PatchLink Update provides a detailed overview of the **PLUS** system.

5.3 New Users Start Here

 **New Users Start Here**
If you are new to PatchLink Update, select this link to see how to get up and running fast...

New User's Start Here displays a quick start user's guide to understanding the interface, defining access, agent behavior and their installation.

5.4 Help Info

 **Help Info**
Select this link for full comprehensive help documentation about PatchLink Update...

Help Info provides comprehensive documentation on PLUS.

PatchLink Update Server

5.5 Known Issues & Resolutions

Known Issues & Resolutions
 Select this link to see a list of known issues and release notes about this version of the PatchLink Update Server.

Known Issues displays a list of Known Issues, Release Notes, and Important Links about PLUS.

5.6 Latest News

This window displays the latest news, articles, announcements, and press releases direct from PatchLink.

Latest News:

Known Issues:

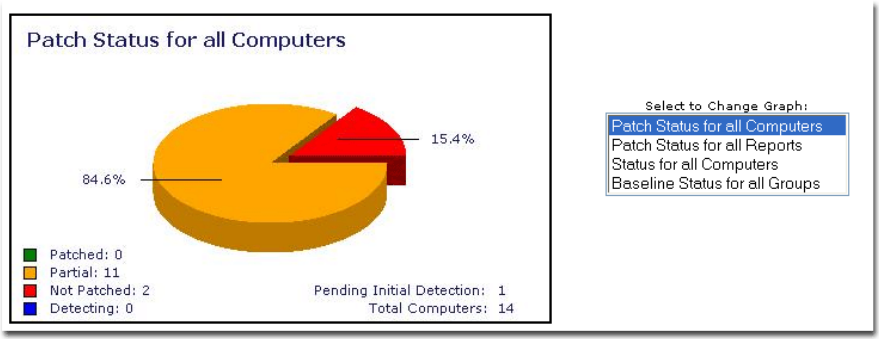
4.06: UK ENGLISH AUTO-UPGRADE
 UK users will not be able to use the upgrade popup to upgrade the server to 4.06. Please deploy the PatchLink Update Server 4.06 -- MUST INSTALL- package from Reports like any other update or patch.

4.06: INVENTORY EXPORT TIMEOUT
 If you are only retrieving partial results when clicking the "EXPORT" button, please modify your script timeout on the PLUS website from

5.7 Comprehensive Graphical Assessments

A pie chart graphical display illustrates various statuses of certain patch elements of PLUS. There are four different display views with different colors and percentages representing these various statuses. The displays are:

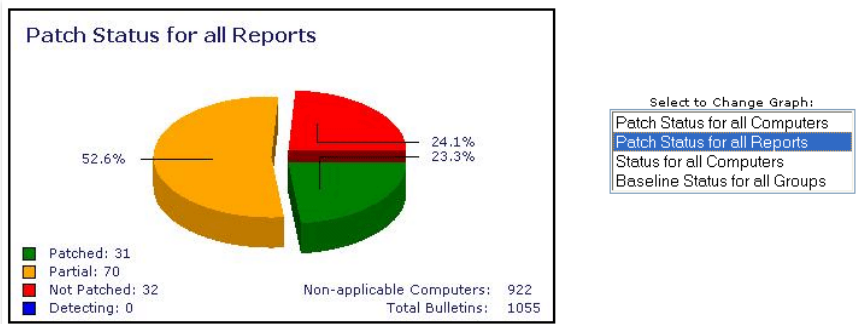
1. Patch Status for all Computers – displaying the status for all computers which are:



- ? Completely Patched
- ? Partially Patched
- ? Not Patched
- ? Performing the analysis detection
- ? Pending the initial analysis detection

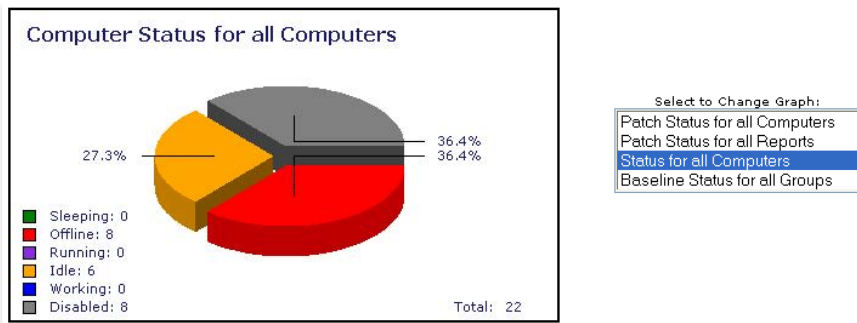
PatchLink Update Server

2. Patch Status for all Reports – displaying the status for all vulnerability patch reports:



- ? Completely Patched
- ? Partially Patched
- ? Not Patched
- ? Detecting
- ? Reports which have no applicable computers assigned to

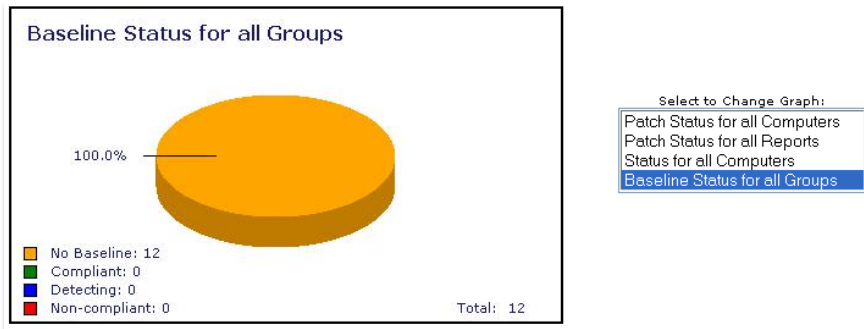
3. Status for all computers:



- ? Sleeping (outside their hours of operation)
- ? Detect offline or have not communicated with PLUS in over two intervals (15 minutes minimum).
- ? Running: currently performing the analysis detection outside the normal means (rarely occurring when the detection process happens outside of the deployment mechanism).
- ? Idle: Agent is communicating fine and currently not performing any tasks.
- ? Working: the Agent is currently working on a task.
- ? Disabled and unable to perform any tasks.

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4. Compliancy Status for the Mandatory Patch Baseline Status for all Groups:



- ? Groups whose members are fully compliant with their baseline.
- ? Groups whose members are not compliant with their baseline.
- ? Groups whose members are in the detection and analysis process.
- ? Groups which have no baseline.

5.8 Current Status Information

This provides you with an overall relative condition, position or state of your PLUS system.

Current Status	
Company:	SUPPORT-W2K2
Serial Number:	9942DA24-90122B71
Non-Expired Licenses:	25
Licenses In Use:	14
Licenses Available:	11
Last Update:	7/11/2003 10:07:38 AM

- ? Company: This is the name of the company that was entered at the time of installation.
- ? Serial Number: This is Your PLUS Serial Number.
- ? Non-Expired Licenses: This is the total number of active licenses. Each registered computer requires one license.
- ? Licenses in Use: This is the number of active licenses being used by registered computers.
- ? Licenses Available: This is the number of active and available licenses that can be used to register computers to PLUS.
- ? Last Update: This is the Date and Time that PLUS last updated itself from the PatchLink Host Server (PLHOST).

PatchLink Update Server

5.9 License Expiration

When PLUS no longer has any licenses available, the agents will no longer be able to perform any of their tasks and the home page display is replaced with this license page. Clicking the "Update License Data" button will initiate the license verification process that connects up to the PatchLink Update Host Server (PLHOST) and retrieves your updated licenses. This page will automatically refresh to the home page, once your updated licenses have been saved (this usually takes 1 minute). If you need to renew your licenses or add new licenses, please contact PatchLink Sales at 480-970-1025 Option #2.

PatchLink Update 5.0 Server Time: 6/4/2003 10:15:45 AM (GMT-07:00)

Product Expired for Serial Number: XXXXXXXX-XXXXXXX

Expired Product Information

This PatchLink Server is no longer available due to license expiration. All agents have been disabled as a result.

License Information

Licenses In Use: 27 Total Non-Expired Licenses: 0
 Licenses Available: -27

Purchase Date	Vendor	Effective Date	Expiration	Purchased
9/26/2001 5:00:00 PM	PatchLink Corporation	9/26/2001 5:00:00 PM	9/25/2002 5:00:00 PM	200
8/28/2002 5:00:00 PM	PatchLink Corporation	8/28/2002 5:00:00 PM	8/28/2002 5:00:00 PM	2500
2/17/2003 5:00:00 PM	PatchLink Corporation	2/18/2003 5:00:00 PM	3/18/2002 5:00:00 PM	2500

Please contact PatchLink Corporation's Sales Department at (480) 970-1025 - Option 1 to extend or purchase additional licenses. After PatchLink notifies you that your license expiration has been resolved, you can click the button below to begin License replication immediately.

patchlink_help

5.10 Home Page Security

The Home Page section of PLUS requires the [View Home Page](#) access right. If a user does not have the correct access the access denied error message is displayed.

The status section of the Home Page requires the [View PLUS Status](#) access right. If a user does not have the correct access, this section is not displayed.

The ability to initiate the [License Verification](#) function requires the [Manage PLUS Licenses](#) access right. If a user does not have the correct access, the button to initiate the verification does not appear.

Contact your [PatchLink Administrator \(Local Super Administrator\)](#) for more information on [PatchLink Update Security](#).

6. Vulnerability Reports

Home | Reports | Inventory | Packages | Computers | Groups | Users | Options | Help |

The reports page is where the majority of patch management work will be performed. It contains a listing of all patch related vulnerabilities across all the systems registered to the PLUS server. A Vulnerability Report encompasses any vulnerability and how to detect it and its associated patch or patches. The detection portion of it, also called a Vulnerability Report, contains the necessary signatures and fingerprints on which to properly determine if the vulnerability is patched or not patched.

6.1 Vulnerability Report Analysis

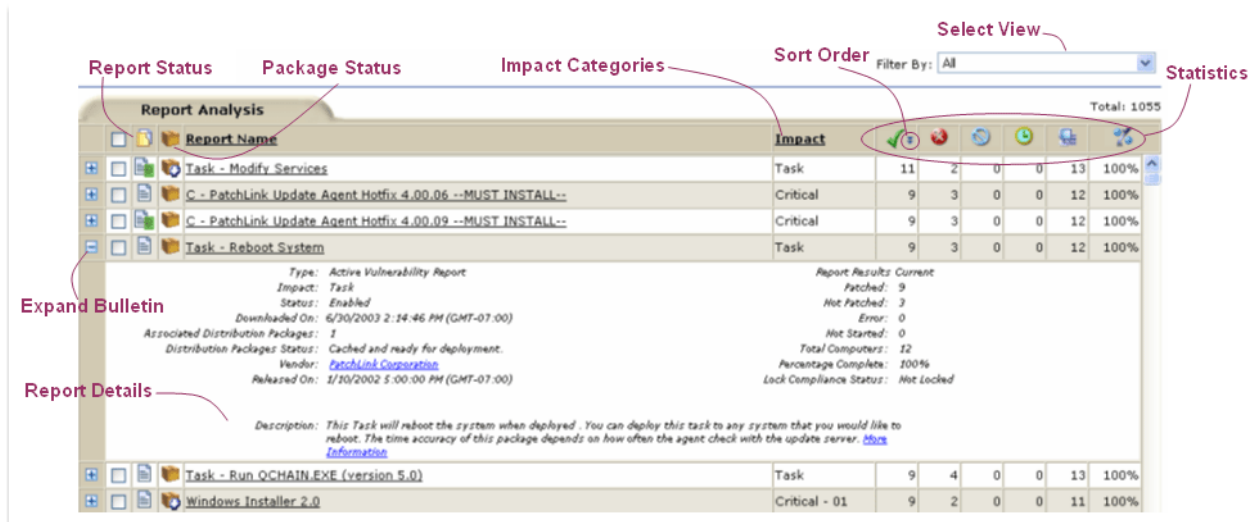
This section displays the analysis results of the vulnerability reports during the discovery and analysis process on the computer. The report analysis gives a simple top-down view of the computer in each status.

The Vulnerability Report Analysis can be seen at your network level, groups of computers level and down to a single machine level. The various statuses are detailed in this section.

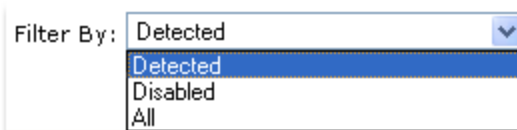
Report Name	Impact	7	4	0	1	12	92%
A - Deployment Test and Diagnostic Package	Critical	7	4	0	1	12	92%
AA - Update Agent Hotfix 5.0 for Windows Rene G	Critical	0	10	0	1	11	91%
A-Detect for pctspk.exe	Critical	0	10	0	1	11	91%
Amruta Break Agent	Critical	0	11	0	1	12	92%
B - PatchLink Update Server Hotfix 4.00.06 --MUST INSTALL--	Critical	1	0	0	0	1	100%
B - PatchLink Update Server Hotfix 4.00.09 --MUST INSTALL--	Critical	0	1	0	0	1	100%
C - PatchLink Update Agent Hotfix 4.00.06 --MUST INSTALL--	Critical	10	0	0	1	11	91%
C - PatchLink Update Agent Hotfix 4.00.09 --MUST INSTALL--	Critical	10	0	0	1	11	91%
Microsoft Data Access Components (MDAC) 2.7 SP1a (SEE NOTES)	Critical	2	5	0	0	7	100%
MS03-021 819639: Flaw In Windows Media Player May Allow Media Library Access	Critical	2	2	0	0	4	100%
MS03-023 823559: Buffer Overrun In HTML Converter Could Allow Code Execution	Critical	0	9	0	1	10	90%
MS03-024 817606: Buffer Overrun in Windows Could Lead to Data Corruption	Critical	2	7	0	0	9	100%
MS03-025 822679: Flaw in Windows Message Handling through Utility Manager Could Enable Privilege Elevation	Critical	2	3	0	0	5	100%
Command Anti-Virus DEF file (July 12, 2003)	Critical - 01	2	2	0	0	4	100%
Command AntiVirus for Windows 4.80.5 (Upgrade Component)	Critical - 01	3	1	0	0	4	100%
Exchange Server 5.5 Service Pack 4	Critical - 01	1	0	0	0	1	100%

A report illustrates a detection mechanism to determine if something is installed or configured in a certain way. For most reports, it is to determine if a patch, service pack, or device driver is installed on a computer. The total number of reports for each view is displayed at the upper right top.

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Filter the Vulnerability Report results by All, Detected, and Disabled by selecting the desired item from the **Filter by** drop down menu.



- ? Detected Reports: Shows only the reports for software that have been detected.
- ? Disabled Reports: Shows only the reports that have been deactivated from being able to be run
- ? All Reports: Shows all the reports that are available on the PatchLink Update Server

Click the to display additional information and statistics about the detection report. Clicking the will hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (,) is only available for Microsoft Internet Explorer at this time.

The deployment information contains:

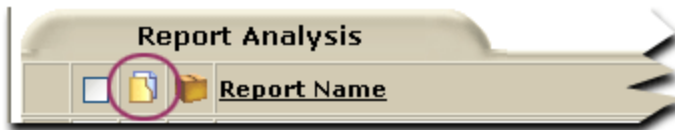
- ? Vulnerability Report Name
- ? Report Type
- ? Report Impact
- ? Report Status
- ? Downloaded On Date
- ? Number of Associated Distribution Packages
- ? Vendor
- ? Date the vendor released the patch
- ? Vendor Product ID for the patch
- ? Report Results
- ? Total number of computers which are patched
- ? Total number of computers which are not patched

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- ? Total number of computers which failed detection.
- ? Total number of computers which have not started, or are in the detection and analysis process.
- ? Total number of computers which are applicable for this vulnerability.
- ? Percentage that have completed the analysis of the detection results.
- ? Locked Compliance Status
- ? If locked, the user who locked the report.
- ? If locked, when the report was locked.
- ? Vulnerability Report Description

Clicking on a vulnerability report will display the detailed results of the analysis. This is the same as in selecting a vulnerability report and clicking on the **View** button.

6.1.1 Vulnerability Report Statuses & Types



The status of a report is indicated by the following icons:

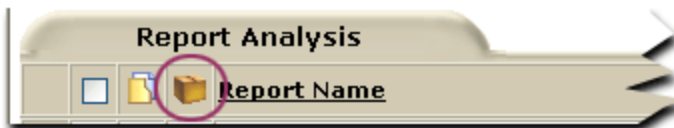
Beta	New	Current	Status Description
			This is an active vulnerability report.
			This report has been locked and is in compliance.
			This report has been locked and is out of compliance.
			This report has been disabled.

Additional information about the status of the associated distribution package is displayed upon hovering your mouse pointer over the icon.

- ? Beta: This vulnerability report has been released to the BETA community of PatchLink.
- ? New: This vulnerability report has been downloaded from PLHOST and has arrived since you started your PLUS session.
- ? Current: This is a current vulnerability report that has been downloaded from PLHOST before you started your PLUS session.

PatchLink Update Server

6.1.2 Package Cache Status & Types



A vulnerability report may have any number of distribution packages associated with it. A distribution package contains the patch to fix the vulnerability. Each distribution package may be cached (downloaded) from the PatchLink Update Host Server (PLHOST) to PLUS. They may be cached automatically if the vulnerability’s impact is critical or if a deployment has been created to deploy the package(s).

Current	New	Status Description
		At least one of the packages is being deployed.
		The packages are cached and ready for deployment.
		At least one of the packages is being cached from PLHOST.
		At least one of the packages has not been cached.

Additional information about the status of the associated distribution package is displayed upon hovering your mouse pointer over the icon.

- ? New: This distribution package has been released and its metadata has been downloaded from PLHOST since you began your PLUS session.
- ? Current: This distribution package has been released and its metadata has been downloaded from PLHOST before you began your PLUS session.

PatchLink Update Server

6.2 Vulnerability Report Impact



The agent list initially sorts by Impact alphanumerically in ascending order. To change the way to sort by another field (other than report or package status) click on the field name. To reverse the alphanumeric sort from ascending to descending, click on field name again.

6.2.1 Critical

The manufacturer or PatchLink has determined that this patch is critical and should be installed as soon as possible. Most of the recent security updates fall in to this category. The patches for this category are automatically downloaded and stored on the PatchLink Update Server.

6.2.2 Critical - 01

The manufacturer or PatchLink has determined that this patch is critical and should be installed as soon as possible. The patches for this category are not automatically downloaded and stored.

6.2.3 Critical - 05

The manufacturer or PatchLink has determined that this patch is critical and should be installed as soon as possible. Most of the superceded security updates fall in to this category. The patches for this category are not automatically downloaded and stored.

6.2.4 Recommended

The manufacturer or PatchLink has determined that this patch, while not critical or security related is useful and should be applied to maintain the health of your computers.

6.2.5 Informational

The manufacturer or PatchLink has determined that this patch is useful, though does not contain any changes that are necessary for day to day operations. Documentation updates are an example of the patches in this category.

6.2.6 Detection

These reports contain signatures that are common to multiple vulnerabilities. They contain no associated patches are only used in the detection process.

6.2.7 Software

These reports contain the fingerprints and signatures for which Software Applications are based. They determine if the prerequisites are met for the installation of these applications.

6.2.8 Task







This category contains tasks which administrators may use to run various detection or deployment tasks across their network.

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6.3 Statistics

The right-hand side of the report entry contains columns which illustrate the current result statistics for the computers which have been scanned in addition to the overall percentage completion of all computers which the detection report will be scanned.







Result	Result Definition
	Total number of computers that are patched.
	The total number of computers that are not patched.
	The total number of computers that produced an error while determining the patch status for the vulnerability.
	The total number of computers that are still waiting for the report analysis to finish.
	The total number of computers that have met the prerequisites for the vulnerability.
	The percentage of computers that have finished the vulnerability analysis.

You may sort by Ascending (default view) or Descending order by clicking on the corresponding results definition icon.

6.4 Page Functions

6.4.1 Display and Hide

Click the  to display additional information and statistics about the represented item. Click the  to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (, ) is only available for Microsoft Internet Explorer at this time.

6.4.2 Filter

Filter your results selecting the desired item from the **Filter by** drop down menu in the upper right hand corner.

6.4.3 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

6.4.4 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

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6.4.5 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

6.5 Action Menu



6.5.1 View

The reports filter controls which vulnerability reports to display. There are three options to choose from: Vulnerability Reports that have computers applicable to them, Disabled Vulnerability Reports or view All Vulnerability Reports.

6.5.2 Deploy

This creates a deployment for the selected vulnerability report. [See Section 10: Deploying Packages: Schedule Deployment Wizard](#) for more information.

6.5.3 Disable

This removes the selected enabled vulnerability reports from being able to be scanned during the discovery and analysis process from all levels of the system (network level down to the individual computer level).

6.5.4 Enable

This re-enables the scanning ability for the selected disabled vulnerability reports during the discovery and analysis process.

6.5.5 Lock Reports

Selecting a report(s) and clicking on the lock button will save the current vulnerability report analysis values. When the analysis is again displayed this data is compared to the current data to determine if the vulnerability report is in or out of compliance. If the vulnerability report is out of compliance, the vulnerability report is highlighted in red.

6.5.6 Unlock Reports

Selecting a locked report(s) and clicking on the unlock button will clear out the vulnerability report's locked data.

6.5.7 Export

Export the vulnerability report analysis to a comma-separated value (CSV) file. The amount and order of the data is based on what the analysis view is filtered and sorted on.

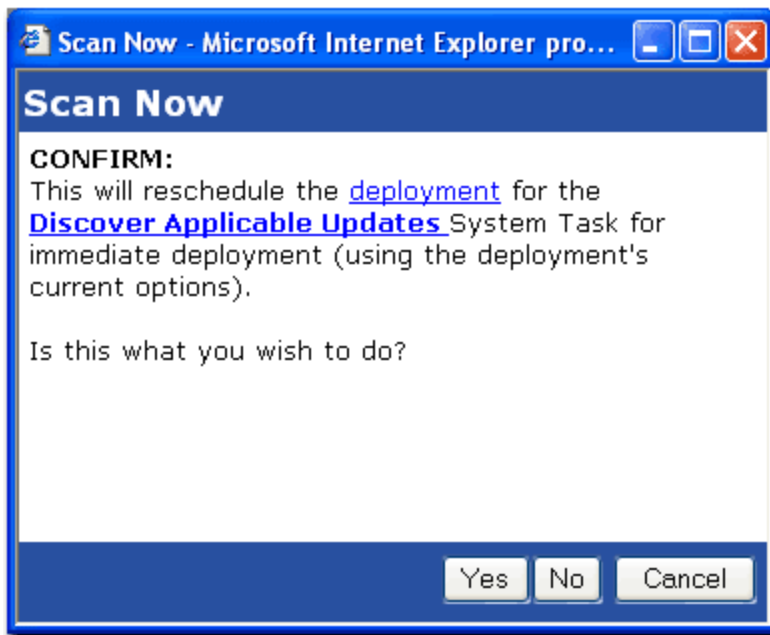
PatchLink Update Server

6.5.8 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates System Task** deployment for immediate execution to all selected computers.

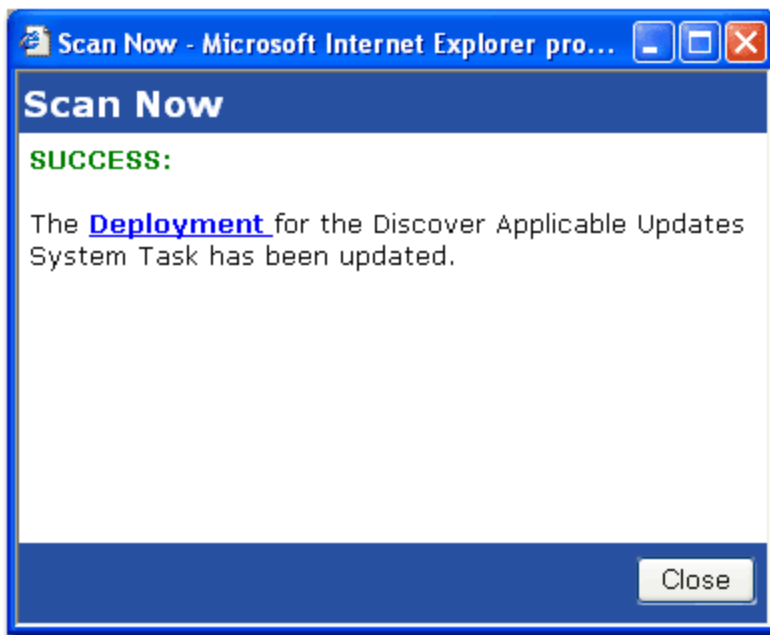
To initialize (choose) all computers, click on **Scan Now** button without selecting any computers.

If you choose not to select any computers, the screen will ask you if you wish to **confirm** the reschedule the **Discover Applicable Updates System Task** for all of the computers.



To reschedule the **Discover Applicable Updates**, select Yes

PatchLink Update Server



PLUS will reschedule the selected computer(s)'s membership (or all computers' memberships), initialize a screen stating its success and provide a deployment link to initialize a new screen with the results of the Discover Applicable Updates Deployment.

Upon clicking the Close button on the screen, the Computers page will be refreshed. Previously selected deployment options are maintained

6.5.9 Update Cache

Update Cache initiates the process to cache (or re-cache) the associated distribution packages for the selected vulnerability reports.

PatchLink Update Server

6.6 Vulnerability Report Analysis Security

The Reports section of PLUS requires the [View Reports Page](#) access right. If a user does not have the correct access the access denied error message is displayed.

To be able to view the detailed report analysis requires the [View Report Details](#) access right. If a user does not have the correct access, the hyperlink will not be shown and the [View](#) button is disabled.

To be able to change the filter from detected vulnerability reports to disabled or all requires the [Change Report Filter](#) access right. If a user does not have the correct access, the filter will not have any options to choose from.

To be able to view the associated distribution packages for a given vulnerability report requires the [View Packages](#) access right. If a user does not have the correct access, the link on the package status image is disabled.

To be able to create a deployment based on the report analysis requires the [Deploy Reports](#) access right. If a user does not have the correct access, the [Deploy](#) button is disabled.

To be able to enable or disable vulnerability reports from being available by the discovery and analysis process requires the [Manage Reports](#) access right. If a user does not have the correct access, the [Enable](#) and [Disable](#) buttons are disabled.

To be able to lock or unlock the selected vulnerability reports requires the [Manage UI Report Locks](#) access right. If a user does not have the correct access, the [Lock](#) and [Unlock](#) buttons are disabled.

To export all of the vulnerability report analysis's to a comma-separated value (CSV) file requires the [Export Report Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

To restart the discovery and analysis process for all of the computers registered to the PLUS requires the [Manage System Tasks](#) access right. If a user does not have the correct access, the [Scan Now](#) button is disabled.

To cache the associated distribution of the selected vulnerability reports requires the [Cache Packages](#) access right. If a user does not have the correct access, the [Update Cache](#) button is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

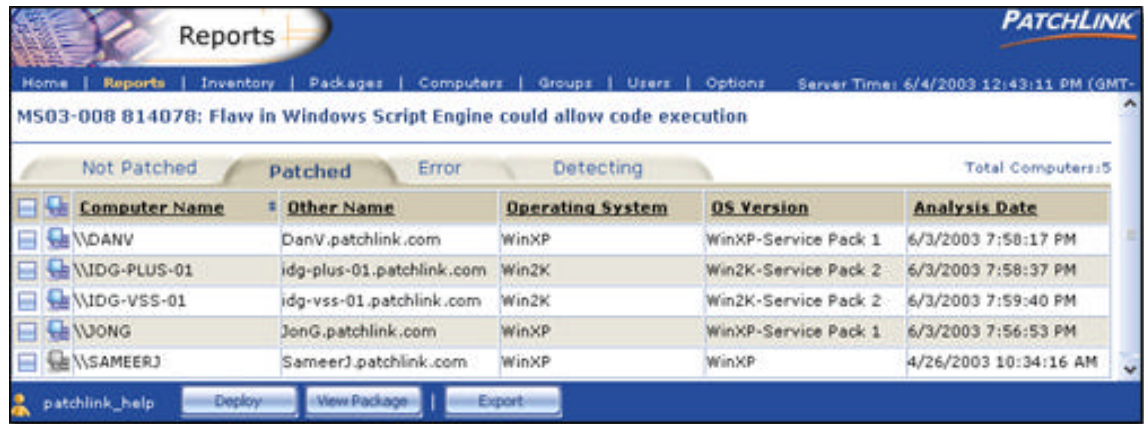
PatchLink Update Server

6.7 Vulnerability Report Analysis Details

Each patch displayed is reported as required based on your unique configuration of systems. By clicking the report link, a full list of all computers that require the patch in question will be displayed. From there, the patch can be easily deployed.

From the Reports Homepage, click on the **Report Name Link** to view the analysis of the vulnerability report.

The analysis results of the vulnerability report are detailed and separated into four tabbed displays. The name of the tab represents status for those computers in the report analysis.



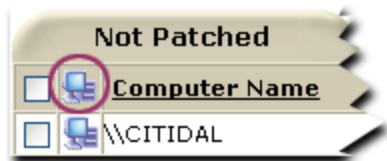
Computer Name	Other Name	Operating System	OS Version	Analysis Date
\\DANV	DanV.patchlink.com	WinXP	WinXP-Service Pack 1	6/3/2003 7:58:17 PM
\\IDG-PLUS-01	idg-plus-01.patchlink.com	Win2K	Win2K-Service Pack 2	6/3/2003 7:58:37 PM
\\IDG-VSS-01	idg-vss-01.patchlink.com	Win2K	Win2K-Service Pack 2	6/3/2003 7:59:40 PM
\\JONG	JonG.patchlink.com	WinXP	WinXP-Service Pack 1	6/3/2003 7:56:53 PM
\\SAMEERJ	SameerJ.patchlink.com	WinXP	WinXP	4/26/2003 10:34:16 AM

6.7.1 Analysis Results

- ? Not Patched: These computers were detected as needing the vulnerability patch.
- ? Patched: These computers were detected as being patched for the vulnerability.
- ? Error: These computers produced an error while determining the patch status for the vulnerability.
- ? Detecting: These computers are either in the process of determining the patch status for the vulnerability or waiting for the detection and analysis process to begin.

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6.8 Agent Status



Status	Description
	The agent is sleeping as it is outside of its hours of operation.
	The agent has not contacted PLUS in more than 2 intervals (minimum of 15 minutes for intervals smaller than 10 minutes). It is considered to be offline.
	This is an active detection agent that does not correspond to a registered deployment agent
	This is an active deployment agent.
	This agent has been disabled.

Additional information may be displayed by hovering your mouse pointer over the icon.

6.8.1 Agent Information

- ? Host Name: This displays the name of the computer.
- ? Other Name: This displays either the DNS name for the computer or its IP address if it does not have an assigned DNS name.
- ? Operating System: This displays the abbreviated the operating system name
- ? OS Version: This displays additional operating system version information.
- ? Last Reported Date: This is the date the agent last ran the discovery and analysis process.

6.9 Page Functions

6.9.1 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

6.9.2 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

PatchLink Update Server

6.9.3 Display (Pagination)

Depending on the amount of items available for display and what page you are viewing, determines the display function. The Display function, if enabled, is located at the bottom above the Action Menu.



- ? Next: To display the next page of computers, click on the next button. If the last computer is displayed, the next button is disabled.
- ? Previous: To display the previous page of computers, click on the previous button. If the first computer is being displayed, the previous button is disabled.
- ? Computers per Page: The computer list initially displays up to 100 computers per page. To change the number of computers to display per page, enter a new number in to the Computers per Page input field. To display all computers enter a zero in the input field.

6.9.4 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

6.10 Action Menu



6.10.1 Deploy

This invokes the Deployment Wizard and allows you to create a deployment for the selected vulnerability report. [See Section 10: Deploying Packages: Schedule Deployment Wizard](#) for more information.

6.10.2 View Package

This displays the associated distribution packages for the vulnerability report.

6.10.3 Export

Export the vulnerability report analysis to a comma-separated value (CSV) file. The amount and order of the data is based on what the analysis view is selected and sorted on.

PatchLink Update Server

6.11 Vulnerability Report Analysis Security

The Report Analysis Details section of PLUS requires the [View Report Details](#) access right. If a user does not have the correct access the access denied error message is displayed.

To be able to create a deployment based on the report analysis requires the [Deploy Reports](#) access right. If a user does not have the correct access, the [Deploy](#) button is disabled.

To be able to view the associated distribution packages for a given vulnerability report requires the [View Packages](#) access right. If a user does not have the correct access, the [View Package](#) button is disabled.

To export the vulnerability report analysis to a comma-separated value (CSV) file requires the [Export Report Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

7. Inventory

Home | Reports | **Inventory** | Packages | Computers | Groups | Users | Options | Help |

PLUS has the capability to determine what patch is applicable to what machine and has strong inventory capabilities for all the software, hardware, operating system and services on a system. The inventory reports all Operating System, Installed Software, Hardware and their device drivers, and Services from a network perspective down to the single machine level.

Filter your results selecting the desired item from the **Filter by** drop down menu in the upper right hand corner.

Clicking the will display the list of computers containing this inventory item. Clicking the will hide this list from view. The computer list is refreshed each time it is displayed. The alternative method to obtain this list is to click on the name of the inventory item and the page will be refreshed with this list.

7.1 Operating Systems View

Displays the full operating system platform names.

Inventory Summary		Filter By: <input type="text" value="Operating Systems"/>
Inventory		Total: 4
Operating Systems		
	Microsoft Windows 2000 Advanced Server	20
	Microsoft Windows 2000 Server	1
	Microsoft Windows ME	1
	Microsoft Windows XP Professional	4
	Computer Name	OS Info
	\\DANY	WinXP-Service Pack 1
	\\JONG	WinXP-Service Pack 1
	\\PC00222	WinXP-Service Pack 1
	\\SAMEER1	WinXP

7.1.1 Operating System

This displays the full name of the operating system platform. Click the for an operating system to display the list of computers for that platform. Click on the to close this list.

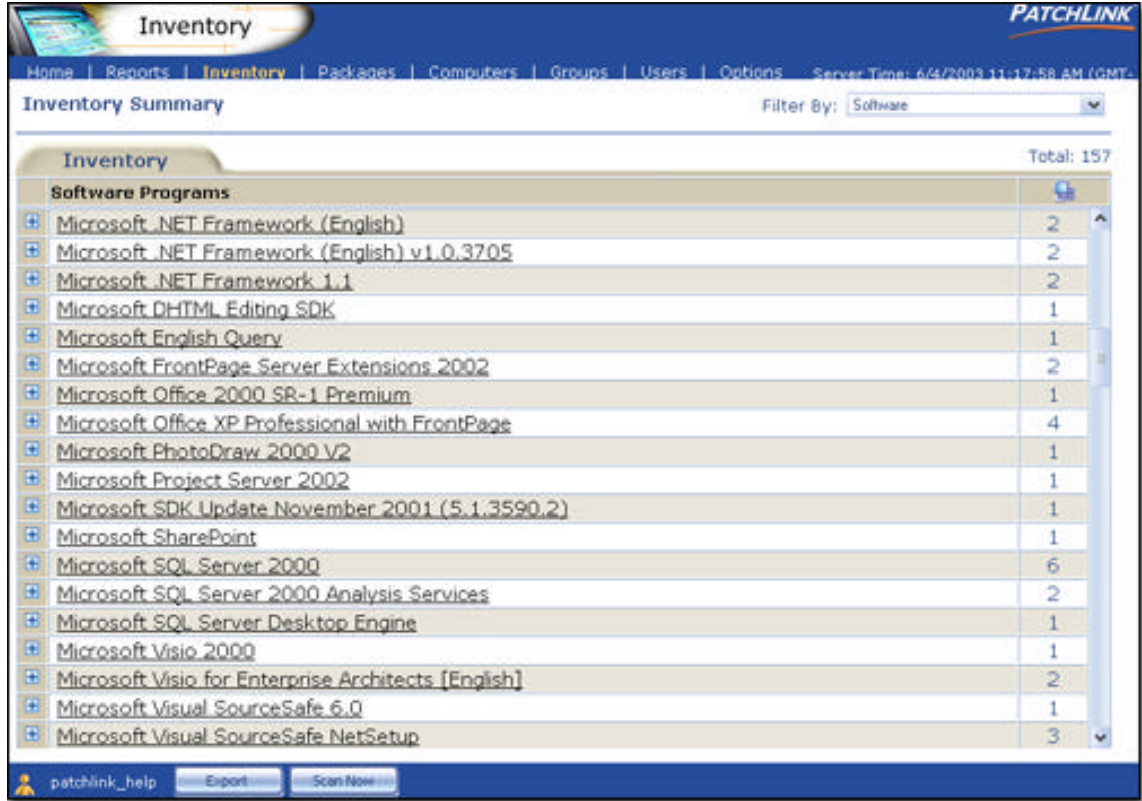
7.1.2 Number of Instances

This displays the number of times this operating system platform has been detected. For displaying the Operating System Inventory for a single computer, this is always one.

PatchLink Update Server

7.2 Software View

Displays the installed software applications.



7.2.1 Software Programs

This displays the name of the software application. Click the for a software application to display the list of computers for that application. Click on the to close this list.

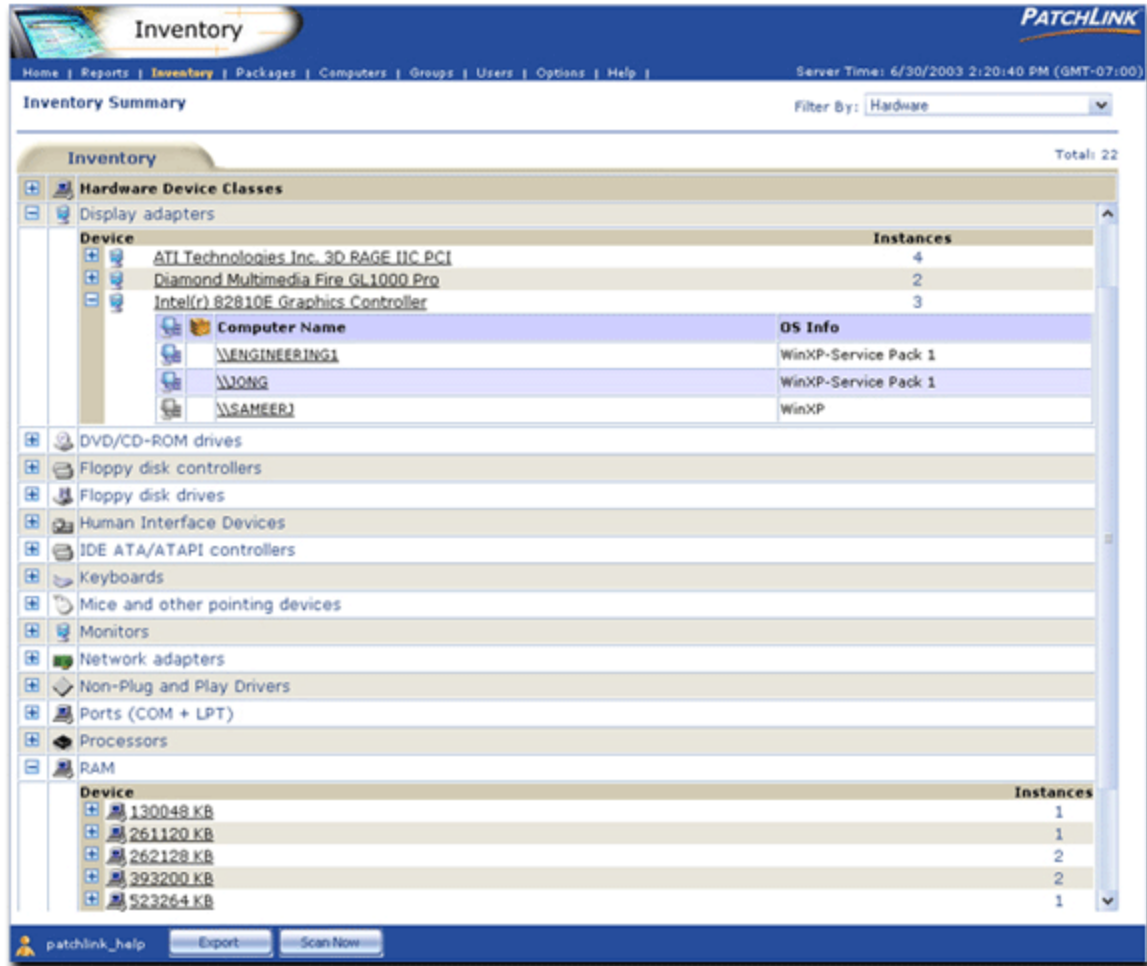
7.2.2 Number of Instances

The number of times this software application was detected.

PatchLink Update Server

7.3 Hardware View

Displays the client Hardware devices.



7.3.1 Hardware Device Class

Hardware is separated into device classes such as disk drives, processors, network adapters, etc. Click the to display the list of devices for each class, or click on the to display them all (for a long list of devices this may take a few moments to generate). Click the to close this list.

7.3.2 Device

A device is a specific piece of hardware, such as a "Microsoft USB IntelliMouse Optical". Click the for a device to display the list of computers for that device. Click the to close this list.

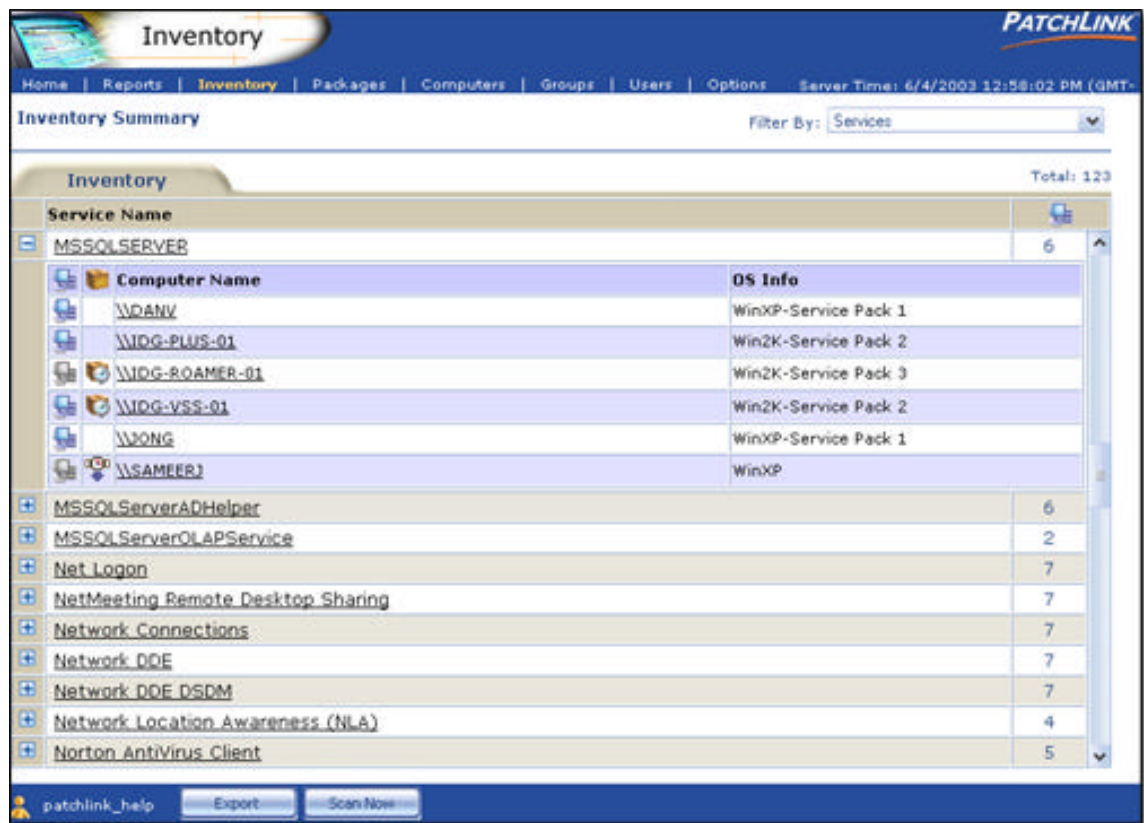
PatchLink Update Server

7.3.3 Number of Instances

An Instance is a specifically detected device or installed driver. A computer may contain multiple instances of a installed device or driver. For example, a computer may contain a video graphics adapter that contains multiple video sources and destinations in which each source or destination is discovered as multiple instances of the same device or driver.

7.4 Services View

Displays the detected services that may or may not be running.



7.4.1 Service Name

This displays the name of the service. Click the for a service to display the list of computers for that service. Click the to close this list.





7.4.2 Number of Instances

The number of times this service was detected.

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7.5 Page Functions

7.5.1 Display and Hide

Click the  to display additional information and statistics about the represented item. Click the  to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (, ) is only available for Microsoft Internet Explorer at this time.

7.5.2 Filter

Filter your results selecting the desired item from the **Filter by** drop down menu in the upper right hand corner.

7.6 Action Menu



7.6.1 Export

Export the filtered inventory data to a comma-separated value (CSV) file.

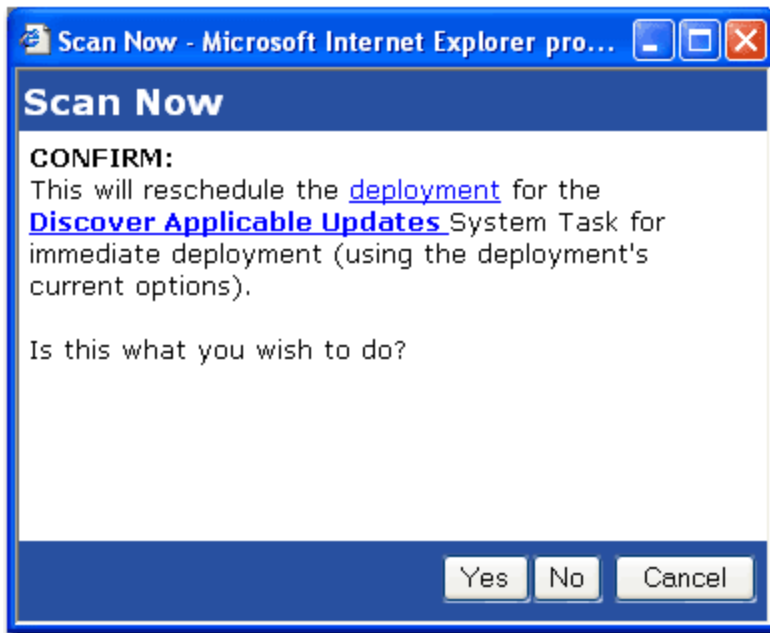
7.6.2 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates System Task** deployment for immediate execution to all selected computers.

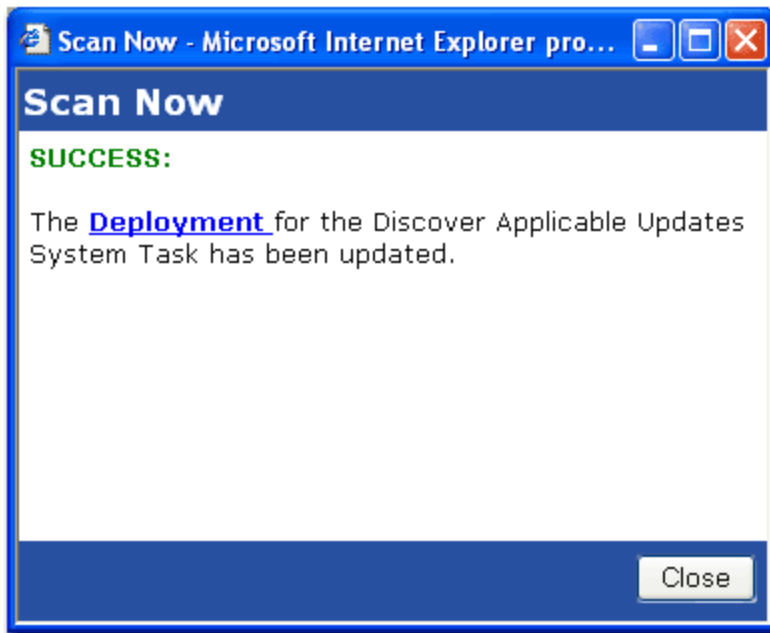
To initialize (choose) all computers, click the **Scan Now** button without selecting any computers.

If you choose not to select any computers, the screen will ask you if you wish to **confirm** the reschedule the **Discover Applicable Updates System Task** for all of the computers.

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To reschedule the **Discover Applicable Updates**, select Yes.



PLUS will reschedule the selected computer(s)'s membership (or all computers' memberships), initialize a screen stating its success and provide a **Deployment** link to initialize a new window with the results of the Discover Applicable Updates Deployment.

Upon clicking the Close button on the pop-up window, the Computers page will be refreshed and initialized. Previously selected deployment options are maintained.

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7.7 Discovered Inventory Security

The Inventory section of PLUS requires the [View Inventories](#) access right. If a user does not have the correct access the access denied error message is displayed.

To be able to view the [Software](#) inventory requires the [View Software Inventories](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to view the [Hardware](#) inventory requires the [View Hardware Inventories](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to view the [Services](#) inventory requires the [View Services Inventories](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to view the list of computers on which an inventory belongs to requires the View Computers access right. If a user does not have the correct access, the hyperlink on the inventory item is not disabled and the  function is disabled.

To export the inventory to a comma-separated value (CSV) file requires the [Export Inventory Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

8. Packages

Home | Reports | Inventory | **Packages** | Computers | Groups | Users | Options | Help |

Distribution Packages contains all the actual patch software and executable code for deployment. It is here that you create custom packages from software. for more information.

Distribution packages will contain whatever you want to deploy on a computer or group. A distribution package can run tasks or scripts, install software applications, place files (or directories of files) to a specified location, change the configuration of an application or service, or various other things that can be done in an unattended manner. The majority of the packages contain the patches for vulnerabilities, defects or bugs. If you would like to create your own patch, application or script package, see [Section 9: Creating and Editing Packages: Package Editor Wizard](#)

Use this section in congruence with [Section 9: Creating and Editing Packages: Package Editor Wizard](#) and [Section 10: Deploying Packages: Schedule Deployment Wizard](#), as this section describes the intricacies of packages, deployments, events and statistics, while sections 9 and 10 focus on the physicality of the actual package creation and deployment.

Package Name	Origin	Operating Systems	
A TEst	Update Local	WinME, WinNT, WinXP	0
AA-PatchLink Update Agent 5.00.2	Update Local	Win95, Win98, WinME, WinNT, Win2K, WinXP, Win2K3	4
Adobe Acrobat Reader 5.1	PatchLink	Win98, WinME, WinNT, Win2K, WinXP	5
Adobe Acrobat Reader 6.0	PatchLink	Win98, WinME, WinNT, Win2K, WinXP, Win2K3	1
AGENT hotfix 5.00.1 For Rene G	Update Local	Win95, Win98, WinME, WinNT, Win2K, WinXP	6
Agent Uninstall	Update Local	Win2K	0
Citrix ICA Win32 Client - v6.30	PatchLink	Win95, Win98, WinME, WinNT, Win2K, WinXP	0
Citrix ICA Win32 Client - v7.0	PatchLink	Win95, Win98, WinME, WinNT, Win2K, WinXP	0
Command Anti-Virus DEF file for v4.6x or lower (July 12 2003)	PatchLink	Win95, Win98, WinME, WinNT	0
Command Anti-Virus DEF file for v4.6x or lower (July 12, 2003)	PatchLink	Win2K, WinXP, Win2K3	0
Command Anti-Virus DEF file for v4.7x or higher (July 12, 2003)	PatchLink	Win95, Win98, WinME, WinNT, Win2K, WinXP, Win2K3	1
Command AntiVirus for Windows 4.75.5 (Upgrade Component)	PatchLink	Win95, Win98, WinME, WinNT, Win2K, WinXP, Win2K3	0
Command AntiVirus for Windows 4.80.5 (Full-install)	PatchLink	Win95, Win98, WinME, WinNT, Win2K, WinXP, Win2K3	1
Command AntiVirus for Windows 4.80.5 (Upgrade Component)	PatchLink	Win95, Win98, WinME, WinNT, Win2K, WinXP, Win2K3	0

8.1 Package Information

8.1.1 Package Name

This displays the name of the distribution package. Clicking on the distribution package will display the deployments for that distribution package.

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8.1.2 Origin



This displays where this distribution package was distributed from.

8.1.3 Operating Systems

This displays the operating system platforms this distribution package can deploy to.

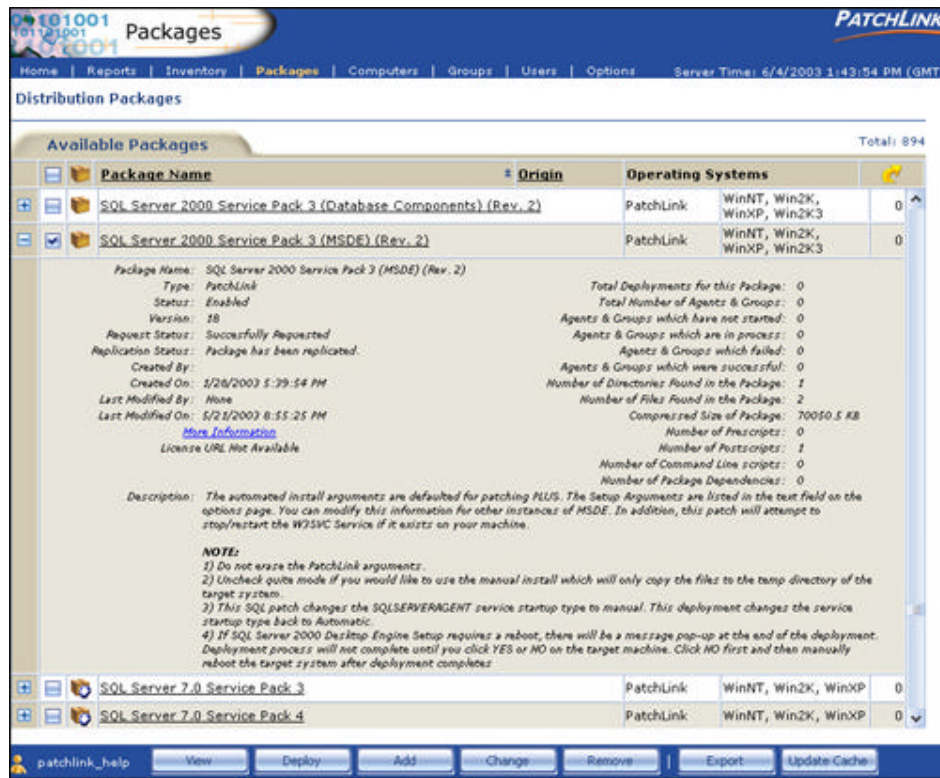
8.1.4 Deployments

The number of deployments previously created for this distribution package.

Clicking the  will display additional information about the distribution package. Clicking the  will hide this information from view. The information is refreshed each time it is displayed. The package distribution information contains:

- ? Distribution Package Name
- ? Origin
- ? Status
- ? Cache Status
- ? Cache Request Status
- ? Deployment Availability
- ? OS Platforms
- ? The user who created this distribution package
- ? The date the distribution package was created
- ? The user who last modified the distribution package
- ? When the distribution package was last modified
- ? The date when a deployment was last created for this distribution package Version
- ? Total number of directories found in the package
- ? Total number of files found in the package
- ? Total size of the compressed package size (in KB)
- ? Total number of prescripts
- ? Total number of postscripts
- ? Total number of command-line scripts
- ? Total number of dependant distribution packages
- ? Total number of idle deployments
- ? Total number of running deployments
- ? Total number of deployments that failed
- ? Total number of deployments that were fully successful
- ? Total number of deployments for this distribution package
- ? Description of the distribution package
- ? Any additional Notes (if applicable)

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8.2 Package Statuses & Types



New	Current	Tasks	Local	Description
				The package is not cached.
				The package has been scheduled to be cached or is in the process of being cached.
				An error occurred while trying to cache the package.
				The package is cached and ready for deployment.
				The package is currently deploying (animated).
				The package is disabled.

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8.2.1 New

This distribution package has been released and its metadata has been downloaded from PLHOST since you began your PLUS session.

8.2.2 Current

This distribution package has been released and its metadata has been downloaded from PLHOST before you began your PLUS session.

8.2.3 Tasks





This is a system task distribution package.

8.2.4 Local

This is a locally created distribution package.

8.3 Page Functions

8.3.1 Display and Hide

Click the  to display additional information and statistics about the represented item. Click the  to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (, ) is only available for Microsoft Internet Explorer at this time.

8.3.2 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

8.3.3 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

8.3.4 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

8.4 Action Menu



8.4.1 View

This displays additional information about the distribution package. In this view you can also click to view the distribution package's deployments.

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8.4.2 Deploy

This creates a deployment for the selected distribution package. See [Section 10: Deploying Packages: Schedule Deployment Wizard](#) for more information.

8.4.3 Add

Create a new local distribution package See [Section 9: Creating and Editing Packages: Package Editor Wizard](#) for more information.

8.4.4 Change

Change a local distribution package. See [Section 9: Creating and Editing Packages: Package Editor Wizard](#) for more information.

8.4.5 Remove

This removes any non-System Task selected distribution packages. PLUS will re-download the package metadata (and not the files or scripts) for any deleted PatchLink provided distribution package (via the PLUS's subscription service). PLUS will only cache the package if it is critical or being requested by a deployment.

8.4.6 Export

Export the distribution package list (and their information) to a comma-separated value (CSV) file. The order of the data is based on what the current display is sorted on.

8.4.7 Update Cache

Initiates the process to cache (or re-cache) for the selected distribution packages. If no distribution packages are selected this will re-cache all of the previously cached distribution packages.

8.5 Distribution Packages Security

*The Distribution Packages section of PLUS requires the **View Packages** access right. If a user does not have the correct access the access denied error message is displayed.*

*To be able to view the deployments for a distribution package requires the **View Deployments** access right. If a user does not have the correct access the hyperlink on the **Package Name** will not be displayed.*

*To be able to create a deployment for a selected distribution package requires the **Deploy packages** access right. If a user does not have the correct access the **Deploy** button is disabled.*

*To be able to create, change or remove distribution packages requires the **Manage Packages** access right. If a user does not have the correct access the **Add, Change** and **Remove** buttons are disabled.*

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To export all of the distribution packages and their information to a comma-separated values (CSV) file requires the [Export Package Data](#) access right. If a user does not have the correct access the [Export](#) button is disabled.

To cache the selected (or re-cache all of the previously cached) distribution packages requires the [Cache Packages](#) access right. If a user does not have the correct access, the [Update Cache](#) button is disabled.

8.6 Deployments

A Deployment, in its simplest form, allows a Patch to be downloaded by a Deployment Agent, so it can install it. In more generic terms, a Deployment is the encompassing instructions around a Distribution Package that describes to the Deployment Agent how to deploy the package. The contents of the Distribution Package contain all the other necessary information (info, files and scripts) required to actually perform whatever needs to be done: install this patch executable, stop this service, validate a system condition, change a database entry, etc.

Deployments can be created throughout the product, but basically encompass three main areas: Report-based Deployments, Package-based Deployments and a Group's Mandatory Baseline.

8.6.1 Report-based Deployments

A Vulnerability Report contains multiple associated distribution packages and the target package to be deployed depends on the assigned computers. As a computer goes through the Discovery and Analysis Process, it is assigned Vulnerability Reports to scan as PLUS determines they are applicable to the computer. Based on these results, a PatchLink User has the ability to determine which computers to deploy the "Patch" (Vulnerability Fix) to. Behind the scenes, PLUS goes through and makes sure that the computers get assigned the correct Distribution Package.

8.6.2 Package-based Deployments

A Distribution Package is assigned a single operating system, thus only those computers whose operating system matches are able to perform the deployment. Package-based Deployments are the easiest to create, though they do not give you the granularity to tell the PatchLink User which computers really apply to this patch (or package) or not.

8.6.3 Group Mandatory Baseline

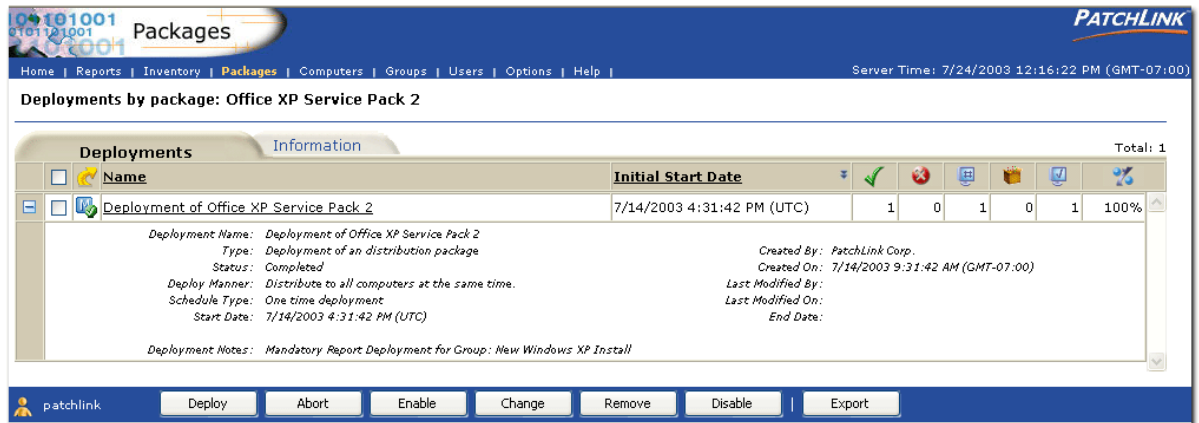
A group contains a feature called its Mandatory Baseline, or the ability to define a baseline of Vulnerability Reports or Locally-created Distribution Packages as being the base set of patches and other packages that must be installed for the group's computer members. In terms of Vulnerability Reports, a Mandatory Baseline will continually check to verify and validate that the patch is actually installed; if it is not, it will deploy the necessary distribution package to get it to be installed.

Select a specific **Package Name** link from the Package Name column to view information and deployment details.

The package deployments section displays all of the deployments that have been created for the distribution package.

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The Distribution Packages section displays all of the packages that the PLUS has available to it, various functions to manage them, and the number of Deployments created to deploy a package.

































Clicking the will display additional information about the deployment. Clicking the will hide this information from view. The information is refreshed each time it is displayed. The deployment information contains:

Deployment name	The name of the deployment
Type	Deployment for which type of a package
Status	This can be: <ul style="list-style-type: none"> <input type="radio"/> Enabled <input type="radio"/> Disabled <input type="radio"/> Paused
Deploy manner	The manner in which this deployment occurred. It can be <ul style="list-style-type: none"> <input type="radio"/> Sequential <input type="radio"/> Parallel <input type="radio"/> First come first serve <input type="radio"/> Distribute to # of computers at a time
Schedule type	This can be: <ul style="list-style-type: none"> <input type="radio"/> Recurring <input type="radio"/> One time
Start date	The date and time this deployment was started
Deployment Notes	Additional information about the deployment
Created by	The user who created this deployment
Created on	The date and time this deployment was created
Last modified by	The user who modified this deployment last
Last modified on	The date and time this deployment was last modified
End date	The date and time the deployment was completed

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Select a specific **Deployments Package Name** to view deployment details.

8.6.4 Deployment Types and Status

New	Current	Local	System	Mandatory Group	Description
					Deployment with no assigned computers.
					Deployment currently deploying (animated).
					Deployment waiting to start.
					Deployment which all of the assigned computers and groups have finished successfully.
					Deployment in which at least one computer finished unsuccessfully.
					Deployment that is disabled.

- ? **New:** A new deployment is a deployment that has been created since you logged on to your current session.
- ? **Current:** A deployment that was created before you logged on to your current session.
- ? **Local:** A deployment is of a locally created distribution package.
- ? **System:** A system deployment contains a system distribution package to perform required or PatchLink provided tasks. These deployments may include automated schedules in which the membership of the deployment may not be modified, though the schedule may.
- ? **Mandatory Group:** A deployment is created through the mandatory baseline for a group. This deployment is automatically created and managed through the mandatory baseline process.

8.6.5 Name

The name assigned to the deployment.

8.6.6 Initial Start Date

The schedule date the deployment is to begin. For recurring deployments this is the first scheduled date of the deployment.

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8.6.7 Statistics



The right-hand side of the report entry contains columns which illustrates the current result statistics for deployments by package.

Result	Result Definition
	The total number of computers or groups that finished the deployment successfully.
	The total number of computers or groups that finished the deployment unsuccessfully.
	The total number of computers or groups that are assigned the deployment.
	The total number of computers or groups that are in process of executing the deployment.
	The total number of computers or groups that finished the deployment.
	The percentage of the computers or groups that finished the deployment.

8.7 Deployment Summary






This view illustrates the overall information about this particular distribution package including its content, deployment status, etc.

Deployments of a package are designated by the following types:

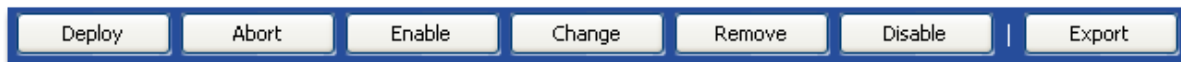
Result	Result Definition
	Deployment of a mandatory baseline item for a group.
	Deployment of an distribution package (provided by PatchLink).
	Deployment of a new distribution package (provided by PatchLink).
	Deployment of a new distribution package (provided by PatchLink).
	Deployment of a locally-created distribution package.

Each deployment has the following states, depending upon the status results of the deployment (using a distribution package deployment for the deployment type).

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Result	Result Definition
	This deployment has not started.
	This deployment is currently in progress. (animated)
	This deployment has finished and all targets of the deployment came back as they deployed the package successfully.
	This deployment has finished and at least one of targets of the deployment came back as it deployed the package unsuccessfully.
	This deployment has been disabled or put on hold.

8.8 Action Menu



8.8.1 Deploy

Deploys the current (selected) package. This will launch the Deployment Wizard. You can quickly schedule a package for deployment or distribution to computers with Client Agents from this wizard. See [Section 10: Deploying Packages: Schedule Deployment Wizard](#) for more information.

Note: You will **not** be allowed to create new deployments of System Packages from PatchLink (only modify their schedule).

8.8.2 Abort

To abort one or more deployments:

- ? Select one or more deployments.
- ? Click the Abort button at the bottom of the page.

This will cancel one or more deployments. The computers that have already received the package will not be affected and any other computers will show that the package deployment was aborted before the deployment could occur.

Note: You will **not** be allowed to abort deployments of System Packages from PatchLink.

8.8.3 Enable

Click on the Enable button to enable a paused or a disabled deployment. The deployment will then be scheduled to occur according to its schedule type and manner.

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8.8.4 Change

This will launch the Deployment Wizard, allowing you to make modifications to any deployment. All deployments can be changed, including deployments of System Packages from PatchLink. Note that System Packages are automatically assigned to computers, so removing a computer from a deployment of a System Package will have no effect (the computer will be re-assigned to the deployment by the PatchLink Update Server). See [Section 9; Creating and Editing Packages: Package Editor Wizard](#) for more information.

8.8.5 Remove

Removes the selected disabled deployments. To remove one or more deployment entries:

- ? Select one or more deployments
- ? Click the Remove button.

This will delete the selected package deployments from your PatchLink Update Server. Removing a deployment will have no affect on computers that have already received the deployment.

Note: you will not be allowed to remove deployments of System Packages from PatchLink.

8.8.6 Disable

Disables the deployment. The deployment will be paused and no longer deployed to the assigned computers.

8.8.7 Export

Export the deployment data to a comma-separated value (CSV) file.

8.9 Deployment Details






The deployment details section displays the assigned computers and groups and the status of the deployment for each. To view the group membership results for the deployment, click on the name of the group, then select that specific deployment package's **Name** link.

Computers and Groups Scheduled for 7/12/2003 1:45:00 PM (Agent Local Time)						Total: 1
<input type="checkbox"/>	Name	Status	Last Run Status	Last Run Start Date	Last Run Completed Date	Next Run Date
<input type="checkbox"/>	\\PDADDY-PC	Completed	Success	7/12/2003 2:48:41 PM	7/12/2003 2:49:54 PM	

8.9.1 Computer Status

Computers and Groups Scheduled for 7/12/2003 1:45:00 PM (Agent Local Time)	
<input type="checkbox"/>	Name
<input type="checkbox"/>	\\AMRUTHA

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Status	Description
	This is an enabled deployment agent.
	The agent is sleeping as it is outside its hours of operation.
	This is an enabled detection agent that does not correspond to a registered deployment agent ² .
	The agent is considered to be offline as it has not contacted PLUS in more than two intervals (minimum of 15 minutes).
	This agent has been disabled.

8.9.2 Name

This displays the name of the computer or group. The name of the group is also a hyperlink. Clicking the link will display the members of the group and the status of the deployment for each.

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8.9.3 Status

This displays the status of the deployment for the computer or group.

Status	Description
Not Started	<p>The computer or group has not started the deployment.</p> <ul style="list-style-type: none"> ? The deployment start time has not elapsed. ? The computer has not contacted PLUS since the start of the deployment. ? The deployment or global PLUS deployment limit was full the last time the computer contacted PLUS. It will try again on its next interval.
In Progress	<p>The computer or the group has started the deployment.</p>
Not Running	<p>The computer or group has finished at least the first occurrence of this recurring deployment, but the next instance of this deployment has not started.</p>
Not Scheduled	<p>Computer members of a group are not assigned the deployment for a group deployment until the computer has contacted PLUS once the deployment start time has elapsed.</p>
Obtaining Package	<p>PLUS is currently downloading the necessary distribution packages for the deployment. Once they have been cached (and the deployment start time has elapsed), the computers will be able to download perform the deployment.</p>
Completed	<p>All computers and groups have finished the deployment.</p>
Disabled	<p>The specific computer or group assignment for this deployment has been disabled.</p>

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8.9.4 Last Run Status (link)

This displays the status message from the last time this computer or group performed the deployment. Once the deployment has been performed, the specific results of the deployment for that computer can be displayed by clicking on the status text.

Deployment Results

Deployment Status for \\CITIDAL

<p>Package Name: zTest: PDK 3</p> <p>Deployment Type: Computer Deployment</p> <p>Associated Impact: Informational</p> <p>Deployment Status: The deployment completed successfully.</p> <p>Last Run Results: Success</p>	<p>Next Run Date:</p> <p>Last Run Status: Success</p> <p>Last Run Start Date: 6/23/2003 11:23:34 AM (GMT-07:00)</p> <p>Last Run Completed Date: 6/23/2003 11:24:37 AM (GMT-07:00)</p>
--	---

- ? **Package Name:** This displays the name of the distribution package that was deployed.
- ? **Deployment Type:**
This displays the deployment type.
- ? **Associated Impact:** This displays the impact of the associated vulnerability report, if the distribution package is associated to one.
- ? **Deployment Status:** This displays the overall deployment status information.
- ? **Last Run Results:** This displays the results of the last time the computer performed the deployment.
- ? **Next Run Date:** This displays the date when the computer is to perform the deployment again, if the deployment is recurring.
- ? **Last Run Status:** This displays the status of the last time the computer performed the deployment.
- ? **Last Run Start Date:** This displays the date when the computer last started the deployment.
- ? **Last Run Completed Date:** This displays the date when the computer last finished the deployment.

8.9.5 Last Run Start Date

This displays the date when the computer or group last started the deployment.

8.9.6 Last Run Completed Date

This displays the date when the computer or group finished the last deployment.





8.9.7 Next Run Date

This displays the date when the computer is to perform the next deployment.

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8.10 Page Functions

8.10.1 Display and Hide

Click the  to display additional information and statistics about the represented item. Click the  to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (, ) is only available for Microsoft Internet Explorer at this time.

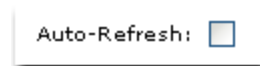
8.10.2 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

8.10.3 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

8.10.4 Auto Refresh

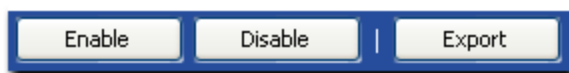


Where present and when selected, the Auto Refresh function automatically refreshes the page every 15 seconds.

8.10.5 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

8.11 Action Menu



8.11.1 Enable

This enables the selected disabled deployment assignments.

8.11.2 Disable

This disables the selected enabled deployment assignments. Disabled deployment assignments cause the individual deployment for the agent or group to not be performed while not affecting the overall deployment. Recurring mandatory baseline-based deployment assignments will automatically be disabled when after the deployment has failed three times.

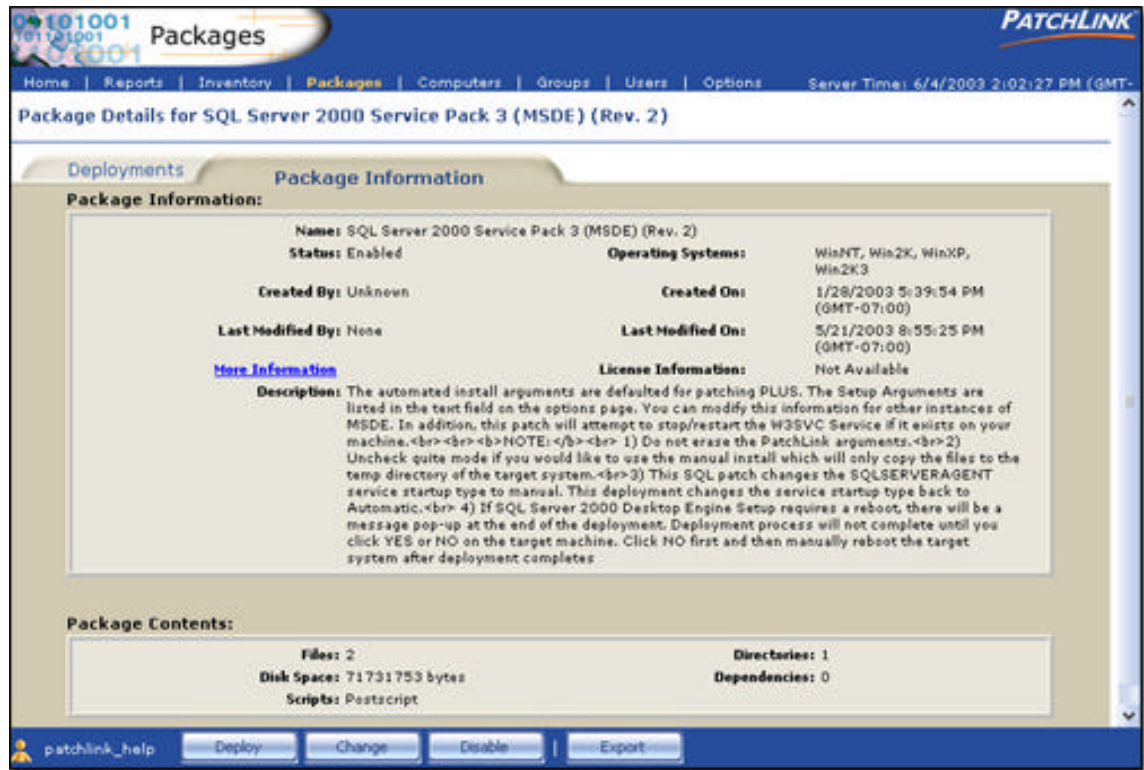
8.11.3 Export

Export the deployment status and details to a comma-separated value (CSV) file. The order of the data is based what the view is sorted on.

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8.12 Package Information

Click on the Information tab to display the information about the distribution package. The Information section is broken down into two sections: Package Information and Package Content.



8.12.1 Package Information

- ? Name: This displays the name of the distribution package.
- ? Status: This displays the status of the distribution package.
- ? Operating Systems: This displays the operating system platforms that this distribution package can deploy to.
- ? Created By: This displays the user who created the distribution package.
- ? Created On: This displays when the distribution package was created.
- ? Last Modified By: This displays the user who last modified the distribution package.
- ? Last Modified On: This displays when the distribution package was last modified on.
- ? More Information: This hyperlink will bring up a browser window with a page that displays more information about the distribution package or the vulnerability.

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- ? License Information: If the distribution package requires a license to be agreed to, then this hyperlink will bring up that license page in a browser window. The license will have to be agreed to before (done when creating a deployment for it) a deployment can be created for the package.
- ? Description: This contains additional information about the distribution package or the patch contained inside.

8.12.2 Package Contents

- ? Files: This displays the number of files that are downloaded when the distribution package is deployed.
- ? Directories: This displays the number of directories that are created if they do not exist when the distribution package is deployed.
- ? Disk Space: This displays the compressed size of the distribution package.
- ? Dependencies: This displays the number of other distribution packages, which must be installed prior to this distribution in order to be deployed.
- ? Scripts: This displays the scripts that the distribution package contains.

8.13 Action Menu



8.13.1 Deploy

This creates a new deployment of the distribution package.

8.13.2 Change

This allows a PatchLink User to change the local deployment package. See [Section 9; Creating and Editing Packages: Package Editor Wizard](#) for more information.

8.13.3 Wait / Disable / Enable

Wait re-enables the package. Disable the distribution package from being able to be deployed. If the distribution package is already disabled, this button will not be displayed. Enable a distribution package so it can be deployed. If the distribution package is already enabled, this button will not be displayed. This enables the selected disabled deployments so they are now available for computer deployment agents to obtain.

8.13.4 Export

Export the deployment data to a comma-separated value (CSV) file.

PatchLink Update Server

9. Creating and Editing Packages: Package Editor Wizard

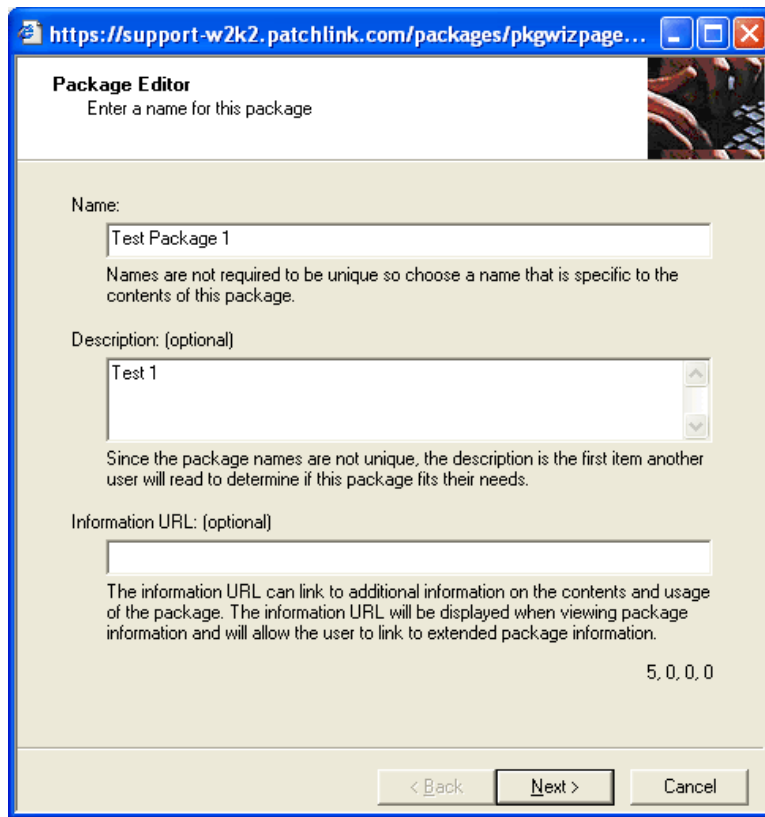
The Package Editor steps through the process of creating or editing packages.

Note s:

- ? Always test the package within your test network of computers to make sure that there are no unexpected problems before deploying.
- ? The package editor is an ActiveX control and requires Internet Explorer 5.0 or higher.
- ? If the Package Editor control has not already been installed on the local browser, it will be downloaded and installed. Once the package editor control has been installed, it will not be downloaded again.

9.1 Create or Edit Package

From the **Packages** homepage, click the **Add** button (or the Edit button if you wish to change a previously created package) on the **Action Menu**. The package editor screen is initialized.



Package Editor
Enter a name for this package

Name:

 Names are not required to be unique so choose a name that is specific to the contents of this package.

Description: (optional)

 Since the package names are not unique, the description is the first item another user will read to determine if this package fits their needs.

Information URL: (optional)

 The information URL can link to additional information on the contents and usage of the package. The information URL will be displayed when viewing package information and will allow the user to link to extended package information.

5, 0, 0, 0

< Back Next > Cancel

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9.1.1 Screen Functions

? Skip

The **Skip the Introduction** checkbox will determine if the Introduction page will be displayed each time the wizard is accessed. Click in the checkbox to prevent the Welcome screen from appearing the next time the Package Editor Wizard is initialized.

? Back

The **Back** button is disabled since this is the first page of the wizard. In subsequent screens, the **Back** button will initialize the previous screen.

? Next

The **Next** button initializes the wizard's next screen.

? Cancel

The **Cancel** button closes the wizard.

9.1.2 Name:

Enter a name or title for your package. The name is required and you will not be able to move to the next page of the wizard until a name has been entered. Make your package names descriptive but short and remember that two or more packages may have the same name. You may change this name at a later time by modifying this package.

9.1.3 Description:

An optional description allows you to specify further information about the package. A good practice would be to add additional information as the package is modified, or to provide cautions and/or warnings to the potential user.

? Deployment Options:

To include a deployment option to indicate a manual installation of the patch is required, please type in (***manual install***) in the description field.

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A number of additional deployment options are available here by including them in with the flags delimiter. To add these, add (**PLFlags: flag list goes here**) to the description field.

- y Perform an uninstall (can be used with -m or -q)
- f Force other applications to close at shutdown
- n Do not back up files for uninstall
- z Do not restart the computer when the installation is done
- q Use quiet mode, no user interaction is required
- m Use unattended Setup mode
- l List installed hotfixes
- 1 Force the script to reboot when the installation is done
- 2 The installer may reboot
- yd This option (uninstall) is available on the deployment wizard
- fd This option (Force other applications to close) is available on the deployment wizard
- nd This option (Do not backup) is available on the deployment wizard
- zd This option (do not restart) is available on the deployment wizard
- qd This option (quiet mode) is available on the deployment wizard
- md This option (unattended mode) is available on the deployment wizard
- ld This option (list mode) is available on the deployment wizard
- 1d This option (force reboot) is available on the deployment wizard (and it is controlled by the script)
- PLDO Deploy only, do not run the script just drop the files
- PLNP Do not show a popup to the user

Notes

- ? Many setup and installation packages are different and thus, the above flags are likely to change from package to package.
- ? To add different flags, simply type in their code. There is an input box available in the deployment wizard to allow the user to see the flags not displayed above.

9.1.4 Information URL

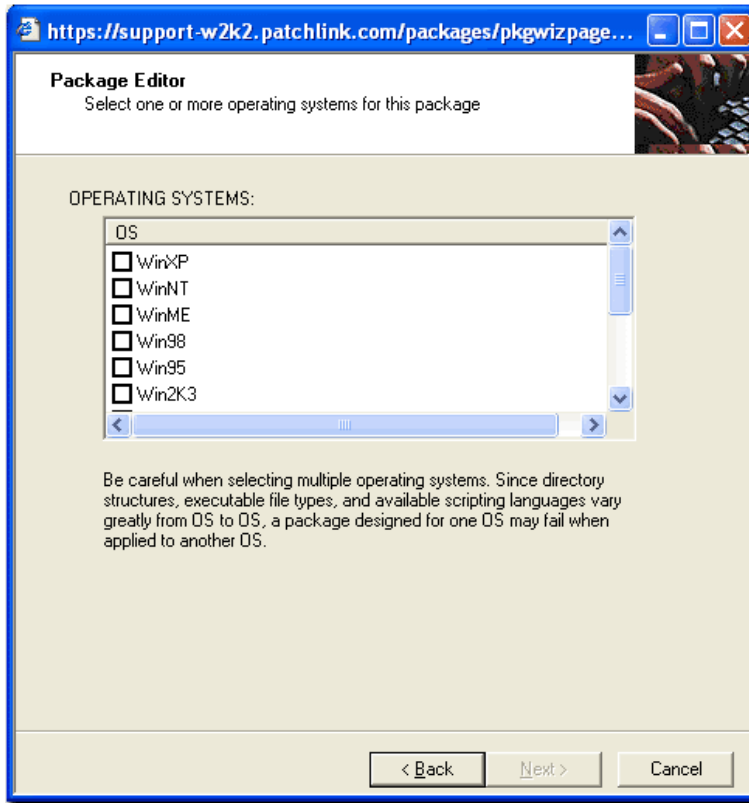
The optional information URL can link to additional information on the contents and usage of the package. The information URL will be displayed when viewing package information and will allow the user to link to extended package information.

Click on the **Next** button to initialize the wizard's next screen, which allows you to select operating systems

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9.2 Operating Systems

The Operating Systems screen allows you to select which Operating Systems you wish to deploy the package to.



To select an Operating System, click in the checkbox to the left of the Operating System name. You can not click on the **Next** button until you have chosen at least one Operating System.

Note:

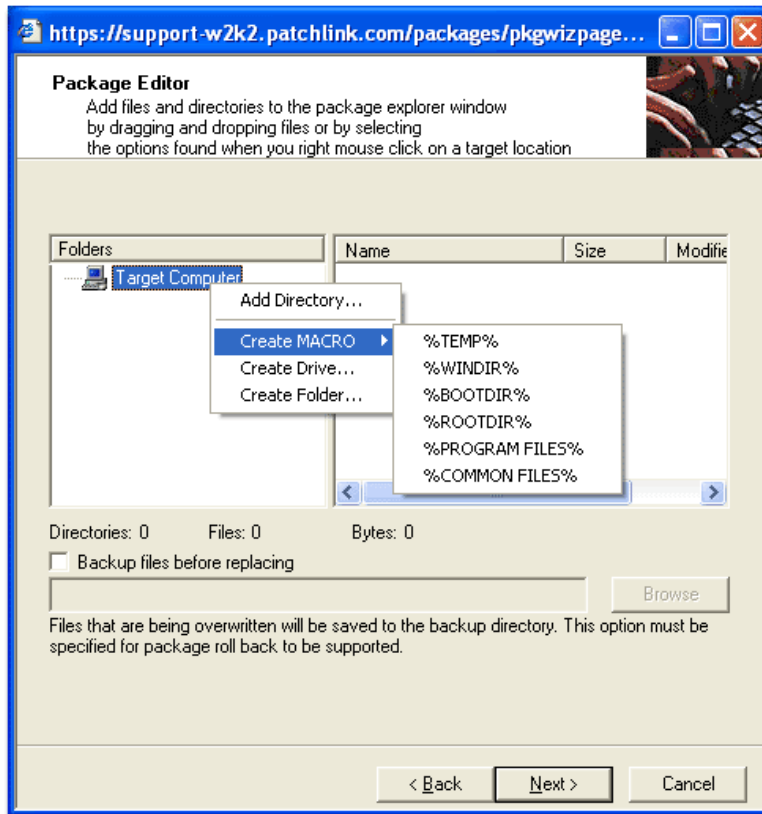
Be careful when selecting multiple Operating Systems. Since directory structures, executable file types, and available scripting languages vary greatly from Operating System to Operating System, a package designed for one Operating System may fail when applied to another Operating System.

After you have selected the operating system(s) you wish to deploy to, click the **Next** button.

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9.3 Adding Files

The File Editor screen allows you to add files to the package and describe where the files will be installed when the package is deployed to the computers on your network.



A Windows Explorer type window initializes with a directory tree on the left starting at "Target Computer" and a file list on the right. Initially, these are both empty except for the "Target Computer" in the tree view. The Target Computer folder signifies the computer(s) on which this package will be installed. It is automatically created for you and cannot be deleted.

You can begin to add files and/or directories to the package by either:

- ? Right-Mouse clicking on the "Target Computer" and selecting one of the options from the popup menu.
- ? Drag directories from a Windows Explorer or My Computer window onto the Target Computer.
- ? You can also drag files from a Windows Explorer or My Computer window onto any drive or directory in the tree view or into the file list.

Note:

We recommend using the temp directory when delivering the package to your target computer. The files will be deployed to %systemroot%\temp directory (c:\winnt\temp on Windows 2000 Computers).

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Once the files you want in the package have been added, or while you are adding them, you can create the directory structure for the package. You can right mouse click on most of the items in either window for options on adding, renaming, or deleting items. You can also drag and drop items from one place on the tree to another or from one window to another in much the same way you would in Windows Explorer. The Right-Mouse Click options are:

9.3.1 Add Directory

This option will bring up a file system browse window, where you can select which directory you wish to add. This option is always available.

9.3.2 Add Files

This option will bring up a file system browser window, where you can select which files you wish to add. This option only becomes available once there is a directory level created (or added) under Target Computer.

9.3.3 Create MACRO

You may create Folders from what are referred to as Macros. Any macro name can be created by placing matching % sign's around a word when using the **Create Folder** option. The file editor allows you to create common macros by using the **Create Macro** option when right-mouse clicking on the Target Computer. Macros can be environment variables that are defined in the System Environment or special macros that only the Client Agent can expand. The following are a few examples of common macros:

<code>%TEMP%</code>	The <i>operating system</i> temp directory location. <code>%TEMP%</code> is a macro that is guaranteed to exist on most systems. If it's not found in the <i>operating system</i> environment then it is created. <code>%TEMP%</code> typically expands to <code>c:\Windows\Temp</code> , <code>c:\Temp</code> , <code>c:\WinNT\Temp</code> , or <code>/tmp</code> depending on <i>operating system</i> and configuration.
<code>%WINDIR%</code>	The <i>operating system</i> windows directory location. <code>%WINDIR%</code> typically expands to <code>c:\Windows</code> .
<code>%BOOTDIR%</code>	The <i>operating system</i> boot directory location. <code>%BOOTDIR%</code> typically expands to <code>c:\</code> .
<code>%ROOTDIR%</code>	The <i>operating system</i> root directory location. <code>%ROOTDIR%</code> typically expands to <code>c:\</code> .
<code>%PROGRAM FILES%</code>	The <i>operating system</i> program files location. <code>%PROGRAM FILES%</code> typically expands to <code>c:\Program Files</code> .
<code>%COMMON FILES%</code>	The <i>operating system</i> common files location. <code>%COMMON FILES%</code> typically expands to <code>c:\Program Files\Common Files</code> .

Not all macros are available on all *Operating Systems*. Please only choose the macros that are available for the operating systems and configurations you are using. This option only becomes available on the directory level directly under *Target Computer*.

9.3.4 Create Drive

If your standard computer installation uses drives other than `C:\` or this package will be deployed to computers that use drives other than `C:\`, you can add drives to the package by right mouse clicking on the Target Computer and selecting the Create Drive option. Once the drive is created you can drag and drop the files or folders as needed to create the correct directory structure.

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9.3.5 Create Folder

This option brings up an input window. This window allows you to type in the directory name you wish to create. This option is always available.

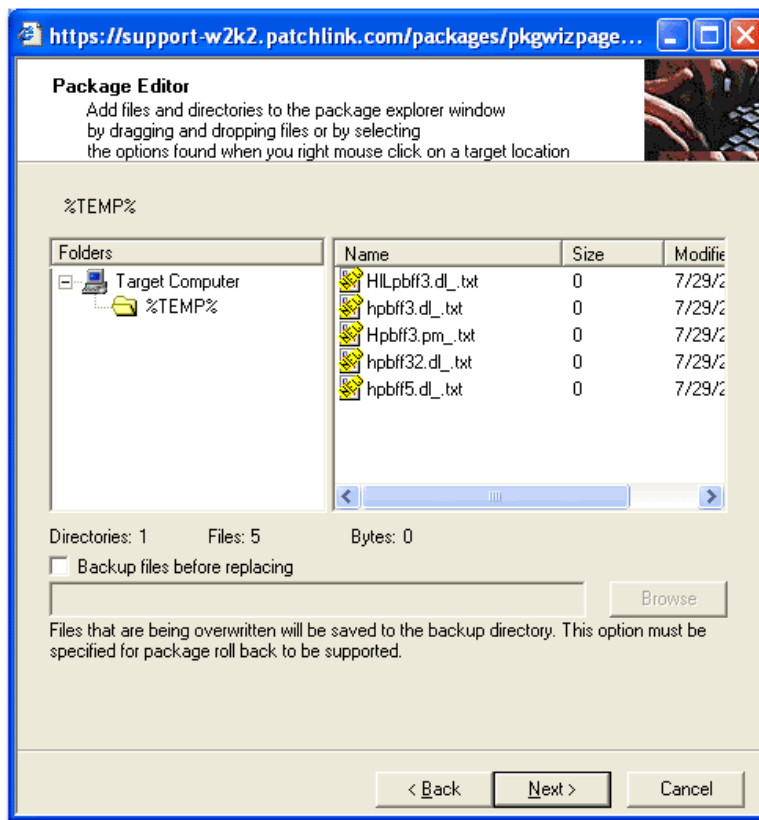
9.3.6 Delete

This option will delete the directory or file you have right-mouse clicked on. This option is only available on directories or files under the Target Computer.

9.3.7 Rename

This option will rename the directory or file you have right-mouse clicked on. This option is only available on directories or files under the Target Computer.

You may place files in any Drive, Folder, or Macro Folder you create. You can rename any file or folder. The package editor will keep track of where the original files were found. No changes will be made to the path names or file names on the computer on which the package editor is running as you are building a representation of where the files will be installed when the package is deployed.



Note:

Please delete all directories that you do not want installed when the package is deployed as the empty directories will be created on the target computer.

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9.3.8 Backup Directory

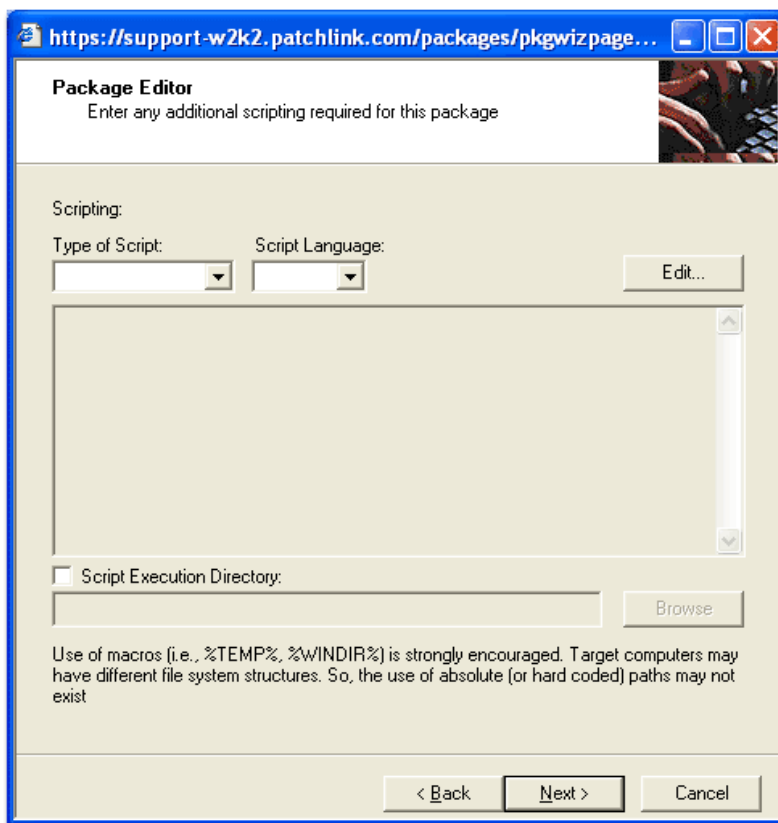
Select "Backup files before replacing" if you wish to create a backup of the files that you are adding to the package. With a backup enabled, when the agent downloads a file it will check to see if the file already exists on the machine. If it does exist the agent will first copy the original file to the backup location then replace the file with the new version from the package. Enter the backup directory path in the text box below the option or use the *Browse* button to search for the path.

Click on the **Next** button to initialize the wizard's next screen, which allows you to create scripts to run at deployment time

9.4 Create Scripts

The Create Scripts screen allows you to create scripts that will be run on the computer during the deployment process. A software package can have up to three scripts, one of each type. Scripts are executed in the follow sequence:

- ? Pre-Script
- ? Files are downloaded and copied to target locations
- ? Command Line Script
- ? Post-Script



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9.4.1 Script Types

? Pre-Script

The Pre-Script can be used to test for a condition of the machine, shutdown a service, etc. For example; you can stop the package rollout in the pre-script by using the SetReturnCode in the PLCCAgent script object. Pre-Scripts can take the form of VBScript or JScript.

? Command Line

Command Line Scripts are often used to launch executables. The format is the same as a standard CMD or BAT file.

? Post-Script

Post-Script can be used for any clean-up operations, delete files, start services, run a installer, etc. Post-Scripts can take the form of VBScript or JScript.

9.4.2 Script Editor

? Script Type

Select the type of script you would like to execute from the Type of Script dropdown box.

? Script Language

Select scripting type from the Script Language dropdown box.

? Script Execution Directory

Select Script Execution Directory if you want your script to run somewhere other than the default location. Enter the backup directory path in the text box below the option or use the **Browse** button to search for the path.

? Edit Script

Click the **Edit** button. This will display the Script Editor dialog.

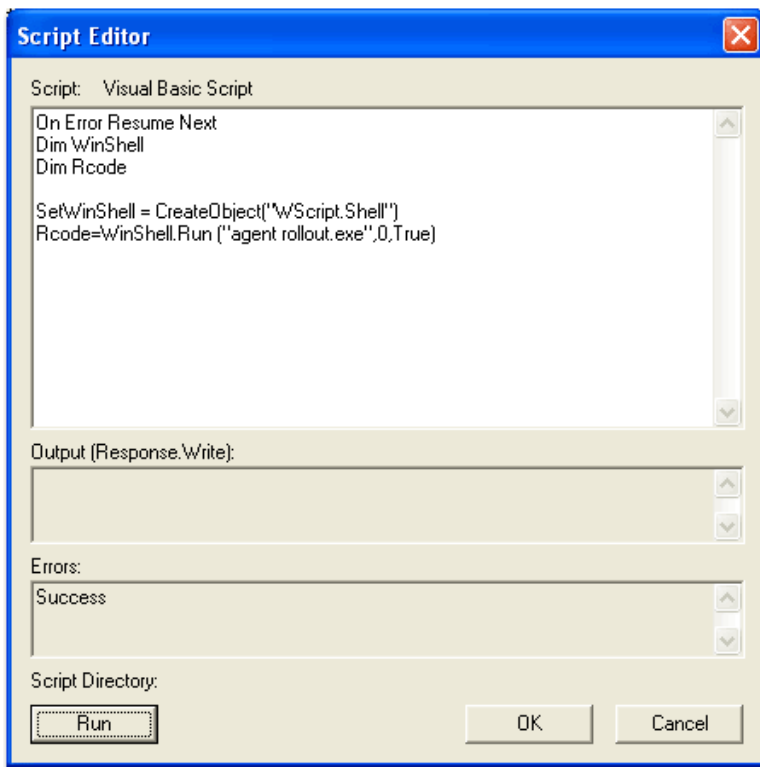
Note:

We recommend using a VB Script to tell the agent what to do with the package.

Click the **Edit** Button to create your script.

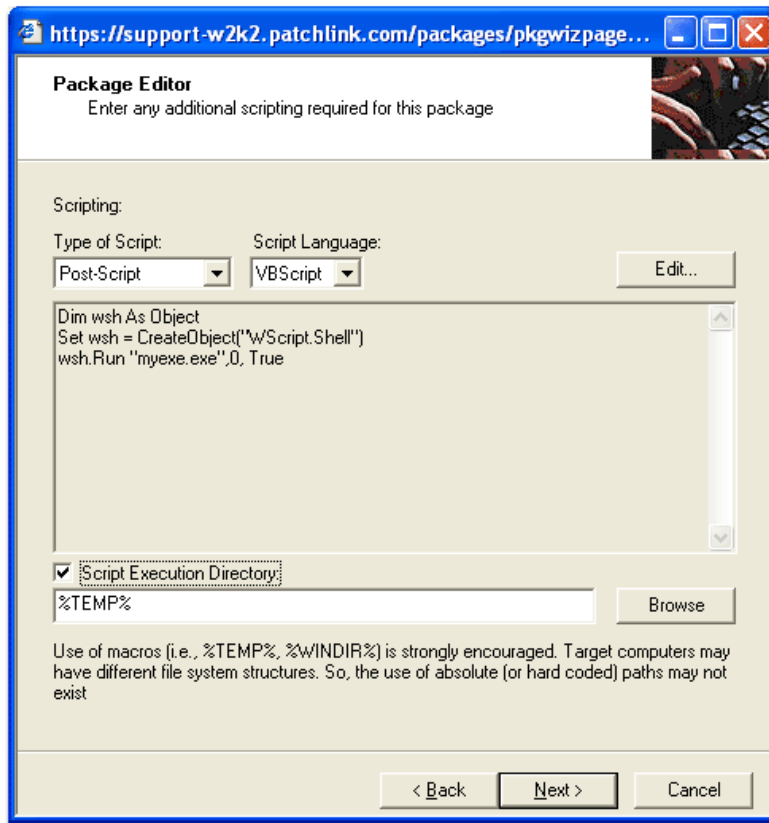
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Here is a simple VB Script below that will just execute the package once the package gets delivered to the target computer.



Test the script by click the **Run** button on the bottom left corner. View the **Errors** field: If the results read "success," click the **OK** button to close his window and the **Next** button to initialize the next window. If you get a failure message, correct your script until a success message is achieved.

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Click the Next button to initialize the wizard's next screen, which allows you to select package dependencies.

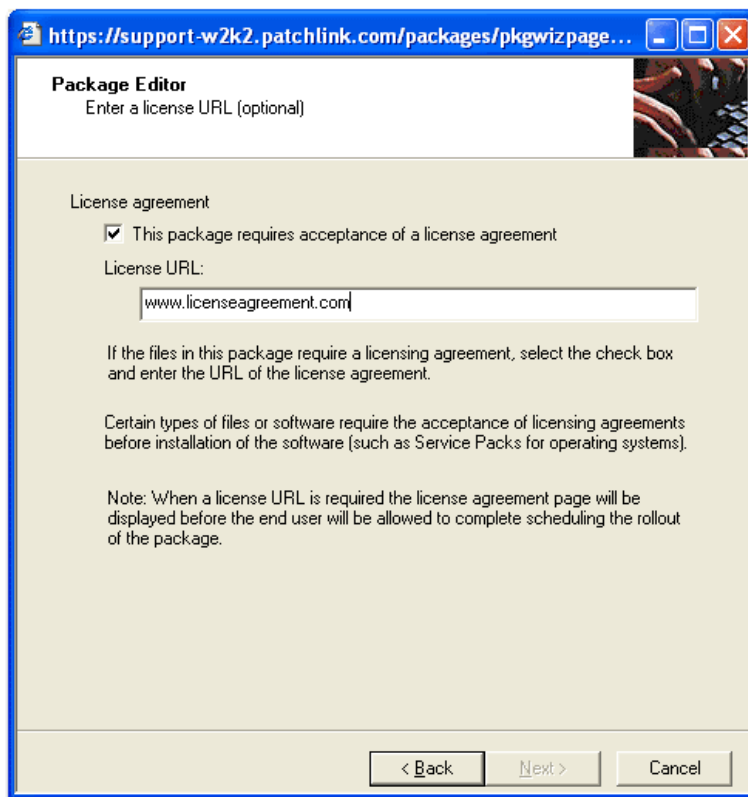
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9.5 License URL

The License Agreement screen allows you to enter in an optional License URL, which can link to licensing information for the contents of the package.

This is not normally used for packages that are in-house file distributions. It is primarily for packages containing items such as operating system service packs, device drivers, etc. The License URL will be displayed when viewing package information and will allow the user to link to the license information.

Simply select the License Agreement checkbox and type in the URL destination address of the License Agreement.



When scheduling a deployment of the package, the license page will be displayed, and the end user will be required to click the Accept button to complete scheduling the deployment.

After entering the License URL (optional), click the Next button to initialize the wizard's next screen, which is a summary of the package.

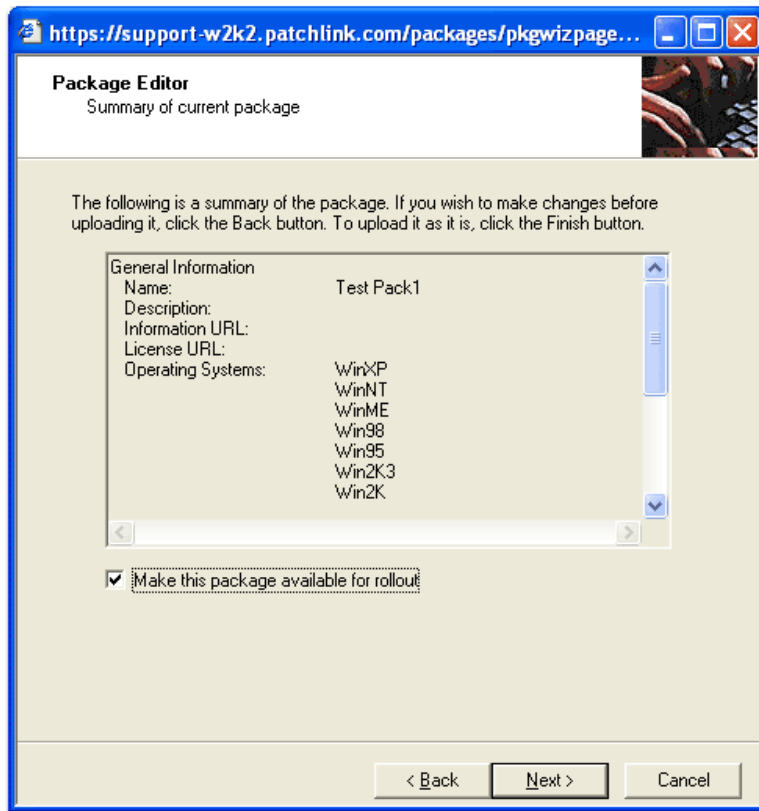
Note:

If you select the License Agreement checkbox, you must type in the URL destination address of the License Agreement to initialize the **Next** button.

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9.6 Summary

The Summary screen displays a simple summary of the package before the package created or the changes are committed.



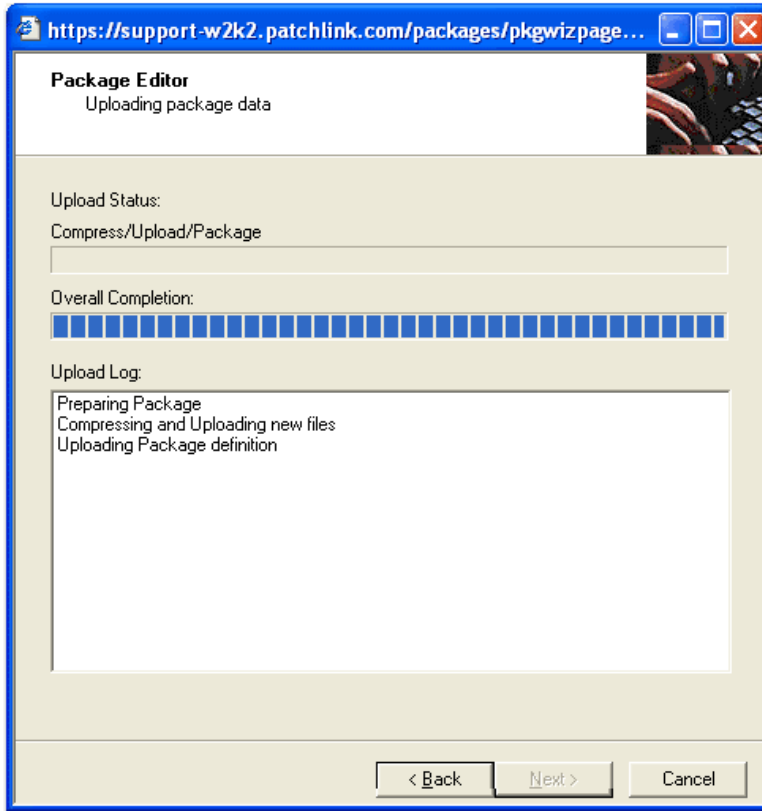
Selecting the **Make this package available for rollout** checkbox, will enable the package to show up in the list of available packages / available for deployment (once the package is created). You may wish to de-select this item if you are creating a skeleton package that will have additional files or details added at a later date or do not wish to have the package scheduled for deployment at this time.

Click the **Next** button to initialize the wizard's next screen, which will commit the changes, create the package, and upload the package data.

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9.7 Upload

The Upload screen appears verifying that the data is unpacking and uploading.

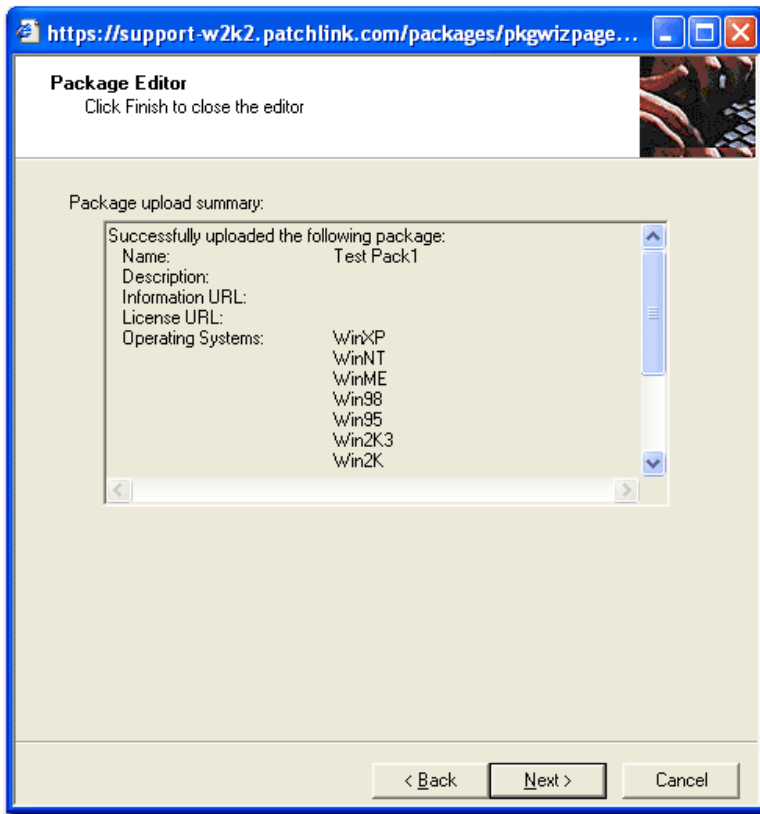


Once the Upload is complete, the **Next** button will initialize. Click the **Next** button to initialize the Updated Summary screen.

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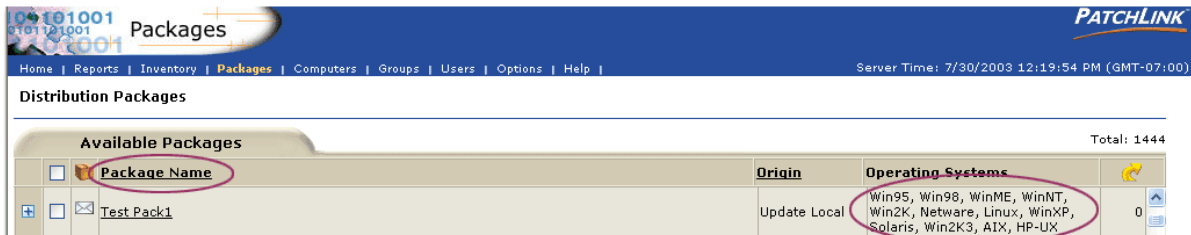
9.8 Updated Summary

The final screen displays a simple summary on the saving of the package, and whether it was successful or failed. If a failure occurred, the error code and description will be displayed.



Click the **Finish** button to close the wizard and complete the operation.

Upon refreshing of the **Packages** page, you can view your package by the name you gave it upon creating it, and view the operating systems that you chose to deploy to during the patch building process.



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10. Deploying Packages: Schedule Deployment Wizard

Use this section in congruence with [Section 8: Packages](#), as Section 8 describes the intricacies of packages, deployments, events and statistics, while Section 9 focuses on the physicality of the actual package deployment.

After the PLUS is installed and agents are deployed, it is necessary to conduct some analysis of the vulnerabilities present within the computers on your network.

When conducting initial remediation, it is wise to begin with service packs and cumulative patches first, as this will significantly decrease the number of individual patches that need deployment.

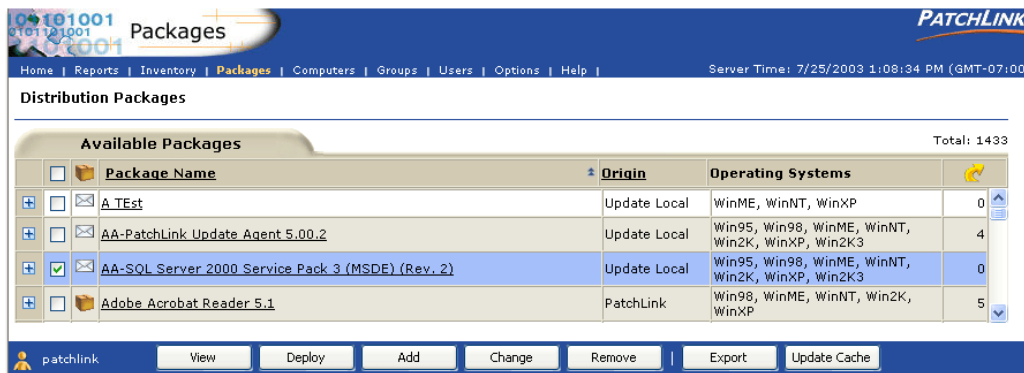
Once the necessary computers are fully patched, it will only be necessary to deploy the new patches that are made available each week.

The Deployment Wizard steps through the process of selecting computers that will receive that package, select a one time or recurring deployment, and select the date and time to deploy the package.

Note:

Always test the package within your test network of computers to make sure that there are no unexpected problems before deploying.

Select the patch you wish to deploy by clicking on the bulletin hyperlink.

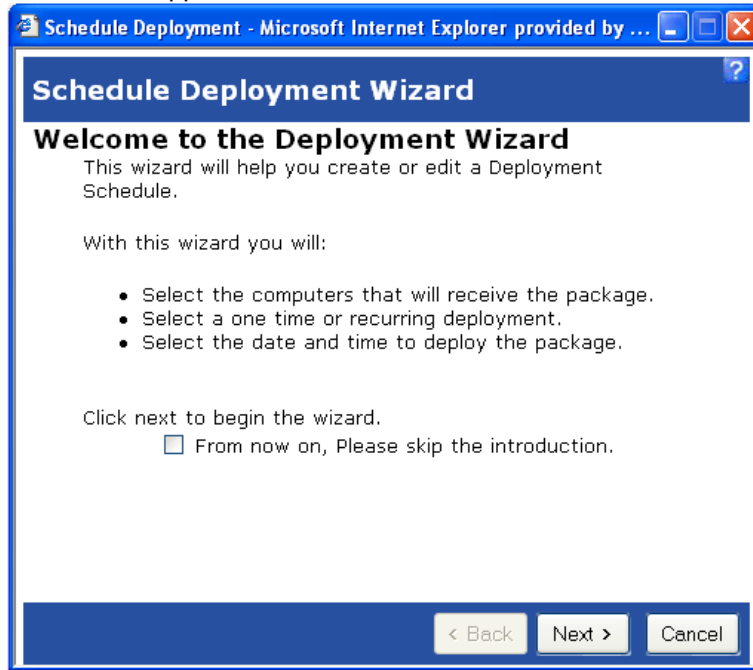


From the list of computers that require this patch, click the checkbox next to the item to select, and click on the **Deploy** button to launch the **Schedule Deployment Wizard**

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10.1 Welcome

The welcome screen appears.



10.1.1 Screen Functions

? Skip

The Skip the Introduction checkbox will determine if the Introduction page will be displayed each time the wizard is accessed. Click in the checkbox to prevent the Welcome screen from appearing the next time the Schedule Deployment Wizard is initialized.

? Back

The **Back** button is disabled since this is the first page of the wizard. In subsequent screens, the **Back** button will initialize the previous screen.

? Next

The **Next** button initializes the wizard's next screen; the package selection page. This screen will appear if you have not previously selected something to deploy. If you have selected a vulnerability report or package, then the next button will take you directly the next screen; the individual computer and computer group selection page.

? Cancel

The **Cancel** button closes the wizard.

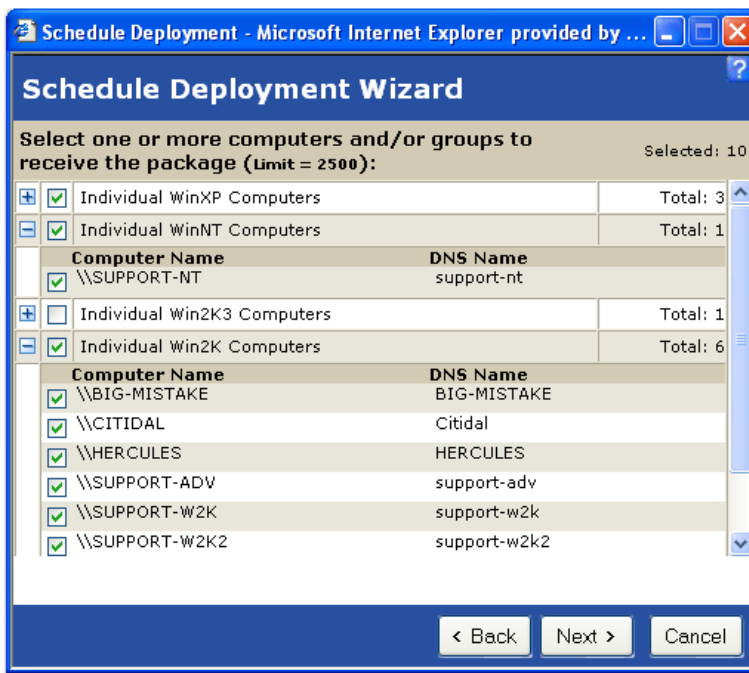
Click the **Next** button to initialize the **Package Selection** screen.

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10.2 Package Deployment Target Selection Actions

This screen displays a list of all individual computers and computer groups that you can deploy to based upon:

- ? The operating system supported by the package or vulnerability report being deployed.
- ? The agents which the vulnerability report are applicable to (only if deploying a vulnerability report).




In addition to the individual computers and system-created computer groups, there is a list of all the user created computer groups present on the PatchLink Update Server. For system and user based group deployments, the determination of which member computers get the deployment is only determined at the start of the deployment.

Initially, the operating systems, the system groups and the user groups are displayed along with the total number of client agents associated with each of them.

To select all computers of a given operating system, click in the checkbox next to each operating system category. (Limit = 2500)

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Click the  to display and select additional or individual computers within a group. All of the computers for that category will be displayed by computer name and DNS name. Hovering the mouse over the computer name will display the description and hovering over the DNS name will display the IP address. If there is no DNS name provided, the IP address will be displayed.

A deployment requires that at least one computer is selected. The wizard will not advance to the next step until at least one computer is selected. If the wizard is being used to deploy a package associated with a report, then the computers that were selected from the report page will be selected automatically.

At the top right corner of the wizard, the total number of selected computers will be displayed.

If launching the deployment wizard from the report page when the report does not have a package associated with it, it will be possible to select a package or packages that do not cover all of the operating systems of the computers. In this case, only the computers that match the operating systems of the package will be added to the deployment.

Note s:

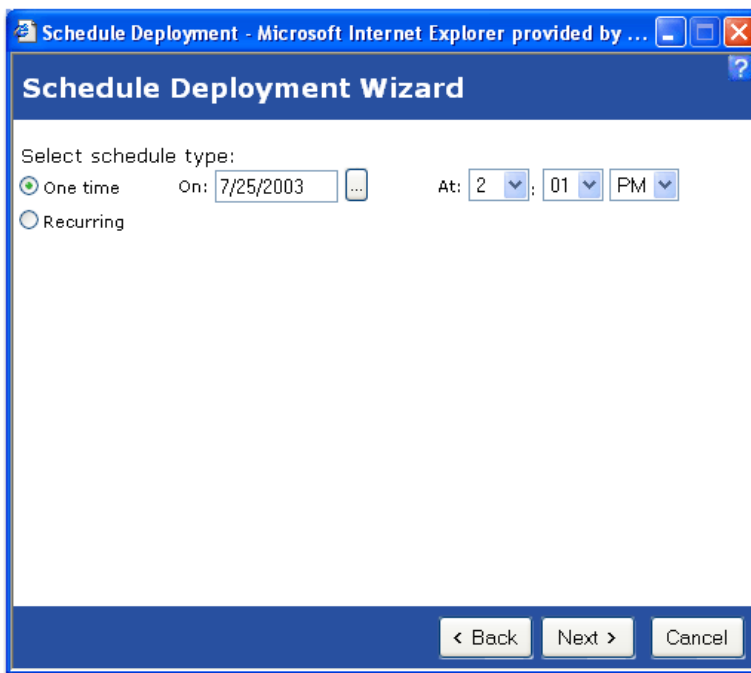
This screen does not show up if you have previously selected the package or vulnerability report to deploy.

Selecting the checkbox selects all computers in the group.

Click on the **Next** button to initialize the **Deployment Schedule** screen.

10.3 Deployment Schedule

The Deployment Schedule screen contains scheduling information.

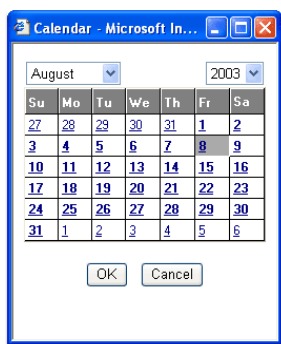
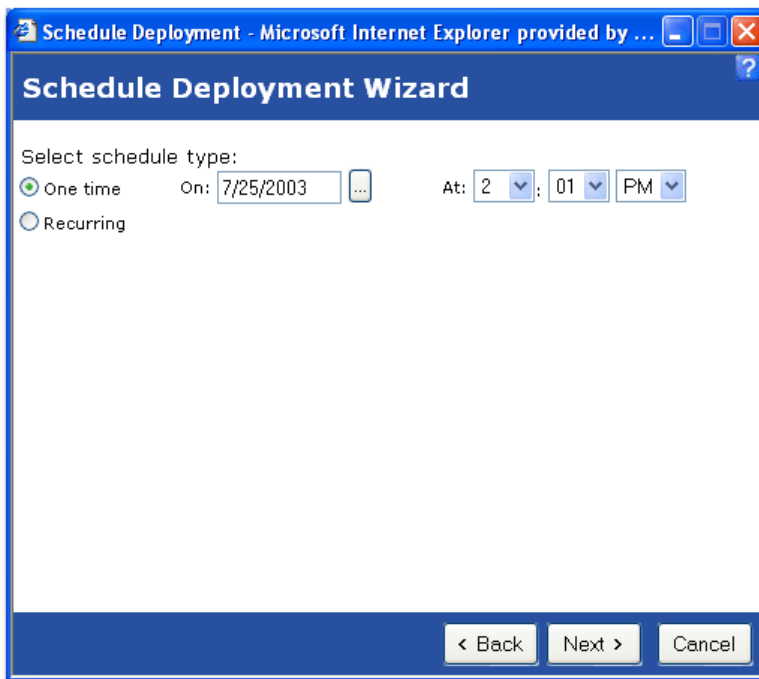



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Schedules can be one of the two types:

10.3.1 One Time: (Default)

A one time schedule will start deployments on the selected day at the selected time. If a one time deployment is scheduled for a date and time in the past, then the computers will start the deployment the next time they contact the PatchLink Update Server.

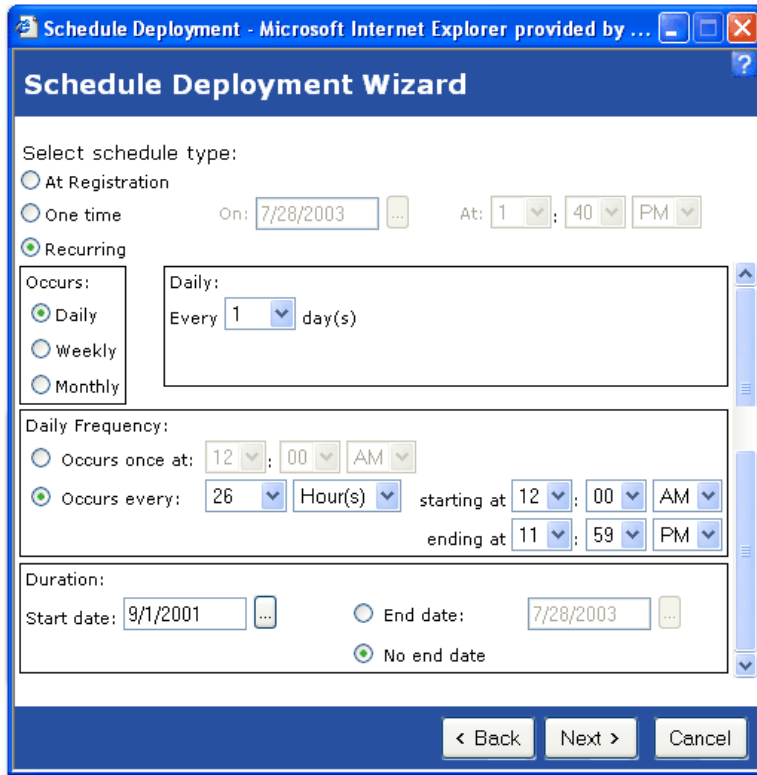


Click on the Calendar Launch Button  to initialize the calendar and set the desired date. Click on the hour, minute, and AM/PM drop down menus to select the desired time.

10.3.2 Recurring

A recurring task will start on the given start date and will occur at the given interval and will stop if a stop day is specified. Click on the radio button to initialize the recurring task window.

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Recurring deployments can be scheduled to occur either:

- ? Daily
- ? Weekly (You can choose the days in a week when you want the task to recur.)
- ? Monthly You can choose from a day number in a month (first day in the month's chosen) or a day in a week of every month (first Monday in the month's chosen)

Each of these can also be scheduled to occur at a specific time during the day or recurring several times during the day at a given interval and between certain hours. Finally each of these can be scheduled to end on a given day or continue with no ending date.

- ? At Registration

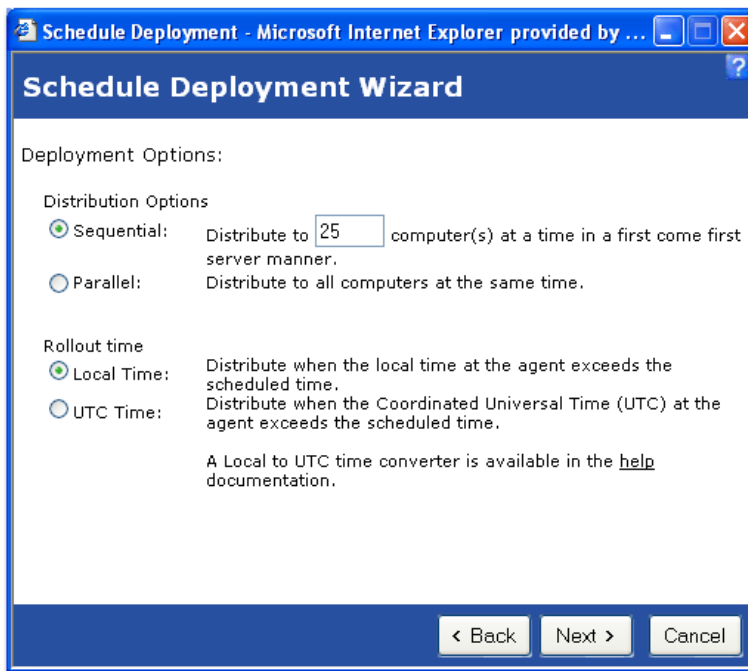
An "at registration" task is only valid for System Packages and will run when a client agent registers at the server. The "at registration" option is only shown for System Package distributions.

After you have made or modified your schedule selections, click the **Next** button to initialize the **Deployment Options** screen.

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10.4 Deployment Options

A deployment has two very distinct sets of options to define how the deployment is going to behave. These sets of options are: Distribution and Rollout Time.



10.4.1 Distribution Options

? Sequential

Only deploy to a maximum number computers at a time, on a first-come first-serve basis. The maximum limit is configurable for all deployments and is defaulted to 25 computers. If a computer takes longer than an hour to complete the deployment, it is no longer counted against the limit (example: the computer may have been turned off). As computers finish the deployment other computers will begin to receive the deployment, as long as the maximum number is not exceeded.

A sequential deployment will both limit the bandwidth required from the server and infrastructure, as well as halt the deployment should an error occur to a bad patch or other deployment problem.

? Parallel

Deploy to all computers as they communicate with PLUS to get their next deployment

Use the parallel option if bandwidth is not a consideration, and automatic halt features are not required.

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10.4.2 Rollout Time Options

A deployment will only be given to a computer when the computer's given time has exceeded the start time of the deployment.

? Local Time

Local time will vary depending on the time zone of your location (daylight savings time may apply). When the computer communicates with PLUS, the local time of the computer is checked to see if there are any deployments available. If you have three computers (each in their own time zone) that communicate with PLUS at the same time, each start the deployment when their local time has exceeded the start time of the deployment. Simply put, they will each start the deployment at different times with respect to PLUS.

? UTC Time

Coordinated Universal Time (UTC), is a standardized measurement of time that does not depend on your local time zone. The time in one geographical location is exactly the same time in another. UTC is also known as World Time, Z Time, or Zulu Time. When the computer communicates with PLUS, the UTC time of the computer is checked to see if there are any deployments available. If you have three computers (each in their own time zone) that contacted PLUS at the same time, each will start when the UTC time has exceeded the start time of the deployment. Simply put, they will each start the deployment at the same time with respect to PLUS.

Notes:

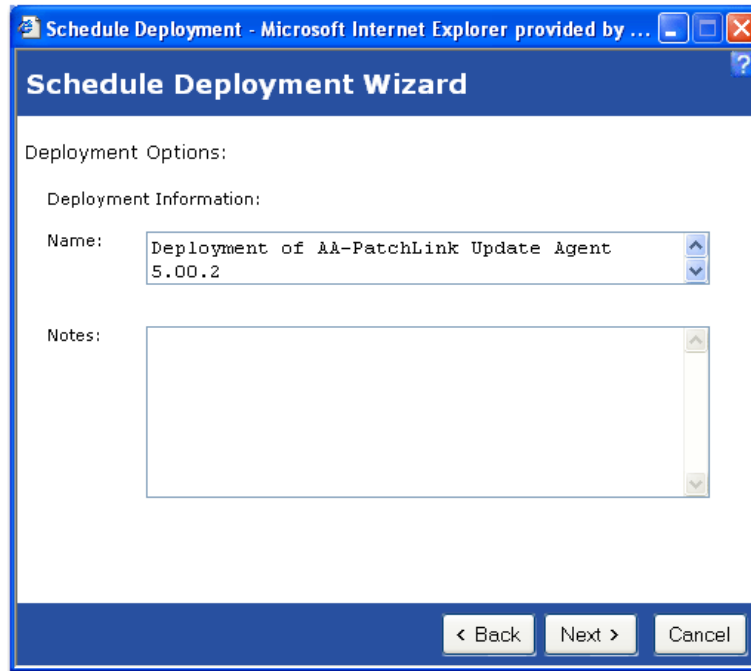
- ? The start time for both of these deployment types depend on the time given by the computer; so the accuracy of the computer's internal clock is important. Hence, when a computer's internal clock is slow, fast or incorrectly set, the scheduled start time of the deployment for that computer is affected.
- ? Deployments created to a group will always default the time to UTC since the determination of which members of the group get the deployment is not calculated until the start of the deployment.

After you have made your option selections, click the **Next** button to initialize the **Deployment Information** screen.

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10.5 Deployment Options

The **Deployment Options** screen initializes. Here you can select additional deployment options, notes, or details.



- ? Name: This is the name given to this deployment. The name given should be descriptive enough to summarize the deployment. This is required.
- ? Notes: This includes any additional information about the deployment that you want to note down like the expected results of this deployment, the effect that this deployment can have on any future deployments.

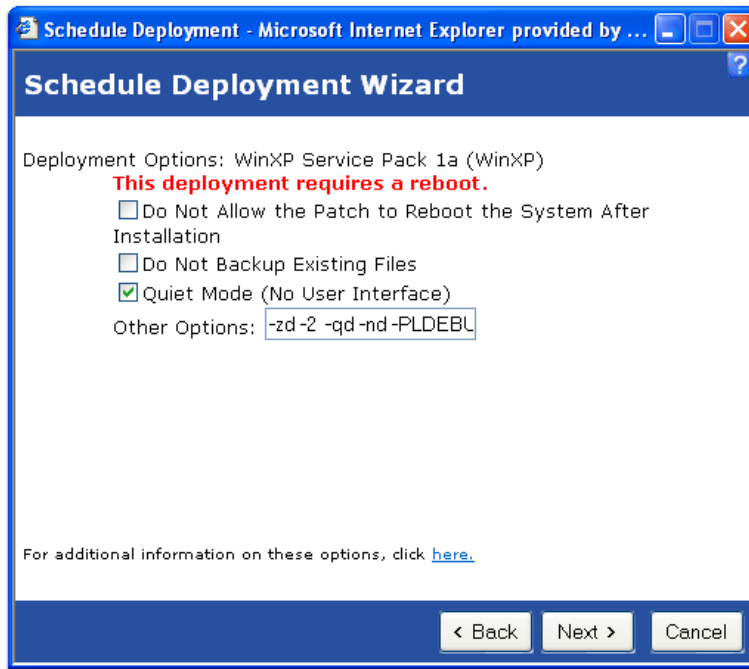
If there are no package flag options to choose from for the item you are deploying, clicking the **Next** button initializes the License Agreement Page **or** the Deployment Information Page, depending if there is a license agreement for what you are deploying.

Click the **Next** button to initialize an additional Deployment Options screen.

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10.6 Deployment Flags

Deployment options include options related specifically to the installation process during the deployment. The deployment comes pre-configured with these options to optimize the deployment's performance. These options are selected based on the behavior of the package's installer program and previous testing by PatchLink personnel. If more than one deployment package is available for deployment, then there will be multiple screens that you must go through to verify these options. These deployment options are placed in to a variable used by the deployment's post script.



10.6.1 Hotfix Setup Programs

See [Microsoft Windows 2000 Hotfix Installation and Deployment Guide](#) for additional information on Microsoft specific command-line parameters for Hotfix Setup Programs. These options are:

- ? **This deployment requires a reboot.**
This item shows up only if the package which is being installed may require a reboot of the operating system in order to finish the deployment. This reboot function is not controlled by the deployment script, but can be turned off by selecting the **Do Not Reboot** checkbox
- ? Uninstall
This option will tell the package's installer to uninstall the package from the selected computers.

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Note:

If multiple packages replace the same file and you want to successfully return your system to its original state, you must remove the most recently installed package first.

? Force Applications Close

This option will tell the package's installer to force all applications to close when the computer is in the shutdown process.

? Force a Reboot

This option will tell the deployment script that a reboot *must* be performed before this deployment is complete.

Notes:

? The script is controlling the reboot in this situation and a reboot will occur regardless if the installer requires it or not.

? This option can not be selected if the Do Not Reboot option is checked.

10.6.2 Do Not Reboot

This option will tell the package's installer to not reboot once the package is installed on to the computer. If the notice that the deployment requires a reboot is shown it is recommended that you do not select this option. If this option is selected anyway, do NOT install any additional programs until a reboot happens. Do not expect the package to be available until a reboot occurs, since many installations require a reboot to finish the installation process.

Note:

This option can not be selected if the **Force a Reboot** option is checked

10.6.3 Do Not Backup Existing Files

This option will tell the package's installer to not backup the existing files. These files are used by the uninstaller. Do not select this option if you wish to uninstall the package at a later time.

The installer controls this action and should not be confused with the deployment backup option, which will only back up the deployment package (not the installed files from the package).

10.6.4 Quiet Mode (No User Interface)

This option will tell the package's installer to function in quiet mode. This mode will not produce any user interfaces (in case any user is logged on to the computer at the deployment time) or require user interaction during the deployment process.

10.6.5 Unattended Setup Mode

This option will tell the package's installer to function in unattended mode. This option does not require any user interaction during the deployment process.

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10.6.6 List Installed Hotfixes

This option will tell the package's installer to return a list of installed hotfixes on the computer.

Note:

The Detection Agent and Inventory function provide an additional, more in-depth, listing of what is installed on a computer.

10.6.7 Other Options

This field will display the list of other extra flags that may be used for the specific deployment, but are not generic enough for all deployments to allow it to be added as a separate flag. Generally this is used for customer deployments or special case scenarios.

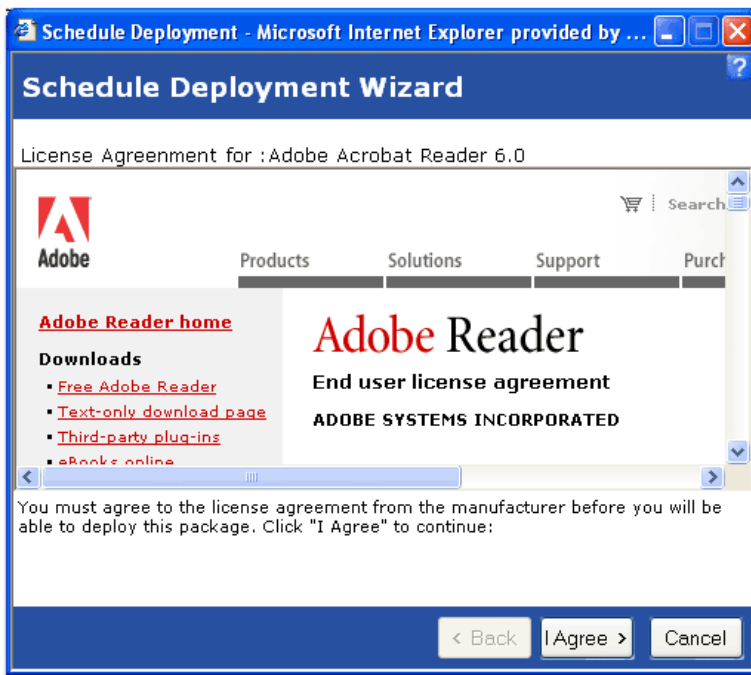
Note:

The -2 flag is often found here to indicate that the deployment's installer program may require a reboot depending if the operating system requires it.

Click the **Next** button to initialize the wizard's next screen, which handles license validation if this package requires one. If the package does not require a license validation, the **Next** button initializes the wizard's next screen, which allows you to define some deployment information.

10.7 Schedule Deployment Wizard: License Information

The Deployment Wizard License Information page is displayed only when a license URL is associated with the package being deployed. It will show the license URL in an imbedded frame.

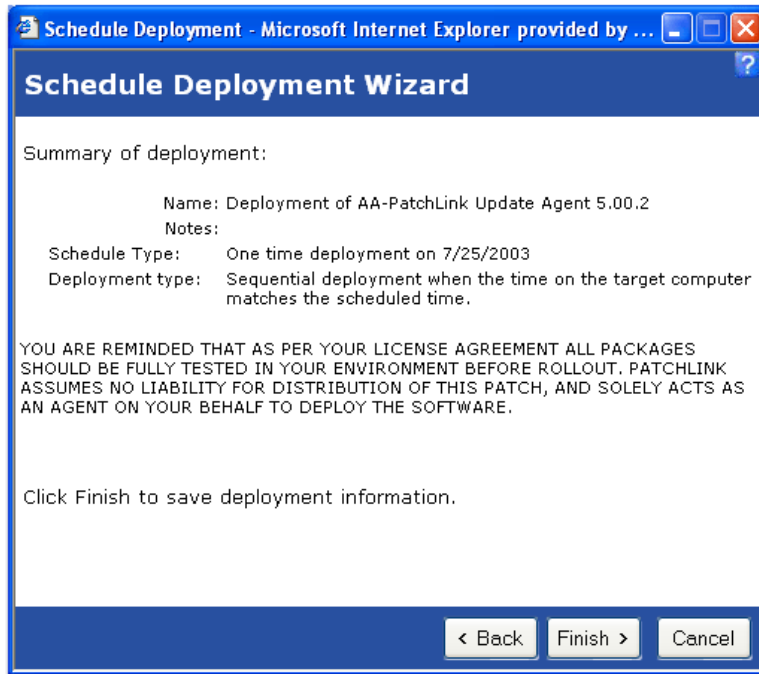


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Click the **I Agree** button to accept the terms and initialize the wizard's next screen, where you can define some deployment information

10.8 Summary

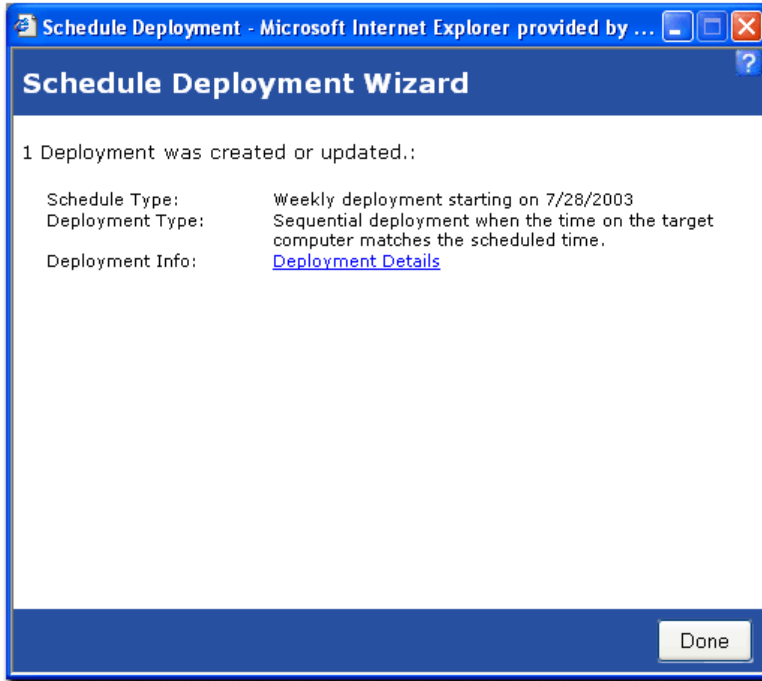
The Deployment Verification displays a simple summary of the deployment to be initialized. If any of this information is incorrect, press the **Back** button to change the values. If everything is correct, press the button **Finish** to have the wizard create the deployment.



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10.9 Verification

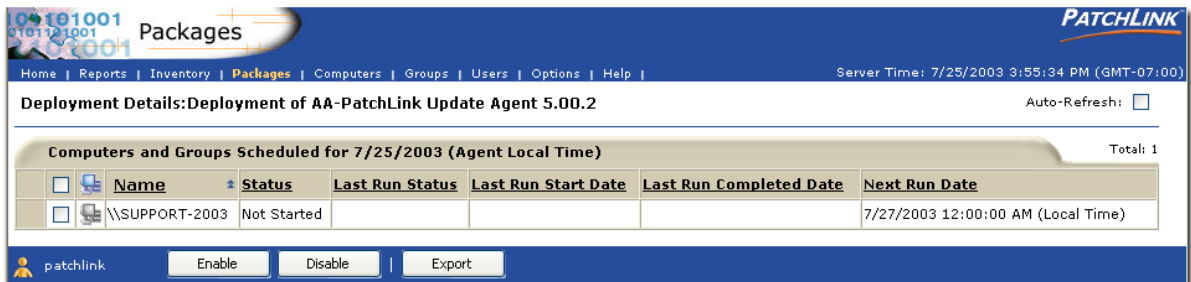
The verification screen displays the results of the deployment creation process.



10.9.1 Screen Functions

- ? Done
Closes the wizard and initializes the Deployment Details screen
- ? Deployment Details Link
Provides details of the deployment

Upon selection of the **Done** button, the deployment details page automatically refreshes and displays the assigned computers and groups and the status of the deployment for each. To view the group membership results for the deployment, click on the name of the group.



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10.10 Package Deployments Security

The package deployments section of PLUS requires the [View Deployment Status](#) access right. If a user does not have the [correct](#) access, the access denied error message is displayed.

To be able to view the information about a distribution package requires the [View Packages](#) access right. If a user does not have the correct access, the hyperlink on the [Information](#) tab is not enabled.

To be able to create a deployment for the distribution package requires the [Deploy Packages](#) access right. If a user does not have the correct access, the [Deploy](#) button is disabled.

To be able to change, disable, enable, abort or remove a deployment(s) requires the [Manage Deployments](#) access right. If a user does not have the correct access, the [Change](#), [Disable](#), [Enable](#), [Abort](#) and [Remove](#) buttons are disabled.

To be able to change the deployment of the [Discover Applicable Updates System Task](#) requires the [Manage System Tasks](#) access right. If a user does not have the correct access, they will receive a message indicating they do not have access.

To be able to export the distribution package's information to a comma-separated value (CSV) file requires the [Export Deployment Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

Contact your PatchLink Administrator for more information on [PatchLink Update Security](#).

10.11 Distribution Packages Security

The Distribution Packages section of PLUS requires the [View Packages](#) access right. If a user does not have the correct access the access denied error message is displayed.

To be able to view the deployments for a distribution package requires the [View Deployments](#) access right. If a user does not have the correct access the hyperlink on the [Package Name](#) will not be displayed.

To be able to create a deployment for a selected distribution package requires the [Deploy packages](#) access right. If a user does not have the correct access the [Deploy](#) button is disabled.

To be able to create, change or remove distribution packages requires the [Manage Packages](#) access right. If a user does not have the correct access the [Add](#), [Change](#) and [Remove](#) buttons are disabled.

To export all of the distribution packages and their information to a comma-separated values (CSV) file requires the [Export Package Data](#) access right. If a user does not have the correct access the [Export](#) button is disabled.

To cache the selected (or re-cache all of the previously cached) distribution packages requires the [Cache Packages](#) access right. If a user does not have the correct access, the [Update Cache](#) button is disabled.

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10.12 Package Information Security

The distribution package information section of PLUS requires the [View Packages](#) access right. If a user does not have the correct access, the access denied error message is displayed.

To be able to view the deployments of the distribution package requires the [View Deployments](#) access right. If a user does not have the correct access, the hyperlink on the [Deployments](#) tab is not enabled.

To be able to create a deployment for the distribution package requires the [Deploy Packages](#) access right. If a user does not have the correct access, the [Deploy](#) button is disabled.

To be able to change a local distribution package requires the [Manage Packages](#) access right. If a user does not have the correct access, the [Change](#) button is disabled.

To be able to disable or enable a distribution package requires the [Manage Packages](#) access right. If a user does not have the correct access, the [Enable](#) and [Disable](#) buttons are disabled.

To be able to export the distribution package's information to a comma-separated value (CSV) file requires the [Export Package Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

10.13 Deployments Details Security

The [Deployment Details](#) section of PLUS requires the [View Deployment Statuses](#) access right. If a user does not have the correct access, the access denied error message is displayed.

To enable and disable a deployment assignment requires the [Manage Deployments](#) access right. If a user does not have the correct access, the [enable](#) and [disable](#) buttons are disabled.

To export the deployment details data requires the [Export Deployment Data](#) access right. If a user does not have the correct access, the [export](#) button is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

10.14 Deployments Results Security

The [Deployment Results](#) section of PLUS requires the [View Deployment Statuses](#) access right. If a user does not have the correct access, the access denied error message is displayed.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

11. Computers

Home | Reports | Inventory | Packages | **Computers** | Groups | Users | Options | Help |

The computers section of PLUS displays all computers which have registered against PLUS. Clicking on a computer name will allow you to display a computer's specific information.

The screenshot shows the 'Computers' section of the PatchLink interface. It includes a navigation bar, a filter dropdown set to 'Enabled', and a table titled 'Enabled Computers'. The table has columns for Computer Name, Status, Platform, OS Info, Version, and Group List. There are 10 computers listed in the table.

Computer Name	Status	Platform	OS Info	Version	Group List
\\BIG-MISTAKE	Idle	Microsoft Windows 2000 Server	Win2K-Service Pack 2	5.0.0.1	Win2K
\\CITIDAL	Idle	Microsoft Windows 2000 Server	Win2K-Service Pack 3	5.0.0.2	COG Test, Win2K, Windows 2000
\\CRAP-TOP	Offline	Microsoft Windows XP Professional	WinXP-Service Pack 1	5.0.0.2	WinXP
\\HERCULES	Idle	Microsoft Windows 2000 Server	Win2K-Service Pack 4	5.0.0.1	COG Test, Win2K
\\PDADDY-PC	Offline	Microsoft Windows XP Professional	WinXP-Service Pack 1	5.0.0.2	WinXP
\\SUPPORT-ADV	Idle	Microsoft Windows 2000 Advanced Server	Win2K-Service Pack 3	5.0.0.1	Win2K
\\SUPPORT-NT	Idle	Microsoft Windows NT Server 4.0	WinNT-Service Pack 6	5.0.0.1	WinNT
\\SUPPORT-W2K	Idle	Microsoft Windows 2000 Advanced Server	Win2K-Service Pack 3	5.0.0.1	Win2K
\\SUPPORT-W2K2	Idle	Microsoft Windows 2000 Server	Win2K-Service Pack 4	5.0.0.1	Win2K
\\SUPPORT-XP2	Idle	Microsoft Windows XP Professional	WinXP-Service Pack 1	5.0.0.1	WinXP

11.1 Computer Information Columns

11.1.1 Computer Name

This displays the name of the computer. Click on the computer name to display specific information about the computer.

11.1.2 Status

This displays the status of the computer.

11.1.3 Platform

This displays the operating system platform the computer is running.

11.1.4 OS Info

This displays additional information about the operating system the computer is running.

11.1.5 Version

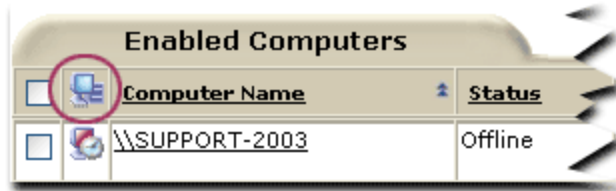
This displays the version of the agent running on the computer.

11.1.6 Group List

This displays the list of groups that the computer is a member of.

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11.2 Agent Status



Status	Description
	This is an idle deployment agent.
	This deployment agent is idle and has deployments
	The agent is sleeping as it is outside its hours of operation.
	The agent is sleeping as it is outside its hours of operation and has deployments in its work queue.
	This agent is currently working on a deployment (animated)
	This is an enabled detection agent that does not correspond to a registered deployment agent*.
	The agent is considered to be offline as it has not contacted PLUS in more than two intervals (minimum of 15 minutes).
	The agent is considered to be offline as it has not contacted PLUS in more than two intervals (minimum of 15 minutes) and has deployments in
	This agent has been disabled.

Additional information may be displayed by hovering your mouse pointer over an enabled icon.

To display additional information about the computer, click on the name of the actual computer. This performs the same function as selecting the computer and clicking on the View button on the Action Menu.

* This usually means that either the deployment agent was removed from PLUS or there has been a problem in registering the deployment agent. For more information on this check the agent installation section.

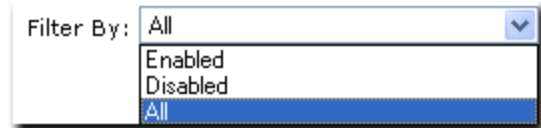
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11.3 Page Functions

11.3.1 Filter by:

Select the desired **Filter by** item from the upper right drop down menu to view the results.

- ? **Enabled:** (Default) Shows only the computers that have been enabled.
- ? **Disabled:** Shows only the computers that have been disabled
- ? **All:** Shows all the computers that are available on the PatchLink Update Server



11.3.2 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

11.3.3 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

11.3.4 Display

Depending on the amount of items available for display and what page you are viewing determines the display function located at the bottom of enabled pages above the Action Menu.



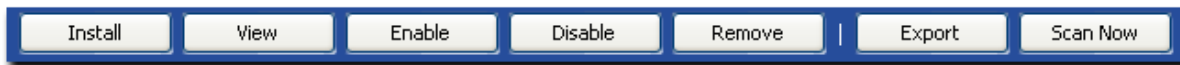
- ? **Next:** To display the next page of computers, click on the next button. If the last computer is displayed, the next button is disabled.
- ? **Previous:** To display the previous page of computers, click on the previous button. If the first computer is being displayed, the previous button is disabled.
- ? **Computers per Page:** The computer list initially displays up to 100 computers per page. To change the number of computers to display per page, enter a new number in to the Computers per Page input field. To display all computers enter a zero in the input field.

11.3.5 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

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11.4 Action Menu



11.4.1 Install

Click on the Install button to display the list of agent installers that can be used to register computers to PLUS.



Silent installer

The Silent Installer is designed for use with log in scripts. The program is stored on a public directory. A sample log in script can be found on the PLUS server, which demonstrates how it is most effectively used.

MSI installer

The MSI installer is designed for windows networks that use the windows software installer mechanism. The MSI installer can be edited to include the PLUS server name and serial number. In this way, the agent can be deployed through the use of Group Policy Objects

PatchLink Update Server

Other supported operating systems

Linux agent versions

PatchLink supports several distributions of Red Hat Linux including:

? 7.0, 7.1, 7.2, 7.3

? 8.0

? 9.0

The Linux agent requires the Java Runtime Environment (JRE) v1.2.2 or above, and can only be installed in single agent mode.

UNIX versions

Like Linux, the UNIX requires JRE v1.2.2 and above. The following operation systems are supported:

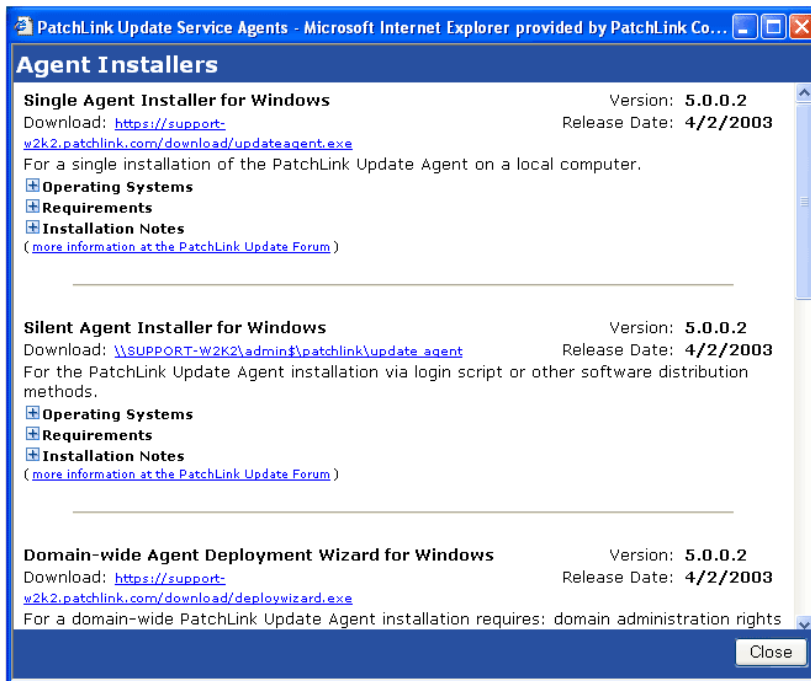
? Solaris

☞ v2.5, v2.6, v 2.7, v7, and v8

Single Agent

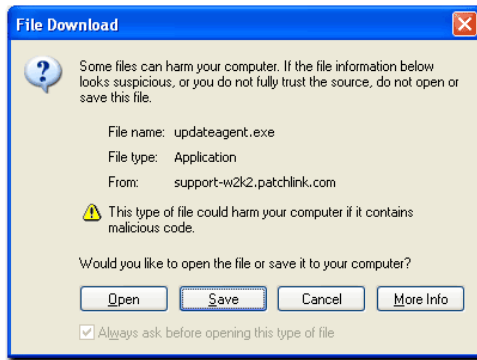
The Single Agent Installer is used to manually add a single computer to the managed computers list. This is most often used in the case of stand alone computers.

The agent installer screen contains links to all of the agent installations and additional information on Operating Systems, Requirements, and Installation Notes.

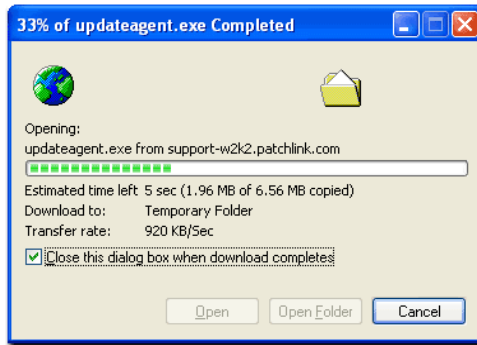


? Select the Single Agent Installer for Windows link.

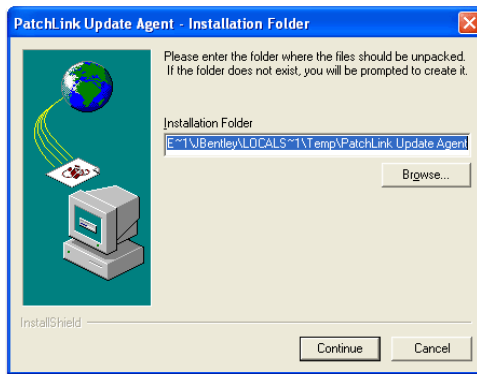
PatchLink Update Server



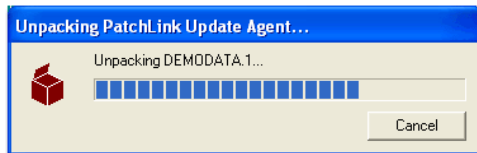
? Click on the **Open** button



? Select the destination directory for the installation files, and click on the **Continue**.

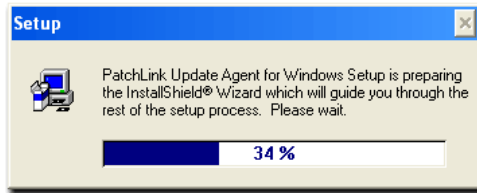


? Files Unpack

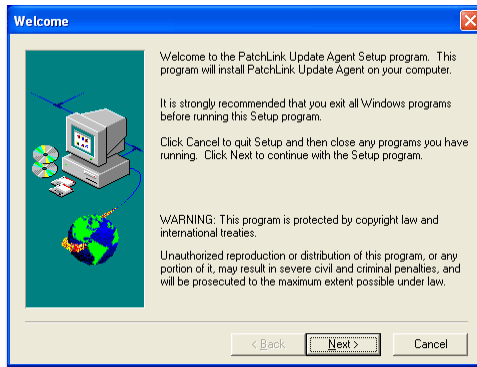


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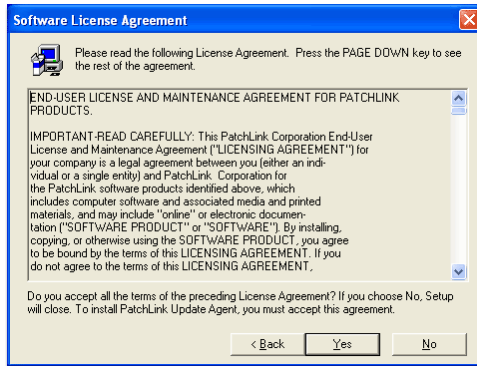
? Files Setup



? Read the Welcome screen and click **Next** to continue.

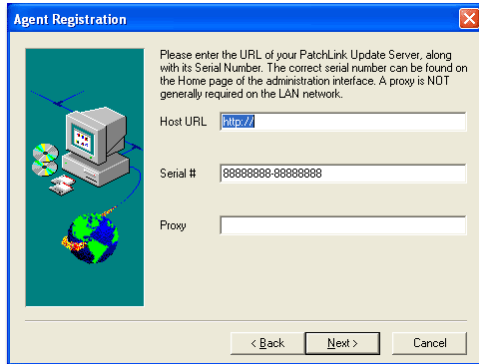


? Read the license agreement, and click "Yes" to continue

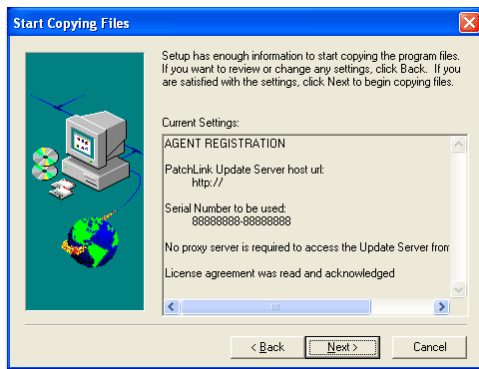


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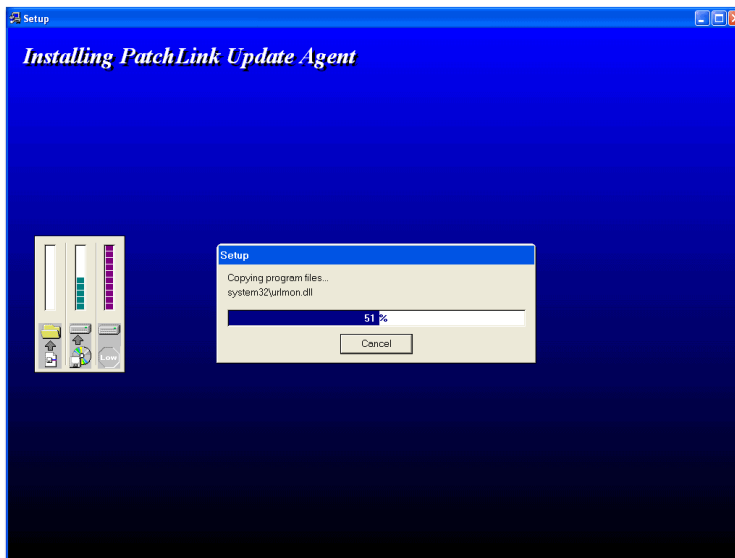
? Enter the “Host URL”, “Serial #”, and “Proxy” server address, then click “Next” to continue.



? Confirm the installation settings, and click “Next” to continue.

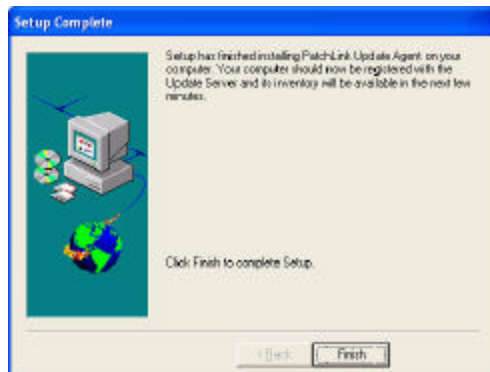


? Patchlink Update Agent Installs.



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? Click **Finish** to complete the installation



11.4.2 View

To display additional information about the computer, select a computer and click on the View button. This performs the same function as clicking on the name of the computer.

11.4.3 Enable

To enable selected disabled computers, click on the Enable button.

11.4.4 Disable

To disable selected enabled computers, click on the Disable button. Disabled computers do not take up an agent license.

11.4.5 Export

Export the computer list data to a comma-separated value (CSV) file. The filter and order of the data is based on what the Computer List view is selected and sorted on. This may display only a certain number of computers per page, the export will save all computer data based on your selected filter.

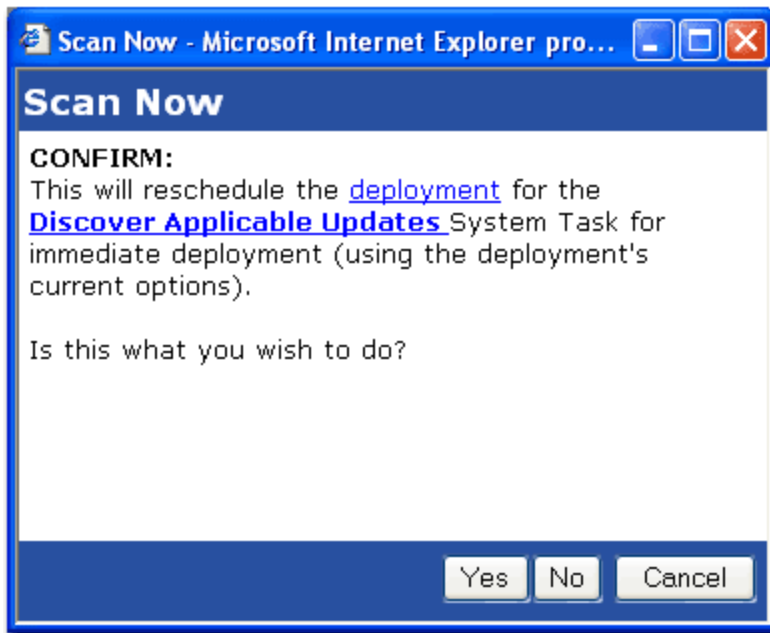
11.4.6 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates** System Task deployment for immediate execution to all selected computers.

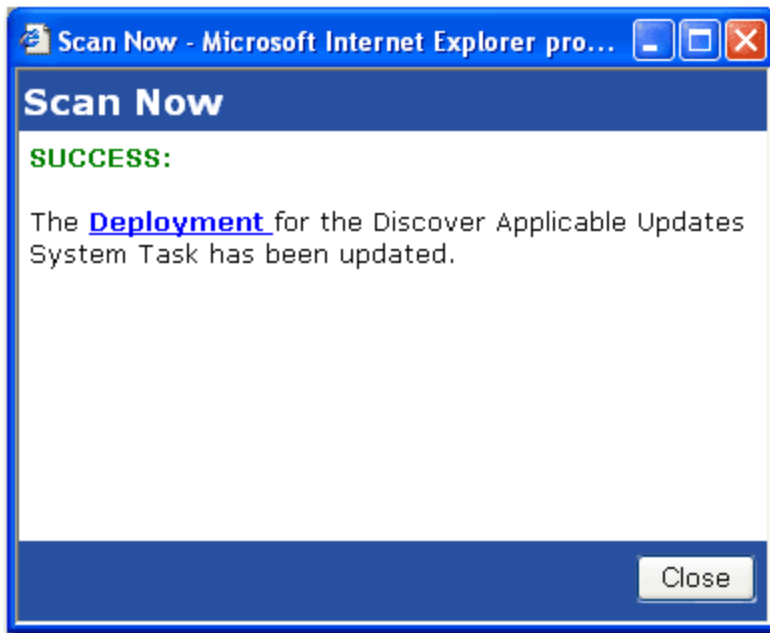
To initialize (choose) all computers, click the **Scan Now** button without selecting any computers.

If you choose not to select any computers, the screen will ask you if you wish to **confirm** the reschedule the **Discover Applicable Updates System Task** for all of the computers.

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To reschedule the **Discover Applicable Updates**, select Yes.



PLUS will reschedule the selected computer(s)'s membership (or all computers' memberships), initialize a screen stating its success and provide a **Deployment** link to initialize a new window with the results of the Discover Applicable Updates Deployment.

Upon clicking the Close button on the screen, the Computers page will be refreshed and initialized. Previously selected deployment options are maintained.

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11.5 Computers Security

The [Computer List](#) section of PLUS requires the [View Computers](#) access right. If a user does not have the correct access, the access denied error message is displayed.

To be able to be able display the agent installers' page requires the [Install Computers](#) access right. If a user does not have the correct access, the [Install](#) button is displayed. Once a computer registers against PLUS a PatchLink Administrator must give access to that computer to other user security roles.

To be able to enable, disable, and remove computers requires the [Manage Computers](#) access right. If a user does not have the correct access, the [Enable](#), [Disable](#), and [Remove](#) buttons are disabled.

To export the computer data to a comma-separated value (CSV) file requires the [Export Computer Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

To restart the discovery and analysis process for all of the computers registered to the PLUS requires the [Manage System Tasks](#) access right. If a user does not have the correct access, the [Scan Now](#) button is disabled.

Contact your PatchLink Administrator for more information on [PatchLink Update Security](#).

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11.6 Computer Details

The Computer Details section of PLUS displays PLUS related and important information about a specific computer. Click on the actual Computer Name link under the Computer Name column. This will bring you to the details page.

- ? Selecting Reports Tab will display the Vulnerability Report Analysis for the computer.
- ? Selecting Inventory Tab will display the Inventory for the computer.
- ? Selecting Deployments Tab will display the deployments for the computer.

The Reports, Inventory, and Deployments tabs serve as a quick link to those related inquiries for a specific computer. [See Section 6: Vulnerability Reports](#), [Section 7: Inventory](#), and [Section 8: Packages](#) for more detailed information.



The screenshot shows the 'Computer Details' page with tabs for Information, Reports, Inventory, and Deployments. The 'Information' tab is active, displaying the following sections:

- Computer Information:**
 - Name: \\CRAP-TOP
 - Operating System: WinXP
 - OS Service Pack: Service Pack 1
 - DNS Name: crap-top
 - Description: Rene's Lap Top
 - OS Version: 5.1
 - OS Build Number: 2600
 - IP Address: 192.168.1.218
- Agent Information:**
 - PLUS Agent Installation Date: 6/20/2003 3:35:07 PM (GMT-07:00)
 - PLUS Agent Version: 5.0.0.2
 - PLUS Agent Status: Offline
 - Last Connected Date: 7/11/2003 5:46:21 PM (GMT-07:00)
- Group Information:**

Group Name	Type	Status	Added By	Added On
WinXP	Computer (system created)	Enabled	PatchLink Corp.	6/10/2003 9:26:54 AM (GMT-07:00)
- Policy Information:**

Communication Interval	Hours of Operation	Logging Level
2 Minutes	Always Run	Basic Info

If information is not applicable to a specific section, the section will simply not be present on the details page.

11.6.1 Computer Information

- ? Name: This displays the name of the computer
- ? Operating System: This displays the abbreviated operating system platform name of the computer.
- ? OS Service Pack: This displays the service pack level of the computer
- ? DNS Name: This displays the DNS name of the computer.
- ? Description: This displays the description of the computer.
- ? OS Version: This displays the operating system version number of the computer.
- ? OS Build Number: This displays the operating system build number of the computer.
- ? IP Address: This displays the IP Address of the computer.

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11.6.2 Agent Information

- ? PLUS Agent Installation Date: The date the agent was installed and registered against PLUS.
- ? PLUS Agent Version: This displays the version of the agent.
- ? PLUS Agent Status: This displays the status of the agent.
- ? Last Connected Date: The date the agent last contacted PLUS.

11.6.3 Group Information

- ? Group Name: This displays the name of the group the computer is a member of.
- ? Type: This displays the type of the group.
- ? Status: This displays the status of the group.
- ? Added By: This displays the PatchLink User who added the computer to the group.
- ? Added On: This displays the date the computer was added to the group.

11.6.4 Policy Information

- ? Communication Level: This displays how often the agent communicates with PLUS.
- ? Hours of Operation: This displays the hours of operation in which the agent will communicate with PLUS.
- ? Logging Level: The logging level determines how much data the agent will log while it performs its tasks.

11.7 Page Functions

11.7.1 Reports Tab

Selecting this tab will display the Vulnerability Report Analysis for the computer.

11.7.2 Inventory Tab

Selecting this tab will display the Inventory for the computer.

11.7.3 Deployments Tab

Selecting this tab will display the deployments for the computer.

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11.8 Action Menu



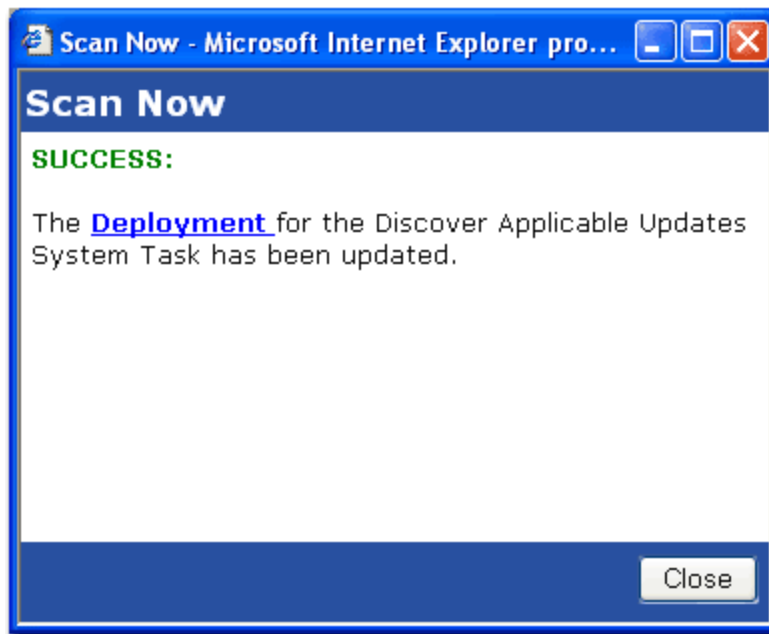
11.8.1 Export

Export the computer information to a comma-separated value (CSV) file.

11.8.2 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates** System Task deployment for immediate execution to all selected computers.

PLUS will reschedule the computer and initialize a screen stating its success and provide a **Deployment** link to initialize a new window with the results of the Discover Applicable Updates Deployment.



Upon clicking the Close button on the screen, the Computers page will be refreshed and initialized. Previously selected deployment options are maintained.

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11.9 Computer Details Security

The [Computer Information](#) section of PLUS requires the [View Computers](#) access right. If a user does not have the correct access, the access denied error message is displayed.

To export the computer information to a comma-separated value (CSV) file requires the [Export Computer Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

To restart the discovery and analysis process for all of the computers registered to the PLUS requires the [Manage System Tasks](#) access right. If a user does not have the correct access, the [Scan Now](#) button is disabled.

To be able to view the vulnerability reports results for the computer requires the [View Reports](#) access right. If a user does not have the correct access, the [Reports](#) tab is disabled.

To be able to view the computer inventory section requires the [View OS Inventories](#) access right. If a user does not have the correct access, the [Inventory](#) tab is disabled.

To be able to view the computer deployments section requires the [View Deployment Status](#) access right. If a user does not have the correct access, the [Deployments](#) tab is disabled.

Contact your PatchLink Administrator for more information on [PatchLink Update Security](#).

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11.10 Detection Reports by Computer

A Vulnerability Report encompasses any vulnerability, how to detect it, and its associated patch or patches. The detection portion of it, also called a Vulnerability Report, contains the necessary signatures and fingerprints on which to properly determine if the vulnerability is patched or not patched.

Click on the actual **Reports Tab** in the Computer Details screen.

Report Name	Impact	✓	✗	🔄	🕒	📄	🔍
A - Deployment Test and Diagnostic Package	Critical	1	0	0	0	1	100%
AA - Update Agent Hotfix 5.0 for Windows Rene G	Critical	0	1	0	0	1	100%
A-Detect for pctspk.exe	Critical	0	1	0	0	1	100%
Amruta Break Agent	Critical	0	1	0	0	1	100%
C - PatchLink Update Agent Hotfix 4.00.06 --MUST INSTALL--	Critical	1	0	0	0	1	100%
C - PatchLink Update Agent Hotfix 4.00.09 --MUST INSTALL--	Critical	1	0	0	0	1	100%
Microsoft Data Access Components (MDAC) 2.7 SP1a (SEE NOTES)	Critical	1	0	0	0	1	100%
MS03-023 823559: Buffer Overrun In HTML Converter Could Allow Code Execution	Critical	0	1	0	0	1	100%
MS03-024 817606: Buffer Overrun in Windows Could Lead to Data Corruption	Critical	0	1	0	0	1	100%
MS03-025 822679: Flaw in Windows Message Handling through Utility Manager Could Enable Privilege Elevation	Critical	0	1	0	0	1	100%
MS03-026 823980: Buffer Overrun In RPC Interface Could Allow Code Execution	Critical	0	1	0	0	1	100%
Microsoft .NET Framework 1.0 SP2	Critical - 01	0	1	0	0	1	100%
MS00-084 Q278499: Patch Available for 'Indexing Services Cross Site Scripting' Vulnerability	Critical - 01	1	0	0	0	1	100%
MS01-022 - Q296441: WebDAV Service Provider Can Allow Scripts to Levy Requests as User	Critical - 01	1	0	0	0	1	100%
MS01-033 - CODE RED-Q300972 Unchecked Buffer in Index Server ISAPI Extension	Critical - 01	1	0	0	0	1	100%
MS02-008 - XMLHTTP Control Can Allow Access to Local Files for MSXML 2.6	Critical - 01	0	1	0	0	1	100%

11.10.1 Vulnerability Report Analysis

This section displays the analysis results of the vulnerability reports during the discovery and analysis process on the computer. The report analysis gives a simple top-down view of the computer in each status.

The Reports, Inventory, and Deployments tabs serve as a quick link to those related inquiries for a specific computer. [See Section 6: Vulnerability Reports](#), [Section 7: Inventory](#), and [Section 8: Packages](#) for more detailed information.

11.11 Page Functions

11.11.1 Information Tab

Selecting this tab will display additional Computer Information.

11.11.2 Inventory Tab

Selecting this tab will display the Inventory for the computer.

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11.11.3 Deployments Tab

Selecting this tab will display the deployments that the computer has been assigned to.

11.12 Action Menu



11.12.1 Deploy

This creates a deployment for the selected vulnerability report. See [Section 10: Deploying Packages: Schedule Deployment Wizard](#) for more information.

11.12.2 Export

Export the vulnerability report analysis to a comma-separated value (CSV) file. The amount and order of the data is based on what the analysis view is filtered and sorted on.

11.13 Computer Vulnerability Security

The Computer Reports section of PLUS requires the [View Reports Page](#) access right. If a user does not have the correct access the access denied error message is displayed.

To be able to change the filter from detected vulnerability reports to disabled or all requires the [Change Report Filter](#) access right. If a user does not have the correct access, the filter will not have any options to choose from.

To be able to view the associated distribution packages for a given vulnerability report requires the [View Packages](#) access right. If a user does not have the correct access, the link on the package status image is disabled.

To be able to create a deployment based on the report analysis requires the [Deploy Reports](#) access right. If a user does not have the correct access, the [Deploy](#) button is disabled.

To export all of the vulnerability report analysis's to a comma-separated value (CSV) file requires the [Export Report Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

To restart the discovery and analysis process for all of the computers registered to the PLUS requires the [Manage System Tasks](#) access right. If a user does not have the correct access, the [Scan Now](#) button is disabled.

To be able to view the computer inventory section requires the [View OS Inventories](#) access right. If a user does not have the correct access, the [Inventory](#) tab is disabled.

To be able to view the computer deployments section requires the [View Deployment Status](#) access right. If a user does not have the correct access, the [Deployments](#) tab is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

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11.14 Computer Inventory Summary

The following inventories are gathered while in the discovery and analysis process: Operating Systems, Installed Software, Hardware and their device drivers, and Services. The Filter changes the display between the different inventories. When displaying the Inventory based on a single computer, the Software inventory is the initial inventory displayed.

The Reports, Inventory, and Deployments tabs serve as a quick link to those related inquiries for a specific computer. [See Section 6: Vulnerability Reports](#), [Section 7: Inventory](#), and [Section 8: Packages](#) for more detailed information.

Computers

Home | Reports | Inventory | Packages | Computers | Groups | Users | Options | Help | Server Time: 7/17/2003 3:02:02 PM (GMT-07:00)

Inventory Summary by Computer: \\BIG-MISTAKE Filter By: Software

Information Reports **Computer Inventory** Deployments Total: 17

Software Programs	Count
Adobe Reader 6.0	1
BigFix Enterprise Client	1
BigFix Enterprise Console	1
BigFix Enterprise Server	1
BigFix Enterprise Suite Installation Generator (Evaluation)	1
HSP56 MR Drivers	1
Microsoft Internet Explorer 5.5 SP2	1
MSDE 2000 (BigFix Enterprise Database)	1
PatchLink Update Agent	1
SIS 900 PCI Fast Ethernet Adapter Driver	1
SIS Audio Driver	1
SIS630_730_V2.03	1
UpdateEXPERT 6	1
UpdateEXPERT UEAgent	1
Windows 2000 Hotfix (SP4) Q329553	1
Windows 2000 Hotfix (SP4) Q811114	1
Windows 2000 Hotfix (SP4) Q811493	1

patchlink Export Scan Now

11.15 Page Functions

11.15.1 Information Tab

Selecting this tab will display additional Computer Information.

11.15.2 Reports Tab

Selecting this tab will display the results of the Discovery and Analysis process for the Vulnerability Reports.

11.15.3 Deployments Tab

Selecting this tab will display the deployments that the computer has been assigned to.

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11.16 Action Menu

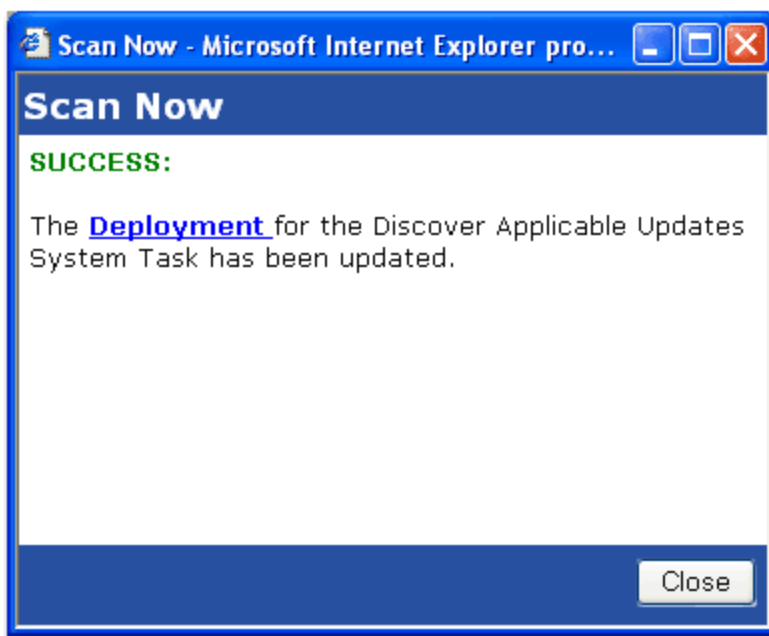
11.16.1 Export

Export the vulnerability report analysis to a comma-separated value (CSV) file. The amount and order of the data is based on what the analysis view is filtered and sorted on.

11.16.2 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates System Task** deployment for immediate execution to all selected computers.

PLUS will reschedule the computer and initialize a screen stating its success and provide a **Deployment** link to initialize a new window with the results of the Discover Applicable Updates Deployment.



Upon clicking the Close button on the screen, the Computers page will be refreshed and initialized. Previously selected deployment options are maintained.

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11.17 Computer Inventory Security

The Computer Inventory section of PLUS requires the [View OS Inventories](#) access right. If a user does not have the correct access, the access denied error message is displayed.

To be able to view the [Software](#) inventory requires the [View Software Inventories](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to view the [Hardware](#) inventory requires the [View Hardware Inventories](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to view the [Services](#) inventory requires the [View Services Inventories](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to view the list of computers on which an inventory belongs to requires the [View Computers](#) access right. If a user does not have the correct access, the hyperlink on the inventory item is disabled.

To export the inventory to a comma-separated value (CSV) file requires the [Export Inventory Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

To be able to view the vulnerability reports results for the computer requires the [View Reports](#) access right. If a user does not have the correct access, the [Reports](#) tab is disabled.

To be able to view the computer deployments section requires the [View Deployment Status](#) access right. If a user does not have the correct access, the [Deployments](#) tab is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

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11.18 Computer Deployments

The Computer Deployments section displays all of the deployments that the computer has been assigned to.

Name	Initial Start Date	1	0	1	0	0	0%
System Task: Refresh Inventory Data	7/19/2003 6:00:00 AM (Local)	1	0	1	0	0	0%
System Task: Discover Applicable Updates	7/18/2003 11:35:37 AM (Local)	1	0	1	0	0	0%
System Task: Refresh Inventory Data	7/11/2003 8:06:14 AM (Local)	1	0	1	0	1	100%
Deployment of AA-PatchLink Update Agent 5.00.2	6/30/2003 1:29:52 PM (Local)	1	0	1	0	1	100%
Deployment of AA - Update Agent Hotfix 5.0 for Windows Rene G	6/30/2003 1:08:41 PM (Local)	0	1	1	0	1	100%
User Created Deployment	6/30/2003 11:53:04 AM (Local)	1	0	1	0	1	100%
Deployment of Update Agent Hotfix 5.0 for Windows XP	6/28/2003 6:07:38 PM (Local)	1	0	1	0	1	100%
Deployment of AGENT hotfix 5.00.1 For Rene G	6/13/2003 10:53:38 AM (Local)	1	0	1	0	1	100%
Deployment of C - PatchLink Update Agent Hotfix 4.00.09 --MUST INSTALL--	6/12/2003 5:18:36 PM (Local)	0	1	1	0	1	100%
Deployment of MS_329553: Cannot Obtain Device Driver Updates from the Windows Update Web Site	6/11/2003 4:43:14 PM (Local)	1	0	1	0	1	100%
Deployment of Internet Explorer 5.5 Service Pack 2 (full auto-install)	6/11/2003 11:59:57 AM (Local)	1	0	1	0	1	100%
Deployment of MS03-018 811114: Cumulative Patch for Internet Information Service (IIS)	6/10/2003 1:07:07 PM (Local)	1	0	1	0	1	100%

The Reports, Inventory, and Deployments tabs serve as a quick link to those related inquiries for a specific computer. [See Section 6: Vulnerability Reports](#), [Section 7: Inventory](#), and [Section 8: Packages](#) for more detailed information.

11.19 Action Menu



11.19.1 Export

Export the vulnerability report analysis to a comma-separated value (CSV) file. The amount and order of the data is based on what the analysis view is filtered and sorted on.

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11.20 Page Functions

11.20.1 Information Tab

Selecting this tab will display additional Computer Information.

11.20.2 Reports Tab

Selecting this tab will display the results of the Discovery and Analysis process for the Vulnerability Reports.

11.20.3 Inventory Tab

Selecting this tab will display the Inventory for the computer.

11.21 Computer Deployments Security

The computer deployments section requires the [View Deployment Status](#) access right. If a user does not have the correct access, the access denied error message is displayed.

To be able to view the vulnerability reports results for the computer requires the [View Reports](#) access right. If a user does not have the correct access, the [Reports](#) tab is disabled.

To be able to view the computer inventory section requires the [View OS Inventories](#) access right. If a user does not have the correct access, the [Inventory](#) tab is disabled.

To be able to view the computer deployments section requires the [View Deployment Status](#) access right. If a user does not have the correct access, the [Deployments](#) tab is disabled.

To be able to export the computer deployment data requires the [Export Deployment Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

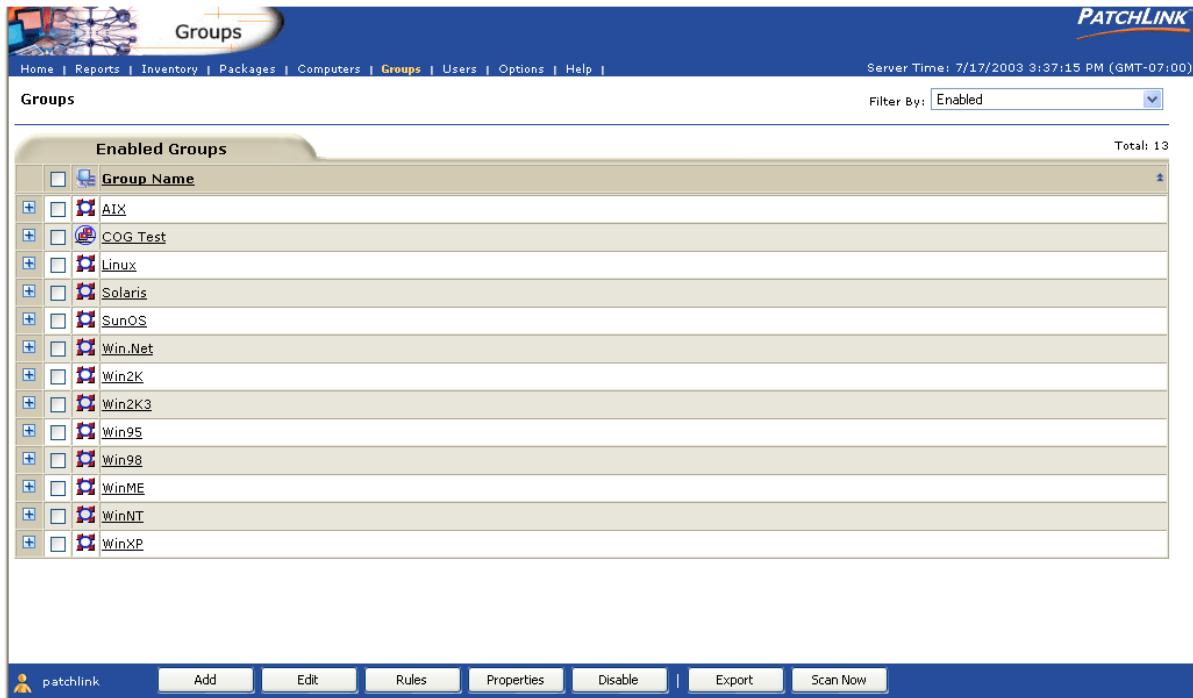
Contact your PatchLink Administrator for more information on PatchLink Update Security.

12. Groups

Home | Reports | Inventory | Packages | Computers | **Groups** | Users | Options | Help |

A group is a collection of computers for the purpose of making deployments on a “groupwise” basis.

The purpose is based upon user specification to provide an easier way to manage the entire group rather than managing each computer one at a time.



With a group you can:

- ? Deploy a distribution package (from an associated Vulnerability or local distribution package) to all computers of the group. When deploying from the Vulnerability Report’s section, the only computers which will receive the distribution package are the ones that are applicable to the vulnerability report.
- ? Define a set of policies which determine the behavior of the agents installed on those computers.
- ? Define a baseline of Vulnerability Reports or local distribution packages which are declared as mandatory. This ensures that these baseline items must be installed or detected as patched; else the deployments for those items will be auto-generated for immediate execution.
- ? View the results of the Vulnerability Report Analysis for the entire membership of the group.

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- ? View the results of the detected Inventory for the entire membership of the group.
- ? Reschedule the Discovery and Analysis process (Discover Applicable Updates System Task) to verify the Inventory and Report data is current.

12.1 Group Status

This displays the various groups that have been pre-generated by PLUS or user-defined by the local administrator. Each group entry displays the name of the group plus the status and type of the group.



Status	Description
	This is an enabled system group. One system group is formed automatically corresponding to each operating system in the network.
	This is a disabled system group. One system group is formed automatically corresponding to each operating system in the network. Reports are prevented from running on computers in this group.
	This is a enabled system group. These are the groups which are manually created by the administrator. Either one agent or multiple agents belonging to multiple operating systems can be added to a group.
	This is a disabled system group. These are the groups which are manually created by the administrator. Either one agent or multiple agents belonging to multiple operating systems can be added to a group. Reports are prevented from running on computers in this group.





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12.2 Page Functions

12.2.1 Properties

Clicking on the group name will display the group information and properties page. This is the same thing as selecting the group and clicking on the Properties button.

12.2.2 Display and Hide

Click the  to display additional information and statistics about the represented item. Click the  to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (, ) is only available for Microsoft Internet Explorer at this time.

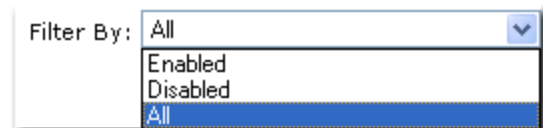
12.2.3 Filter by

Select the desired **Filter by** item from the upper right drop down menu to view the results.

? **Enabled:** (Default) Shows only the groups that have been enabled.

? **Disabled:** Shows only the groups that have been disabled

? **All:** Shows all the groups that are available on the PatchLink Update Server



12.2.4 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

12.2.5 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

12.2.6 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

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12.3 Action Menu



12.3.1 Add

Clicking this button will bring up the Group Property page allowing new groups to be created. See [Section 13: Add a Group Wizard](#) for more information.

12.3.2 Edit

By clicking on the button, an edit group wizard comes up in which you can enter all the information about the already existing group. See [Section 13: Add a Group Wizard](#) for more information.

12.3.3 Rules

Clicking the Rules button allows the PatchLink User the ability to create and populate a group based on a few minimal parameters. Group Name, Group Description, and a comma-delimited list of computer names (Windows computers must be prefixed with \\) may be entered.

12.3.4 Properties

Selecting a group and clicking on this button will display the group information and properties page.

12.3.5 Disable

This disables all group-based functionality for the group members.

12.3.6 Enable

This enables all of the group-based functionality for the group members.

12.3.7 Remove

This will delete all selected disabled groups.

12.3.8 Export

Export the group data to a comma-separated value (CSV) file. The amount and order of the data is based on what the Group List view is filtered and sorted on.

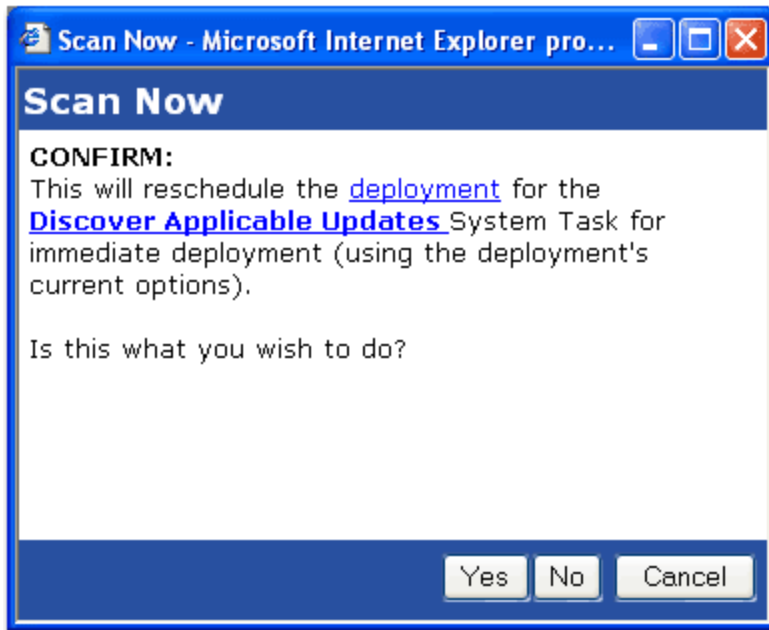
12.3.9 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates** System Task deployment for immediate execution to all selected groups.

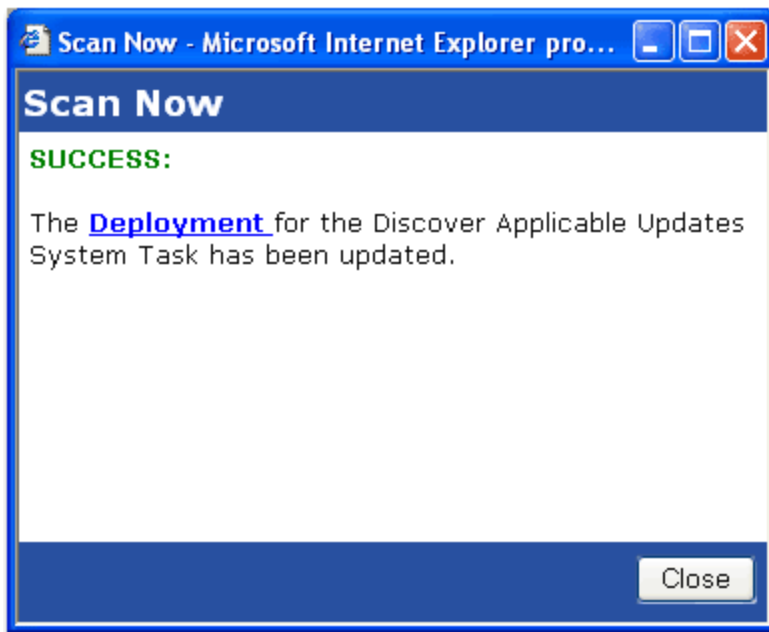
To initialize (choose) all groups, click on the Scan Now button without selecting any groups **or** select a group (or Groups) by clicking in the checkbox and click the **Scan Now** button.

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If you choose to not select any groups, the screen will ask you if you wish to **confirm** the reschedule the **Discover Applicable Updates System Task** for all of the members for all of the groups.



To reschedule the **Discover Applicable Updates**, select Yes.



PLUS will reschedule the selected group(s)'s membership (or all groups' memberships) ,initialize a pop-up screen stating its success, and provide a **Deployment** link to initialize a new window with the results of the Discover Applicable Updates Deployment.

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Upon clicking the Close button on the screen, the Groups page will be refreshed and initialized. Previously selected deployment options are maintained.

12.4 Groups Security

The [Groups](#) section of PLUS requires the [View Groups](#) access right. If a user does not have the correct access, the access denied error message is displayed.

To be able to create, edit, enable, disable, and remove groups requires the [Manage Groups](#) access right. If a user does not have the correct access, the [Add](#), [Edit](#), [Rules](#), [Enable](#), [Disable](#) and [Remove](#) buttons are disabled.

To export all of the group data to a comma-separated value (CSV) file requires the [Export Group Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

To reschedule the discovery and analysis process ([Discover Applicable Updates System Task](#)) for all members of the selected groups requires the [Manage System Tasks](#) access right. If a user does not have the correct access, the [Scan Now](#) button is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

12.5 Group Information

The group information and properties section of PLUS displays group related information, properties, and assessment graphs for viewing various statuses concerning the group's membership. Click on the actual group name link. The information tab of the Computer Information page (default) appears. (Win XP, All vendors, All Impacts, By Agent is used as an example)

The screenshot displays the 'Groups' page in the PatchLink interface. The main content area is titled 'Information for Group: WinXP'. It features several tabs: 'Information', 'Reports', 'Inventory', 'Membership', 'Mandatory', and 'Deployments'. The 'Information' tab is active, showing the following details:

- Name:** WinXP
- Status:** Enabled
- Type:** System Computer Group
- Agent Policy Set Name:** [Empty Policy](#)
- Membership Total:** 9
- Description:** PatchLink Update Service Operating System Group. System Groups can not be deleted.
- Created By:** PatchLink Corp.
- Created On:** 5/29/2002 10:08:15 AM
- Last Modified By:** None
- Last Modified On:** 8/6/2002 1:49:12 PM
- Mandatory Baseline Total:** 0

Below the information section, there are two assessment filters:

- Group Assessment:** Filter on: Platform (WinXP), Vendor (All Vendors), Impact (All Impacts).
- Computer Assessment:** Perspective: By Agent, By Status.

At the bottom of the page, there are buttons for 'Export' and 'Scan Now'.

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12.5.1 Information

- ? Name: This displays the name of the group.
- ? Status: This displays the current status of the group.
- ? Type: This displays the type of the group with respect to how it was created.
- ? Agent Policy Set Name: This displays the assigned Agent Policy Set name and link to view the agent policy set information.
- ? Membership Total: This displays the total number of computers which are a member of the group.
- ? Created By: This displays the user who created the group.
- ? Created On: This displays when the group was created.
- ? Last Modified By: This displays the user who last modified the group.
- ? Last Modified On: This displays when the group was last modified.
- ? Mandatory Baseline Total: This displays the total number of patches which create the baseline for the group.
- ? Description: This displays the group's description.

12.5.2 Group Assessment

There are three basic graphs that can display status information about the group's membership. Selecting any one of the three options and clicking the **Go** button will initialize a graphical representation pie chart screen illustrating the assessment.

Group Patch Status by Agent

This displays the how many agents are in each of the following patch statuses:

- ? Fully Patches: the computer requires no additional patches at this time.
- ? Partially Patched: the computer is not fully patched, but has some patches are installed.
- ? Not Patched: The computer contains is not patched at all.
- ? Detecting: In process of running the Discovery and Analysis Process
- ? Pending: The initial Discovery and Analysis process has not started so there is no data on which to determine the status.

Additionally there are three filters that can define down to obtain more precise status information. The filters are:

- ? Platform
- ? Vendor
- ? Vulnerability Report Impact

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Group Patch Status by Patch

This displays the how many applicable patches are in each of the following patch statuses:

- ? Fully Patches: the computer requires no additional patches at this time.
- ? Partially Patched: the computer is not fully patched, but has some patches are installed.
- ? Not Patched: The computer contains is not patched at all.
- ? Detecting: In process of running the Discovery and Analysis Process
- ? Non-applicable: The number of computers which have no Vulnerability Reports applicable to them.

Additionally there are three filters that can define down to obtain more precise status information. The filters are:

- ? Platform
- ? Vendor
- ? Vulnerability Report Impact

Agent Status

This displays the number of computers in each of the various agent states. The various states are:

- ? Sleeping: these computers are outside their defined hours of operation.
- ? Offline: these computers haven't contacted PLUS in over two communication intervals (15 minutes minimum for intervals smaller than 10 minutes).
- ? Running: these computers are currently running the Discovery and Analysis process and they do not correspond to a registered Deployment agent.
- ? Idle: these computers are active yet not performing any deployments.
- ? Working: these computers are working on some deployments.
- ? Disabled: these computers are disabled and will be given no work to do.

12.6 Lock Information

If a PatchLink User has locked a group's reports, software, hardware or services, then information about the lock is displayed here.

12.6.1 Lock Type

This displays what type of group lock was done. The four various types are:

- ? Group Vulnerability Report Locks
- ? Group Inventory Software Locks
- ? Group Inventory Hardware Locks
- ? Group Services Hardware Locks

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12.6.2 Total Locked

This displays the total number of items which were locked.

- ? Last Locked By: This displays who locked the group.
- ? Last Locked On: This displays when the group was locked.
- ? Lock Notes: This displays any notes that were added when the group was locked.

12.7 Action Menu

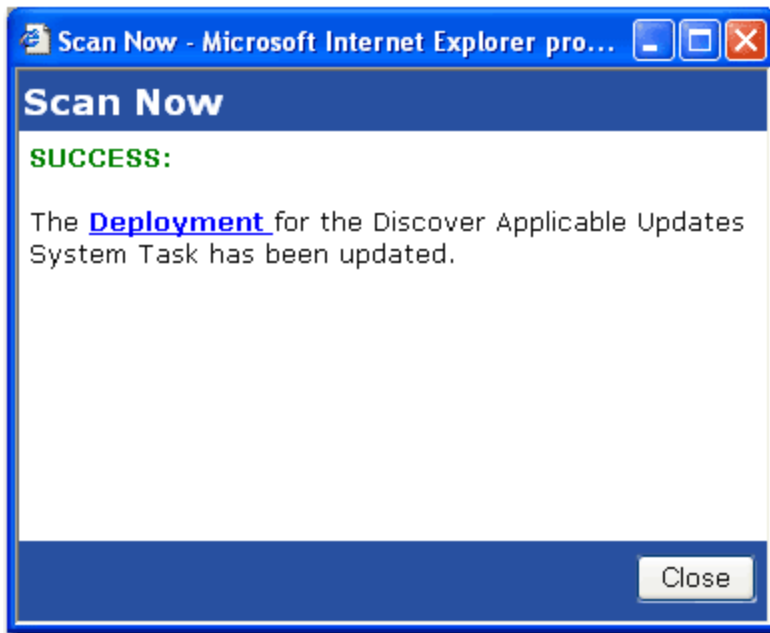


12.7.1 Export

Export the group information to a comma-separated value (CSV) file.

12.7.2 Scan Now

Initializes a screen that allows you to reschedule the deployment of the [Discover Applicable Updates](#) System Task for immediate execution to all enabled group members. Previously selected deployment options are maintained.



PLUS will reschedule the computer and initialize a screen stating its success and provides a **Deployment** link to initialize a new window with the results of the Discover Applicable Updates Deployment.

Upon clicking the Close button on screen, the Groups page will be refreshed and initialized. Previously selected deployment options are maintained.

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12.8 Security

The Group Information and Properties section requires the *View Groups* access right. If a user does not have the correct access, the access denied error message is displayed.

To export all of the group information data to the comma-separated value (CSV) file requires the *Export Group Data* access right. If a user does not have the correct access, the *Export* button is disabled.

To restart the discovery and analysis process for all of the computers registered to the PLUS requires the *Manage System Tasks* access right. If a user does not have the correct access, the *Scan Now* button is disabled.

The Reports tab requires the *View Report* access right. If a user does not have the correct access, the *Reports* tab is disabled.

The Inventory tab requires the *View Software Inventory* access right. If a user does not have the correct access, the *Inventory* tab is disabled.

The Membership tab requires the *View Computers* access right. If a user does not have the correct access, the *Membership* tab is disabled.

The Deployments tab requires the *View Deployment Status* access right. If a user does not have the correct access, the *Deployments* tab is disabled.

Contact your *PatchLink Administrator* for more information on *PatchLink Update Security*.

12.9 Vulnerability Reports by Group

A Vulnerability Report encompasses any vulnerability and how to detect it and its associated patch or patches. The detection portion of it, also called a Vulnerability Report, which contains the necessary signatures and fingerprints on which to properly determine if the vulnerability is patched or not patched.

Report Name	Impact	✓	✗	🔄	📄	📄	📄	📄	📄
A - Deployment Test and Diagnostic Package	Critical	1	0	0	1	2	50%		
AA - Update Agent Hotfix 5.0 for Windows Rene G	Critical	0	1	0	1	2	50%		
A-Detect for pctspk.exe	Critical	0	1	0	1	2	50%		
Amruta Break Agent	Critical	0	1	0	1	2	50%		
B - PatchLink Update Server Hotfix 4.00.06 --MUST INSTALL--	Critical	1	0	0	0	1	100%		
B - PatchLink Update Server Hotfix 4.00.09 --MUST INSTALL--	Critical	0	1	0	0	1	100%		
C - PatchLink Update Agent Hotfix 4.00.06 --MUST INSTALL--	Critical	1	0	0	1	2	50%		
C - PatchLink Update Agent Hotfix 4.00.09 --MUST INSTALL--	Critical	0	1	0	1	2	50%		

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12.9.1 Vulnerability Report Analysis

This section gives the analysis of running those vulnerability reports against the group computer members. The report analysis gives a simple top-down view on how many computers are in each status. The various statuses are detailed below.

[See Section 6: Vulnerability Reports](#), for more information.

12.10 Page Functions

12.10.1 Display and Hide

Click the  to display additional information and statistics about the represented item. Click the  to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (, ) is only available for Microsoft Internet Explorer at this time.

12.10.2 Filter by

Select the desired **Filter by** item from the upper right drop down menu to view the results.

12.10.3 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

12.10.4 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

12.10.5 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

12.11 Action Menu



12.11.1 View

To display additional information about the report for this group computer, select a report and click on the View button. This performs the same function as clicking on the name of the report.

12.11.2 Deploy

Deploy the selected detection reports associated update packages. See [Section 10: Deploying Packages: Schedule Deployment Wizard](#) for more information.

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12.11.3 Lock

Locks report(s) for this group and its computer members.

12.11.4 Unlock

Unlocks report(s) for this group and its computer members

12.11.5 Enable

To enable selected disabled computers, click on the Enable button.

12.11.6 Disable

To disable selected enabled computers, click on the Disable button. Disabled computers do not take up an agent license.

12.11.7 Export

Export the vulnerability report analysis to a comma-separated value (CSV) file. The amount and order of the data is based on what the analysis view is filtered and sorted on.

12.11.8 Update Cache

Deploys all of the **Discover Applicable Updates System Task** to all computers (or selected computers).

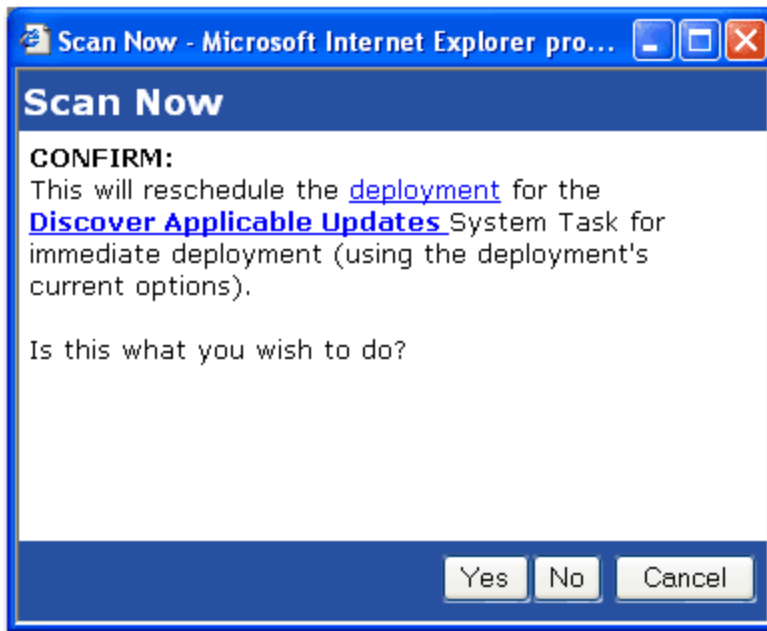
12.11.9 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates System Task** deployment for immediate execution to all selected groups.

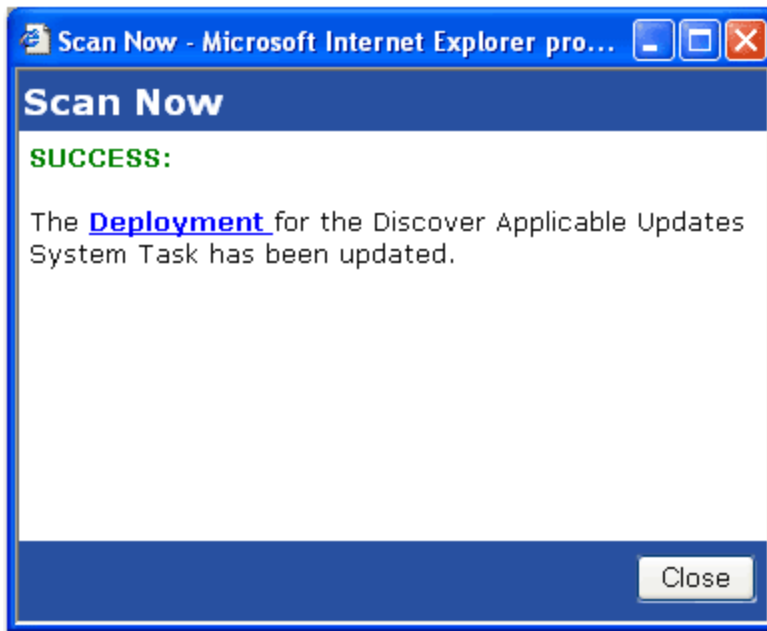
To initialize (choose) all groups, click on the Scan Now button without selecting any groups and click the **Scan Now** button.

If you choose not to select any groups, the screen will ask you if you wish to **confirm** the reschedule the **Discover Applicable Updates System Task** for all of the groups.

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To reschedule the **Discover Applicable Updates**, select Yes.



PLUS will reschedule the selected groups(s)'s membership (or all groups' memberships), initialize screen stating its success and provide a **Deployment** link to initialize a new screen with the results of the Discover Applicable Updates Deployment.

Upon clicking the **Close** button on the screen, the Groups page will be refreshed and initialized.

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Previously selected deployment options are maintained.

12.12 Group Vulnerability Security

The Reports section of PLUS requires the [View Reports Page](#) access right. If a user does not have the correct access the access denied error message is displayed.

To be able to view the detailed report analysis requires the [View Report Details](#) access right. If a user does not have the correct access, the hyperlink will not be shown and the [View](#) button is disabled.

To be able to change the filter from detected vulnerability reports to disabled or all requires the [Change Report Filter](#) access right. If a user does not have the correct access, the filter will not have any options to choose from.

To be able to view the associated distribution packages for a given vulnerability report requires the [View Packages](#) access right. If a user does not have the correct access, the link on the package status image is disabled.

To be able to create a deployment based on the report analysis requires the [Deploy Reports](#) access right. If a user does not have the correct access, the [Deploy](#) button is disabled.

To be able to enable or disable vulnerability reports from being available by the discovery and analysis process requires the [Manage Reports](#) access right. If a user does not have the correct access, the [Enable](#) and [Disable](#) buttons are disabled.

To be able to lock or unlock the results of the selected vulnerability reports analysis for the group's membership requires the [Manage Group Report Locks](#) access right. If a user does not have the correct access, the [Lock](#) and [Unlock](#) buttons are disabled.

To export all of the vulnerability report analysis's to a comma-separated value (CSV) file requires the [Export Report Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

To restart the discovery and analysis process for all of the computers registered to the PLUS requires the [Manage System Tasks](#) access right. If a user does not have the correct access, the [Scan Now](#) button is disabled.

To cache the associated distribution of the selected vulnerability reports requires the [Cache Packages](#) access right. If a user does not have the correct access, the [Update Cache](#) button is disabled.

The Inventory tab requires the [View Software Inventory](#) access right. If a user does not have the correct access, the [Inventory](#) tab is disabled.

The Membership tab requires the [View Computers](#) access right. If a user does not have the correct access, the [Membership](#) tab is disabled.

The Deployments tab requires the [View Deployment Status](#) access right. If a user does not have the correct access, the [Deployments](#) tab is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

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12.13 Group Inventory Summary

This view will display the software, hardware, operating systems and services that were detected on the computers in the group. When displaying the Inventory based on a single computer, the Software inventory is the initial inventory displayed.

This view is the same as the Inventory Summary view with the following differences:

1. Only displays the inventory based upon the member computers of the selected group.
2. The Scan Now button will only reschedule the **Discover Applicable Updates System Task** for the selected group's membership.

See [Section 7: Inventory](#), for more detailed information.

Software Programs	Count
Adobe Download Manager (Remove Only)	1
Adobe Reader 6.0	1
Command AntiVirus for Windows Enterprise	1
Internet Explorer Q818529	1
Java 2 Runtime Environment Standard Edition v1.3	1
Microsoft .NET Framework (English) v1.0.3705	1
Microsoft Internet Explorer 5.5 SP2	1
MSN Messenger 5.0	1
PatchLink Agent Deployment	1

12.13.1 Software Programs

This displays the name of the software application.

12.13.2 Lock Status

If the software is locked for the group this image indicates if the software application is in compliance or not.

12.13.3 Number of Instances

The number of times this software application was detected.

12.14 Page Functions

12.14.1 Display and Hide

Click the to display additional information and statistics about the represented item. Click the to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (,) is only available for Microsoft Internet Explorer at this time.

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12.14.2 Filter by

Select the desired **Filter by** item from the upper right drop down menu to view the results.

12.14.3 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

12.15 Action Menu



12.15.1 Lock

Clicking on the lock button will lock the selected inventory for all computers members of the group. When the inventory changes for one of the computer members the inventory item is highlighted as being out of compliance and an e-mail notification is sent to the group notification list of the occurrence.

12.15.2 Unlock

Clicking on the unlock button will clear the lock.

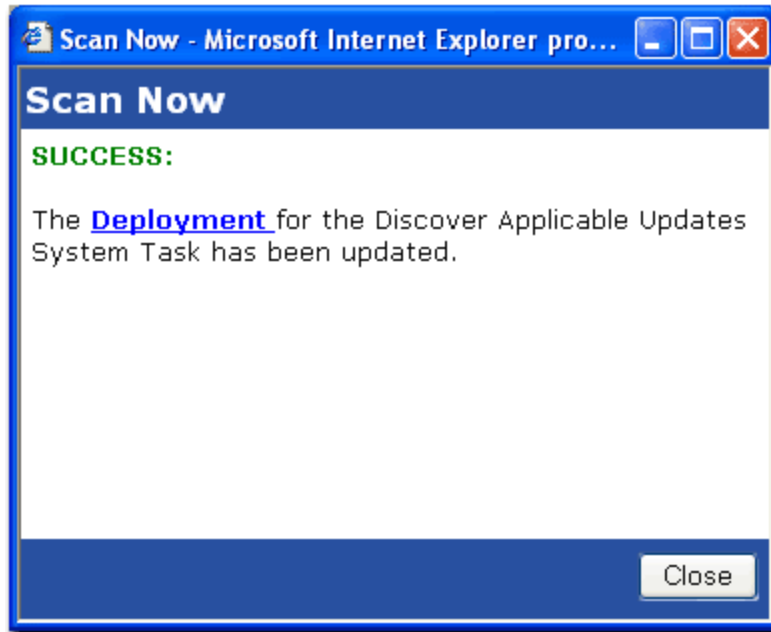
12.15.3 Export

Clicking on the Information tab will display the Group Information and Properties page.

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12.15.4 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates System Task** deployment for immediate execution to the selected groups.



PLUS will reschedule the computer and initialize a screen stating its success and provides a **Deployment** link to initialize a screen with the results of the Discover Applicable Updates Deployment.

Upon clicking the Close button on the screen, the Groups page will be refreshed. Previously selected deployment options are maintained.

12.16 Group Inventory Security



*The Group **Inventory** section of PLUS requires the **View Software Inventory** access right. If a user does not have the correct access, the filter will not have this option available and the inventory display will default to the inventory the user has access to view or the access denied error message is displayed.*

*To be able to view the **Operating Systems Inventory** requires the **View Inventory OS** access right. If a user does not have the correct access, the filter will not have this option available.*

*To be able to view the **Hardware Inventory** requires the **View Hardware Inventory** access right. If a user does not have the correct access, the filter will not have this option available.*

*To be able to view the **Services Inventory** requires the **View Services Inventory** access right. If a user does not have the correct access, the filter will not have this option available.*

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To be able to view the list of computers on which an inventory belongs to requires the [View Computers](#) access right. If a user does not have the correct access, the hyperlink and ,  more information images are disabled.

To export the inventory to a comma-separated value (CSV) file requires the [Export Inventory Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

The Reports tab requires the [View Report](#) access right. If a user does not have the correct access, the [Reports](#) tab is disabled.

The Membership tab requires the [View Computers](#) access right. If a user does not have the correct access, the [Membership](#) tab is disabled.

The Deployments tab requires the [View Deployment Status](#) access right. If a user does not have the correct access, the [Deployments](#) tab is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

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12.17 Group Membership

The Group Membership section of PLUS displays all computers which are members of the group. Clicking on a computer name will allow you to display a computer's specific information.

This view is almost identical to the computers section of PLUS. See [Section 11: Computers](#) for more information.

Computer Members of the Group: Win3.1 Users

Filter By: Enabled

Computer Name	Status	Platform	OS Info	Version	Group List
\\SUPPORT-ADV	Offline	Microsoft Windows 2000 Advanced Server	Win2K-Service Pack 2	4.0.1.26	COG Test, Win2K, Win3.1 Users
\\SUPPORT-W2K	Working	Microsoft Windows 2000 Advanced Server	Win2K-Service Pack 3	4.0.1.26	COG Test, Win2K, Win3.1 Users

Display 100 rows per page

12.17.1 Computer Name

This displays the name of the computer. Click on the computer name to display specific information about the computer.

12.17.2 Status

This displays the status of the computer.

12.17.3 Platform

This displays the operating system platform the computer is running.

12.17.4 OS Info

This displays additional information about the operating system the computer is running.

12.17.5 Version










This displays the version of the agent running on the computer.

12.17.6 Group List

This displays the list of groups that the computer is a member of.

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12.18 Agent Status

Status	Description
	This is an idle deployment agent.
	This deployment agent is idle and has deployments in its work queue.
	The agent is sleeping as it is outside its hours of operation.
	The agent is sleeping as it is outside its hours of operation and has deployments in its work queue.
	This agent is currently working on a deployment.
	This is an enabled detection agent that does not correspond to a registered deployment agent ² .
	The agent is considered to be offline as it has not contacted PLUS in more than two intervals (minimum of 15 minutes).
	The agent is considered to be offline as it has not contacted PLUS in more than two intervals (minimum of 15 minutes) and has deployments in its work
	This agent has been disabled.

Additional information about the status of the agent is displayed once your mouse hovers over the image.

12.19 Page Functions

12.19.1 Filter by

Select the desired **Filter by** item from the upper right drop down menu to view the results.

12.19.2 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

12.19.3 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

12.19.4 Display

Depending on the amount of items available for display and what page you are viewing determines the display function located at the bottom of enabled pages above the Action Menu.

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- ? Next: To display the next page of computers, click on the next button. If the last computer is displayed, the next button is disabled.
- ? Previous: To display the previous page of computers, click on the previous button. If the first computer is being displayed, the previous button is disabled.
- ? Computers per Page: The computer list initially displays up to 100 computers per page. To change the number of computers to display per page, enter a new number in to the Computers per Page input field. To display all computers enter a zero in the input field.

12.19.5 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

12.20 Action Menu



12.20.1 Install

Click on the Install button to display the list of agent installers that can be used to register computers to PLUS.

The agent installer screen contains links to all of the agent installations and additional information on Operating Systems, Requirements, and Installation Notes.

See Item 11.4.; Install, for more information.

12.20.2 Manage

Manage the group's computer membership. Initializes the Group Property page. See [Section 13: Add a Group Wizard](#) for more information.

12.20.3 View

To display additional information about the computer, select a computer and click on the View button. This performs the same function as clicking on the name of the computer.

12.20.4 Enable

To enable selected disabled computers, click on the Enable button.

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12.20.5 Deploy

To deploy a package to specified computers within the computer membership, simply click the Deploy button, select the package, the computers, and the deployment options.

See [Section 10: Deploying Packages: Schedule Deployment Wizard](#) for more information.

12.20.6 Disable

To disable selected enabled computers, click on the Disable button. Disabled computers do not take up an agent license.

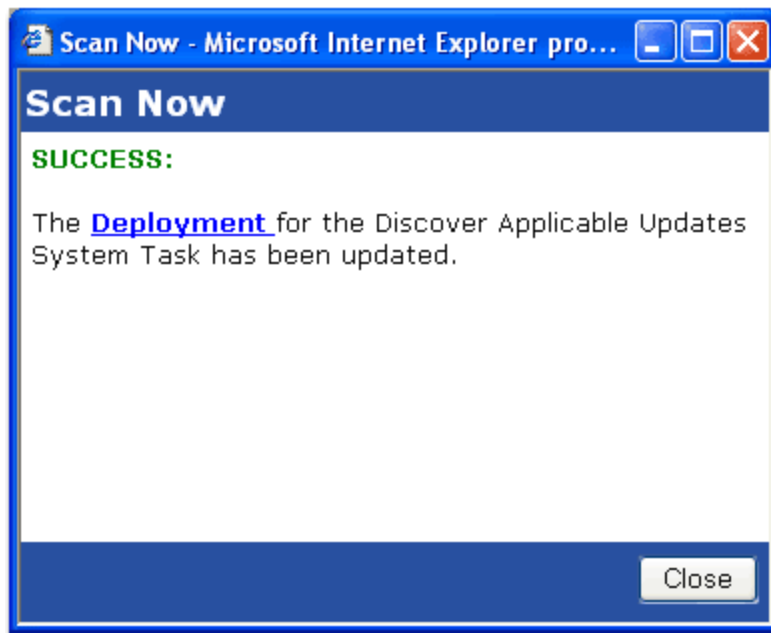
12.20.7 Export

Exports the group membership information to a comma-separated value (CSV) file.

12.20.8 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates** System Task deployment for immediate execution to the selected group.

PLUS will reschedule the computer and initialize a screen stating its success and provides a **Deployment** link to initialize a screen with the results of the Discover Applicable Updates Deployment.



Upon clicking the Close button on the screen, the Groups page will be refreshed. Previously selected deployment options are maintained.

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12.21 Group Membership Security

The Group [Membership](#) section of PLUS requires the [View Group Membership](#) access right. If a user does not have the correct access, the filter will not have this option available and the inventory display will default to the inventory the user has access to view or the access denied error message is displayed.

To be able to view the Enabled [Group Membership](#) requires the [View Enabled Group Membership](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to view the [Disabled Group Membership](#) requires the [View Disabled Group Membership](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to view the [All Group Membership](#) requires the [View All Group Membership](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to utilize the [Scan Now](#) capability requires the [Scan Now](#) access right.

To be able to install, manage, view, deploy or disable group memberships requires the [Manage Group Membership](#) access right. If a user does not have the correct access, the [Install](#), [Manage](#), [View](#), [Deploy](#) and [Disable](#) buttons are disabled.

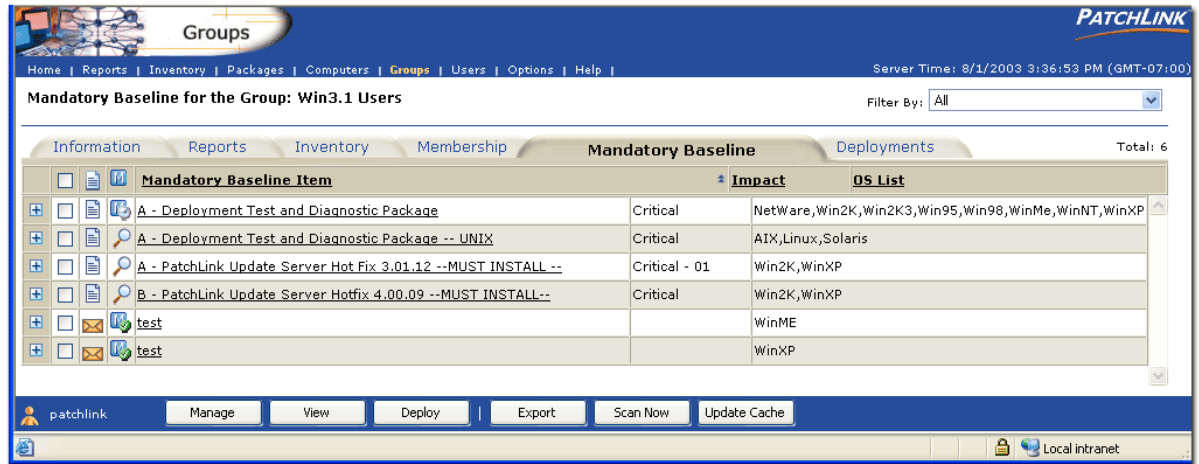
To export the inventory to a comma-separated value (CSV) file requires the [Export Group Membership Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

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12.22 Groups Mandatory Baseline

Mandatory Baselines are the mandatory packages (defined by the user) for a computer group that will be delivered to all members.



Note s:

- ? Any non-system report with one or more associated packages can be associated with a given computer group as a Mandatory patch.
- ? Mandatory report based patches shall be applied to every computer in the computer group which is of a compatible operating system type to the report.
- ? Mandatory report based patches shall be applied to a given computer only when the report for that given computer shows a failure condition showing that the patch is not already installed on the computer.

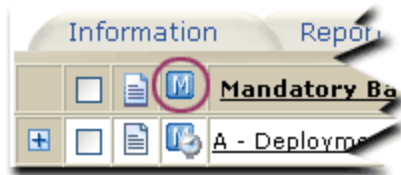
The Group Summary shows three views of currently existing groups on the PatchLink Update Server. Select the desired **Filter by:** item from the upper right drop down menu to view the results. The views are:

- ? **Vulnerability Reports:** Show only the vulnerability reports
- ? **Distribution Packages:** Show only the distribution packages
- ? **All reports:** Show all the mandatory baseline of the Groups that exist on the PatchLink Update Server.

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12.23 Status

There are two status columns for the Mandatory Baseline page. The first will display one of the following icons giving information about the patch itself:



Status	Description
	This is a current vulnerability report
	This is a new vulnerability report
	This is a disabled vulnerability report.
	This is a distribution package.

The second column will display information about the group with respect to the patch using one of the following icons:



Status	Description
	At least one member of this group is either Detecting, Obtaining the Package, Waiting On Detection, or in a Deployment Not Started state. (None of the members have errors).
	At least one member of this group is Deploying this patch. (None of the members have errors, nor are they Detecting).
	All of the members of this group are Disabled for this patch.
	All of the members of this group are either Not Applicable or In Compliance for this patch. (Some can also be disabled).
	At least one member of this group is out of compliance. This indicates that an error has occurred. More specific information about the type of error will appear in the mouse over text.

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- ? Mandatory Baseline Item:
Name of the Item
- ? Impact:
If applicable, Impact of the Vulnerability Report
- ? OS List:
List of applicable Operating Systems

12.24 Select

To select a Mandatory Baseline you can:

- ? Click anywhere within the mandatory baseline entry line (be careful: *mandatory baseline item name* are links to view other information (see below).
- ? Click the checkbox for that mandatory baseline item and click the **View** button.
- ? Click the checkbox in the header section to select all of the mandatory baseline items.

Not Patched		Patched	Error	Detecting	Total Computers:1
<input type="checkbox"/>	Computer Name	* Other Name	Operating System	OS Version	Analysis Date
<input type="checkbox"/>	\\SUPPORT-W2K	support-w2k	Win2K	Win2K-Service Pack 3	8/1/2003 10:23:11 PM

This view is similar to the Reports Section. See [Item 6.7 Vulnerability Report Analysis Details](#) for more details

At the View Mandatory deployment stage, you can select computers and schedule a deployment to them. Also, at this stage you get the complete statistics for the computers whose Detection Agents have run the detected report.

These computers are divided in 9 categories:

- ? Compliance
- ? Detecting
- ? Disabled
- ? Deploying
- ? Not Applicable
- ? Obtaining Package
- ? Deployment Not Started
- ? Waiting On Detection
- ? Error: {specific error message}





These are two error categories:

- ? Detection Errors
- ? Deployment Errors
- ? Item Type

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12.25 Page Functions

12.25.1 Display and Hide

Click the  to display additional information and statistics about the represented item. Click the  to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (, ) is only available for Microsoft Internet Explorer at this time.

12.25.2 Filter by

Filter your results selecting the desired item from the **Filter by** drop down menu in the upper right hand corner.

12.25.3 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

12.25.4 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

12.25.5 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

12.26 Action Menu



12.26.1 Manage

Initializes the Group Property Page to manage the baseline of the Group. .See [Section 13: Add a Group Wizard](#) for more information.

12.26.2 View

Views the Vulnerability Report analysis for the Group

12.26.3 Deploy

Deploys the selected package to the specified Computer. See [Section 10: Deploying Packages: Schedule Deployment Wizard](#) for more information.

12.26.4 Export

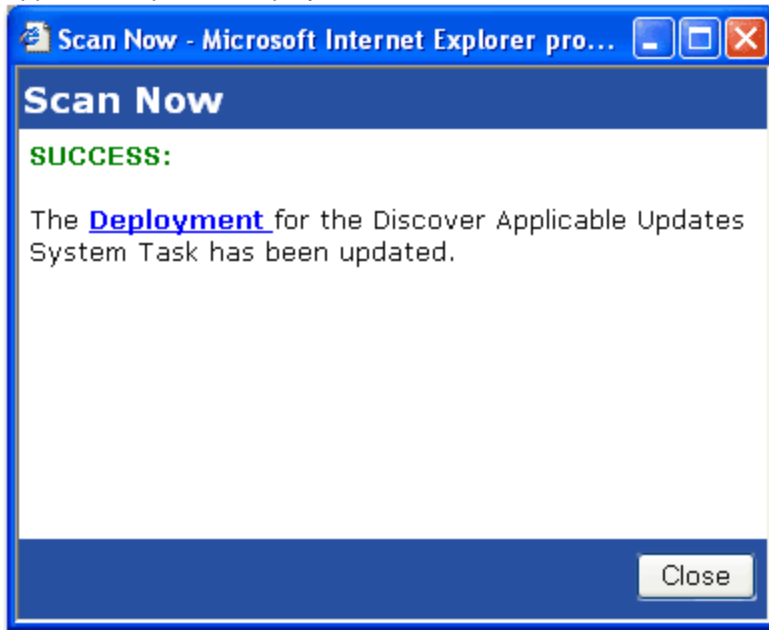
Exports the group mandatory baseline information to a comma-separated value (CSV) file.

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12.26.5 Scan Now

Initializes a screen that allows you to reschedule the **Discover Applicable Updates** System Task deployment for immediate execution to the selected computer.

PLUS will reschedule the computer and initialize a screen stating its success and provides a **Deployment** link to initialize a screen with the results of the Discover Applicable Updates Deployment.



Upon clicking the Close button on the screen, the Groups page will be refreshed and initialized. Previously selected deployment options are maintained.

12.26.6 Update Cache

Initiates the process to cache (or re-cache) for the selected distribution packages. If no distribution packages are selected this will re-cache all of the previously cached distribution packages.

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12.27 Group Mandatory Baseline Security

The [Group Membership](#) section of PLUS requires the [View Group Mandatory](#) access right. If a user does not have the correct access, the filter will not have this option available and the inventory display will default to the inventory the user has access to view or the access denied error message is displayed.

To be able to view the [Group Mandatory Baseline](#) requires the [View Enabled Group Membership](#) access right. If a user does not have the correct access, the filter will not have this option available.

To be able to manage, view, deploy or disable group memberships requires the [Manage Group Membership](#) access right. If a user does not have the correct access, the [Manage](#), [View](#), [Deploy](#) and [Disable](#) buttons are disabled.

To be able to utilize the [Scan Now](#) capability requires the [Scan Now](#) access right

To cache the associated distribution of the selected vulnerability reports requires the [Cache Packages](#) access right. If a user does not have the correct access, the [Update Cache](#) button is disabled.

To export the inventory to a comma-separated value (CSV) file requires the [Export Group Membership Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

Contact your [PatchLink Administrator](#) for more information on [PatchLink Update Security](#).

12.28 Group Deployments

This view displays the deployments that the selected group has been assigned to.

Note:

This view does not display the individual deployments each member has been assigned to, only the deployments that the group, as an entity, have been assigned to.





This view is the same as the Deployment Summary view, but displays all deployments that the selected group has been assigned to.

Name	Initial Start Date	1	0	1	1	1	100%
Deployment of PatchLink Server HotFix TEST 4.00.9	8/1/2003 10:36:54 PM (UTC)	1	0	1	1	1	100%
Deployment of Deployment Test and Diagnostic Package	8/1/2003 10:35:26 PM (UTC)	1	0	1	1	1	100%
Deployment of test	8/1/2003 10:32:36 PM (UTC)	0	0	1	0	0	0%
Deployment of test	8/1/2003 10:32:36 PM (UTC)	0	0	1	0	0	0%

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12.29 Page Functions

12.29.1 Display and Hide

Click the  to display additional information and statistics about the represented item. Click the  to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (, ) is only available for Microsoft Internet Explorer at this time.

12.29.2 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

12.29.3 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

12.29.4 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

12.30 Action Menu



12.30.1 Abort

Allows the user to abort the deployment for the group.

12.30.2 Enable

Allows the user to enable the selected disabled deployments.

12.30.3 Change

Allows the user to change the selected deployment.

12.30.4 Remove

Allows the user to change the selected disabled deployment(s).

12.30.5 Disable

Allows the user to disable the selected deployments.

12.30.6 Export

Exports the group deployment(s) information to a comma-separated value (CSV) file.

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12.31 Group Deployments Security

To be able to change, disable, enable, abort or remove a deployment(s) requires the *Manage Deployments* access right. If a user does not have the correct access, the *Change*, *Disable*, *Enable*, *Abort* and *Remove* buttons are disabled.

To export the inventory to a comma-separated value (CSV) file requires the *Export Group Membership Data* access right. If a user does not have the correct access, the *Export* button is disabled.

Contact your PatchLink Administrator for more information on PatchLink Update Security

13. Add a Group Wizard

Plus has the ability to add groups. From the **Groups** homepage, click on the **Add** button on the Action Menu.

13.1 Group Property Screen - Info

The **Group Information** Screen section of PLUS allows the PatchLink User the ability to create a group, System-defined groups cannot be changed. The **Group Information** tab of the property page contains the base information and it is this tab in which a group's information is loaded and saved.

- ? Group Name
The name of the group to be created. This field is required for groups to be created.
- ? Description
Notes or information describing the group.
- ? Agent Policy Set
The desired Agent Policy Set to use for the computers who are members of the group. When a computer's policies are calculated, PLUS determines the superset of all Agent Policy Sets for the groups the computer is a member of. Thus, if one policy set says the agent has a 60 minute interval and another says the computer has a 30 minute interval, the resulting policy set is 30 minutes.

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Set the Agent Policy Set to the Empty Policy if this group is to have to effect on the policy calculations.

- ? E-Mail
Select any users who have been added to the E-Mail Notification list on PLUS The selected users will be sent group-based notifications.
- ? Number of Computer Members
The total number of computers that are in the selected group.
- ? Number of Computers assigned to the Mandatory Baseline
The total number of computers who are currently assigned to the group.

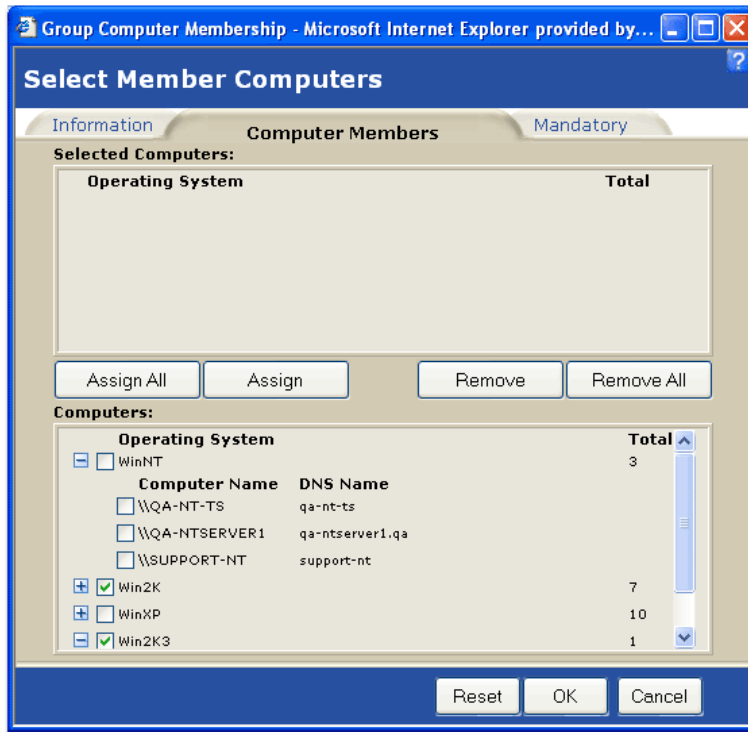
13.1.1 Screen Functions

- ? Reset
Resets the page back to its initial state.
- ? OK
Initiates the process to save the group. If an error occurs during the save process the window will display the error. If no errors occur then the window will be closed.
- ? Cancel
Cancels the add process and closes the group property page window.

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13.2 Group Property Screen - Members

The Computer Members Group Property Page section of PLUS allows the PatchLink User the ability to create a group. System-defined groups cannot be changed. The **Computer Members** tab of the property page contains a list of all computers which have been assigned as members of the group and the list of computers which are not a member of the group.



13.2.1 Selected Computers

- ? Operating System
The operating system platform name. Click the to display the list of computers for that operating system. Click to close the list.
- ? Computer Name
The name of the computer.
- ? DNS Name
The DNS name assigned to the computer
- ? Total Selected per OS
The total number of computers that have been selected for the operating system platform.

13.2.2 Available Computers

- ? Operating System
The operating system platform name. Click the to display the list of computers for that operating system. Click to close the list.

PatchLink Update Server

- ? Computer Name
The name of the computer.
- ? DNS Name
The DNS name assigned to the computer
- ? Total Selected per OS
The total number of computers that have not been selected for the operating system platform.

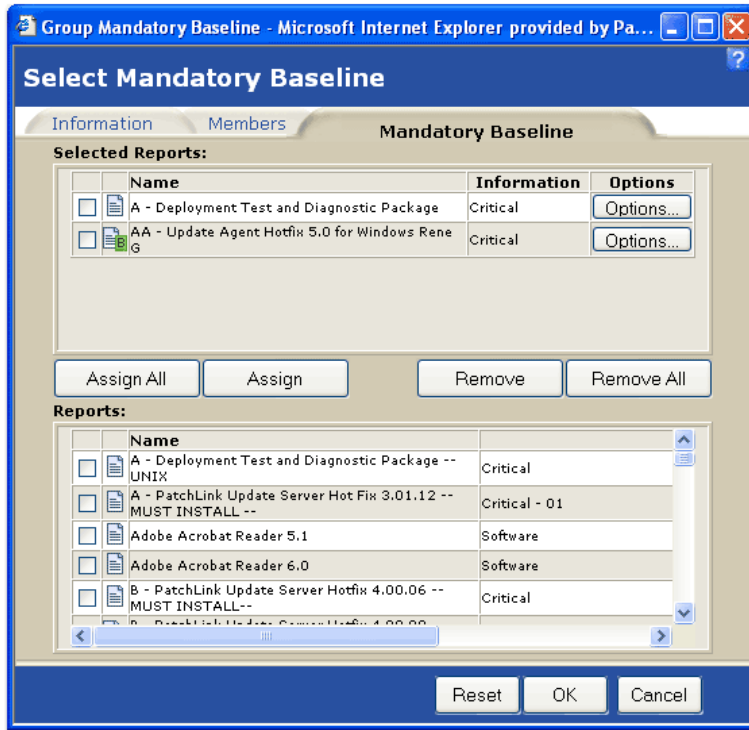
13.2.3 Screen Functions

- ? Assign All
Assigns all available computers to the group.
- ? Assign
Assigns all available computers to the group.
- ? Remove
Removes the selected computers from the group.
- ? Remove All
Removes all selected computers from the group.
- ? Cancel
Cancels the add process and closes the group property page window.
- ? Reset
Resets the page back to its initial state.
- ? OK
Initiates the process to save the group (or the group's changes). If an error occurs during the save process the window will display the error. If no errors occur then the window will be closed.
- ? Cancel
Cancels the add process and closes the group property page window.

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13.3 Group Property Screen –Mandatory Baseline

The Group Property Page section of PLUS allows the **PatchLink User** the ability to create a group, system-defined groups cannot be changed. The **Mandatory Baseline** tab of the property page contains the lists of selected and available Vulnerability Reports and Locally-created Distribution Packages for the group's baseline.

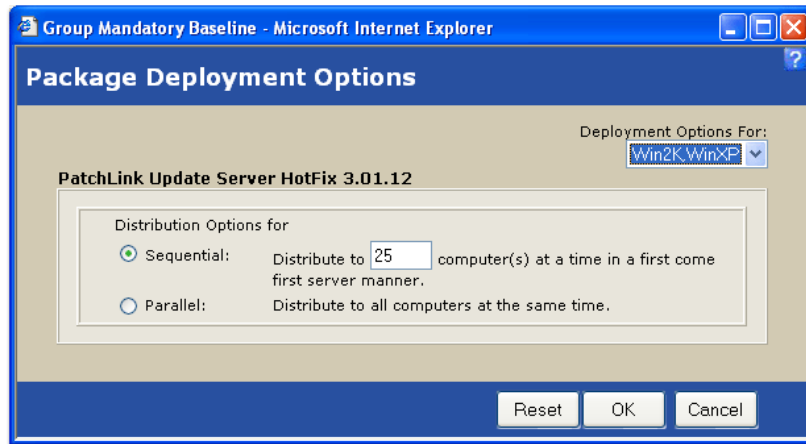


13.3.1 Selected Baseline Items

- ? Baseline Item Name
The name of the report or package.
- ? Baseline Item Type
This is either a Vulnerability Report or a Distribution Package.
- ? Information
This contains information about the operating systems for the package or the impact for a report.

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- ? Options
Click the Options button to display a screen with the deployment options and information about the item.



Sequential (default) indicates that only N (defaulted to 25) number of computers may perform this deployment at any given moment. The other computers will get the deployment, but it is on a first come first serve basis.

Parallel, or all computers may receive the deployment as they connect up to PLUS to get their tasks.

13.3.2 Available Computers

- ? Baseline Item Name
The name of the report or package.
- ? Baseline Item Type
This is either a Vulnerability Report or a Distribution Package.
- ? Information
This contains information about the operating systems for the package or the impact for a report.

13.3.3 Screen Functions

- ? Assign All
Assigns all available reports and packages to the group.
- ? Assign
Assigns all available reports and packages to the group.
- ? Remove
Removes the selected reports and packages from the group.
- ? Remove All
Removes all selected reports and packages from the group.
- ? Reset
Resets the page back to its initial state.

PatchLink Update Server

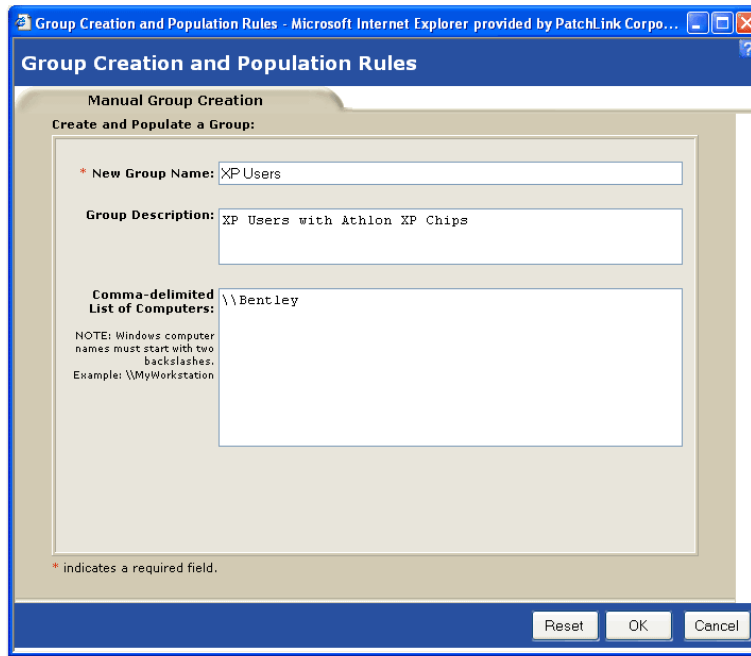
- ? OK
Initiates the process to save the group (or the group's changes). If a Mandatory Baseline item has been added which requires a license to agree prior to the saving of the group, a license agreement page will be displayed. If an error occurs during the save process the window will display the error. If no errors occur then the window will be closed.
- ? Cancel
Cancels the add process and closes the group property page window.
- ? Options
Displays a window with the deployment options for the item.

13.3.4 Edit

Selecting a group and clicking on this button will bring up the Group Property screen with this group's information allowing the group to be changed. See [Section 14; Edit a Group Wizard](#) for more information.

13.3.5 Rules

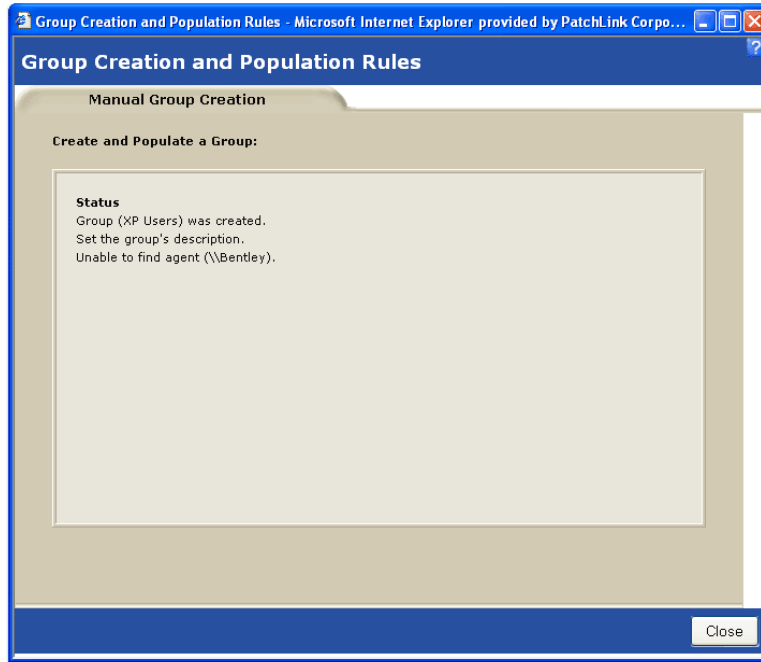
Clicking this button will bring up the Manual Group Creation and Population Rules property page.



Define a new group by filling in a new group's name and description. The group will be auto-populated by adding in a comma-separated list of computer names.

Clicking the OK button initializes the Manual Group Creation status screen.

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Upon clicking the Close button of the Manual Group Creation status screen, the **Groups Homepage** is automatically refreshed showing the newly created computer group.

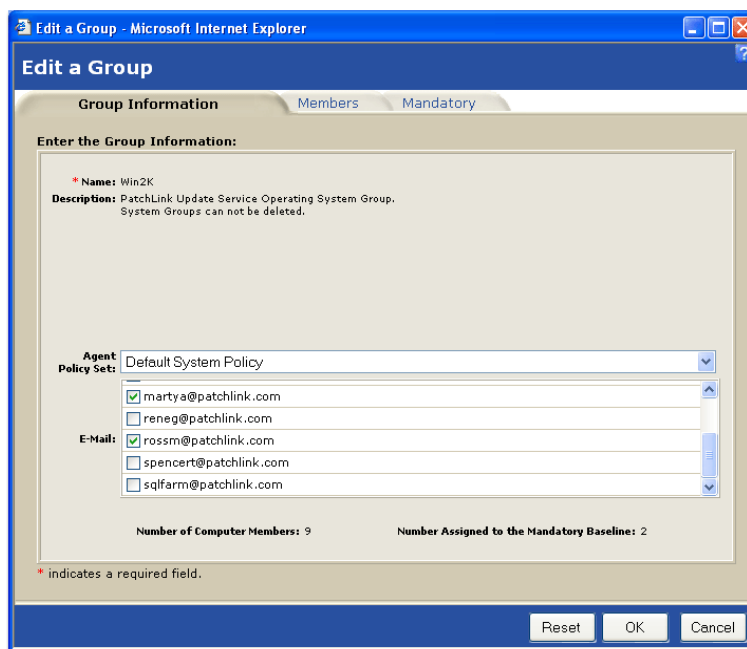
14. Edit a Group Wizard

Plus has the ability to edit groups. To Edit a group, you must first create one. See [Section 13: Add a Group Wizard](#) for more information.

From the **Groups** homepage, select the group that you wish to edit by clicking in the checkbox next to the item and click on the **Edit** button on the Action Menu.

14.1 Group Property Screen - Info

The **Group Information** Screen section of PLUS allows the PatchLink User the ability to edit a group. System-defined groups cannot be changed. The first tab of the property page contains the base information and it is this tab in which a group's information is loaded and saved.



- ? Group Name
The name of the group selected to be edited.
- ? Description
Previously entered notes or information describing the group.
- ? Agent Policy Set
The desired Agent Policy Set to use for the computers who are members of the group. When a computer's policies are calculated, PLUS determines the superset of all Agent Policy Sets for the groups the computer is a member of. Thus, if one policy set says the agent has a 60 minute interval and another says the computer has a 30 minute interval, the resulting policy set is 30 minutes.

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Set the Agent Policy Set to the Empty Policy if this group is to have to effect on the policy calculations.

- ? E-Mail
Select any users who have been added to the E-Mail Notification list on PLUS The selected users will be sent group-based notifications.
- ? Number of Computer Members
The total number of computers that are in the selected group.
- ? Number of Computers assigned to the Mandatory Baseline
The total number of computers who are currently assigned to the group.

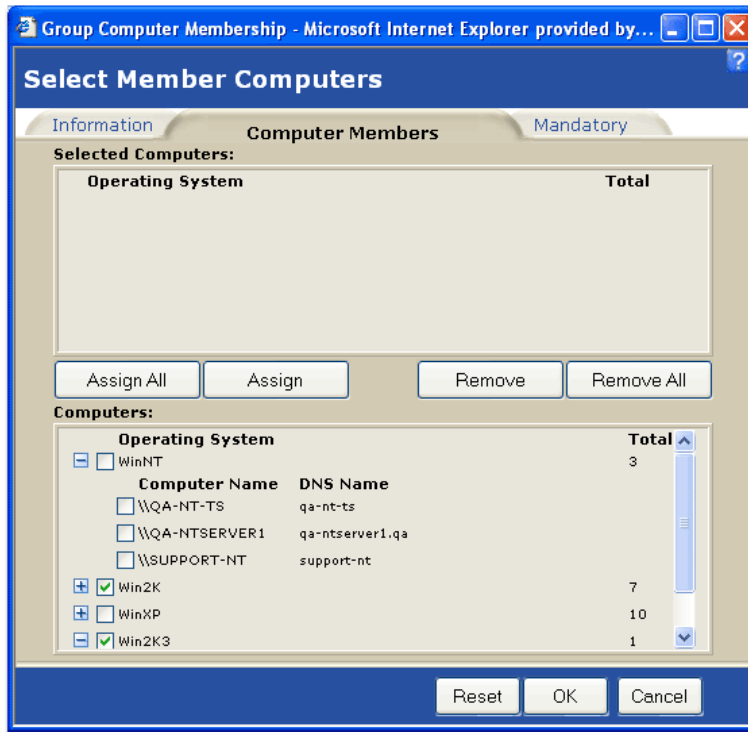
14.1.1 Screen Functions

- ? Reset
Resets the page back to its initial state.
- ? OK
Initiates the process to save the group's changes. If an error occurs during the save process the window will display the error. If no errors occur then the window will be closed.
- ? Cancel
Cancels the edit process and closes the group property page window.

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14.2 Group Property Screen - Members

The Computer Members Group Property Page section of PLUS allows the PatchLink User the ability to edit a group. System-defined groups cannot be changed. The **Computer Members** tab of the property page contains a list of all computers which have been assigned as members of the group and the list of computers which are not a member of the group.



14.2.1 Selected Computers

- ? Operating System
The operating system platform name. Click the to display the list of computers for that operating system. Click to close the list.
- ? Computer Name
The name of the computer.
- ? DNS Name
The DNS name assigned to the computer
- ? Total Selected per OS
The total number of computers that have been selected for the operating system platform.

14.2.2 Available Computers

- ? Operating System
The operating system platform name. Click the to display the list of computers for that operating system. Click to close the list.

PatchLink Update Server

- ? Computer Name
The name of the computer.
- ? DNS Name
The DNS name assigned to the computer
- ? Total Selected per OS
The total number of computers that have not been selected for the operating system platform.

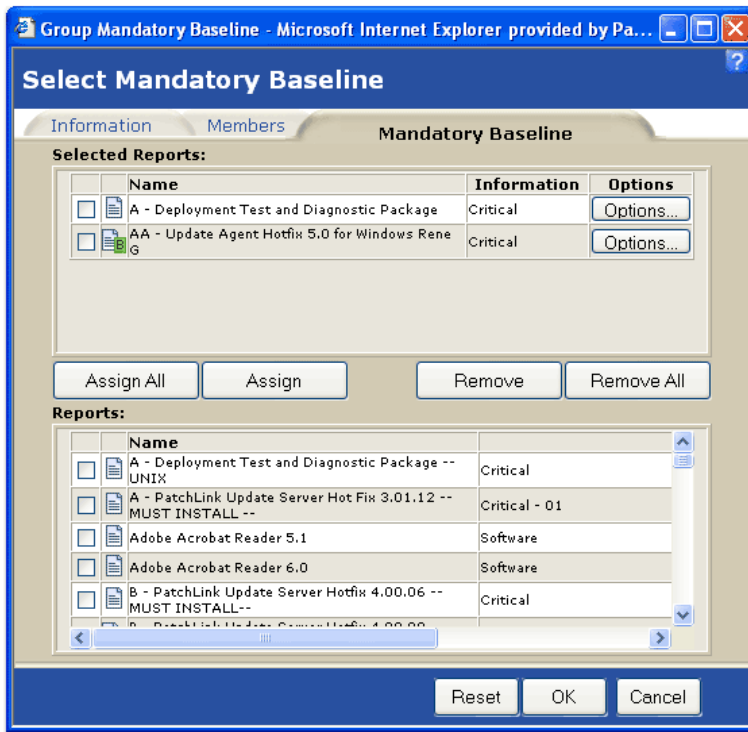
14.2.3 Screen Functions

- ? Assign All
Assigns all available computers to the group.
- ? Assign
Assigns all available computers to the group.
- ? Remove
Removes the selected computers from the group.
- ? Remove All
Removes all selected computers from the group.
- ? Cancel
Cancels the edit process and closes the group property page window.
- ? Reset
Resets the page back to its initial state.
- ? OK
Initiates the process to save the group (or the group's changes). If an error occurs during the save process the window will display the error. If no errors occur then the window will be closed.
- ? Cancel
Cancels the edit process and closes the group property page window.

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14.3 Group Property Screen –Mandatory Baseline

The Group Property Page section of PLUS allows the **PatchLink User** the ability to edit a group, system-defined groups cannot be changed. The **Mandatory Baseline** tab of the property page contains the lists of selected and available Vulnerability Reports and Locally-created Distribution Packages for the group's baseline.

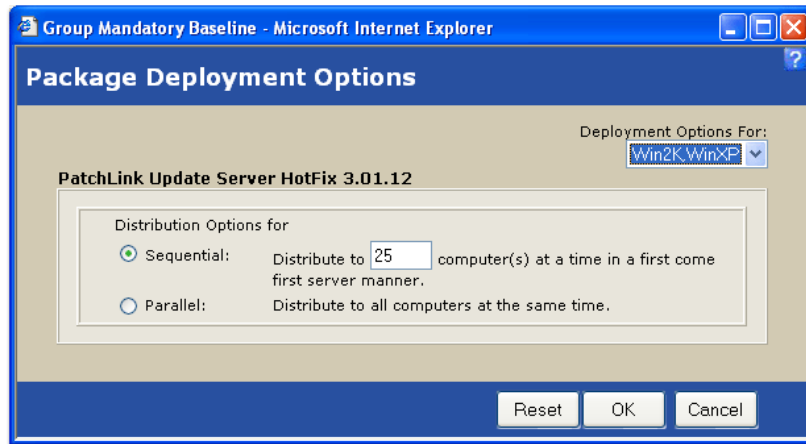


14.3.1 Selected Baseline Items

- ? Baseline Item Name
The name of the report or package.
- ? Baseline Item Type
This is either a Vulnerability Report or a Distribution Package.
- ? Information
This contains information about the operating systems for the package or the impact for a report.

PatchLink Update Server

- ? Click the Options button to display a screen with the deployment options and information about the item.



Sequential (default) indicates that only N (defaulted to 25) number of computers may perform this deployment at any given moment. The other computers will get the deployment, but it is on a first come first serve basis.

Parallel, or all computers may receive the deployment as they connect up to PLUS to get their tasks.

14.3.2 Available Computers

- ? **Baseline Item Name**
The name of the report or package.
- ? **Baseline Item Type**
This is either a Vulnerability Report or a Distribution Package.
- ? **Information**
This contains information about the operating systems for the package or the impact for a report.

14.3.3 Screen Functions

- ? **Assign All**
Assigns all available reports and packages to the group.
- ? **Assign**
Assigns all available reports and packages to the group.
- ? **Remove**
Removes the selected reports and packages from the group.
- ? **Remove All**
Removes all selected reports and packages from the group.
- ? **Reset**
Resets the page back to its initial state.

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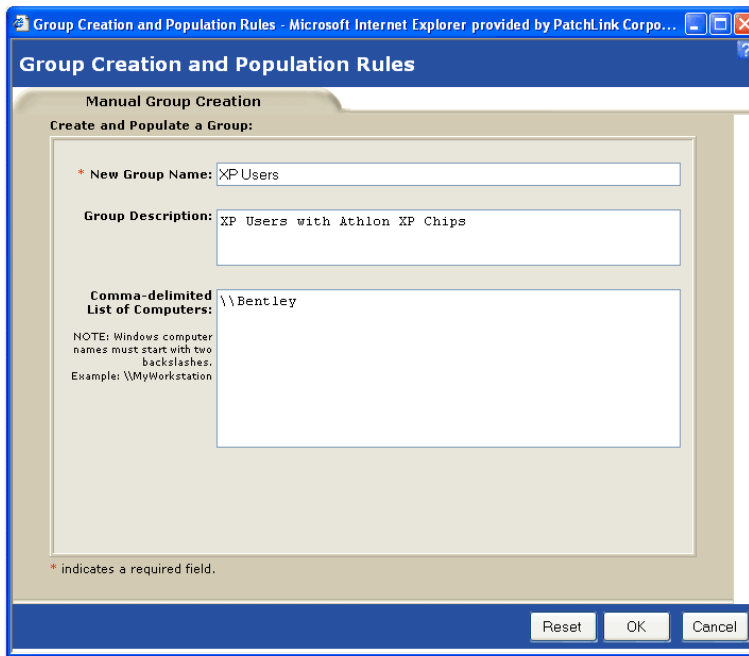
- ? OK
Initiates the process to save the group (or the group's changes). If a Mandatory Baseline item has been edited which requires a license to agree prior to the saving of the group, a license agreement page will be displayed. If an error occurs during the save process the window will display the error. If no errors occur then the window will be closed.
- ? Cancel
Cancels the edit process and closes the group property page window.
- ? Options.
Displays a window with the deployment options for the item.

14.3.4 Edit

Selecting a group and clicking on this button will bring up the Group Property page with this group's information allowing the group to be changed.

14.3.5 Rules

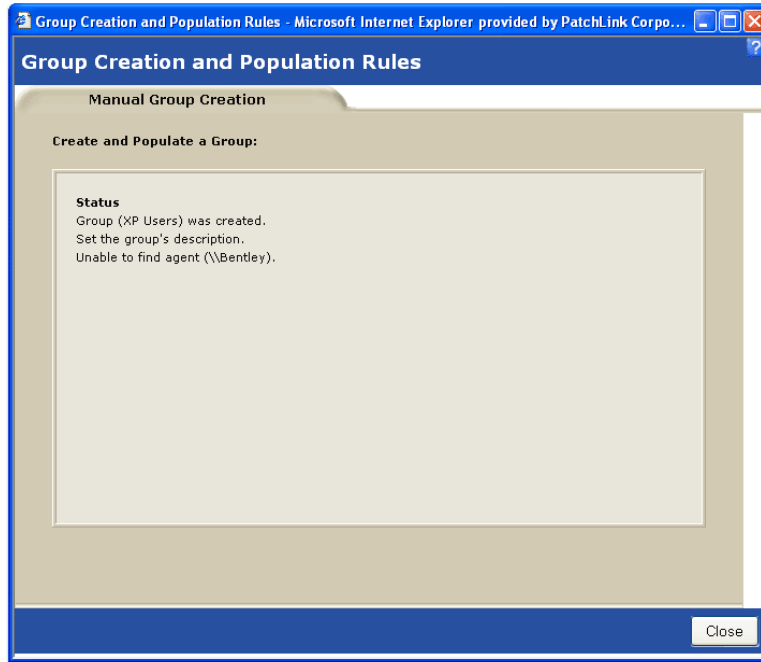
Clicking this button will bring up the Manual Group Creation and Population Rules property page.



Define a new group by filling in a new group's name and description. The group will be auto-populated by adding in a comma-separated list of computer names.

Clicking the OK button initializes the Manual Group Creation status screen.

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Upon clicking the Close button of the Manual Group Creation status screen, the **Groups Homepage** is automatically refreshed showing the newly created computer group.

15. Users

Home | Reports | Inventory | Packages | Computers | Groups | **Users** | Options | Help |

The User Management section of PLUS allows the PatchLink Administrator the ability to manage who has access to log in to PLUS and once they are logged in, what sections and functions they can access, and what computers and groups they can perform those functions on.

15.1 PatchLink Users

This displays the users who have the ability to log in to PLUS and what User Role each user has.

<input type="checkbox"/>	User Name	Role	Full Name	First Logged On	Last Logged On
<input type="checkbox"/>	Administrator	Administrator		6/17/2003 7:14:09 AM	7/18/2003 7:44:39 AM
<input type="checkbox"/>	BILLW	Administrator	Bill Wesson	6/6/2003 7:04:25 AM	8/1/2003 4:01:45 PM
<input type="checkbox"/>	J. Bentley	Administrator	Joseph J. Bentley		
<input type="checkbox"/>	mike	Loser Role	Michael	7/21/2003 4:11:59 PM	7/22/2003 10:32:24 AM
<input type="checkbox"/>	PatchLink	Administrator	PatchLink	6/5/2003 3:44:17 PM	8/4/2003 4:38:43 PM
<input type="checkbox"/>	SUPPORT1\pdaddy	Administrator		6/16/2003 10:19:41 AM	8/4/2003 5:39:35 PM
<input type="checkbox"/>	SUPPORT1\reneg	Administrator		6/22/2003 11:35:00 PM	7/11/2003 7:55:10 AM

patchlink [Create] [Add] [Edit] [Remove] [Delete] [Export]

15.2 User Information

15.2.1 Username

The name a user uses to log in to PLUS with.

15.2.2 Role

What user role the user is assigned.

15.2.3 Full Name

The user's full name.

15.2.4 First Logged On

When the user first logged on to PLUS.

15.2.5 Last Logged On

When the user last logged on to PLUS.

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15.3 Page Functions

15.3.1 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

15.3.2 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

15.3.3 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

15.4 Action Menu



15.4.1 Create

Allows a PatchLink Administrator to create new local machine users and add them as users who have access to log on to PLUS. See [Section 16: Create a User](#) for more information.

15.4.2 Add

Allows a PatchLink Administrator to give an existing Windows user access to log on to PLUS. See [Section 17: Add a User](#) for more information.

15.4.3 Edit

The Edit a User Wizard allows PatchLink Administrator the ability to edit a user's information and change their user role, if needed. This page of the wizard gives an overview of the wizard's function. See [Section 18: Edit a User](#) for more information.

15.4.4 Remove

Allows a PatchLink Administrator to remove a Windows User from being able to log on to PLUS. This does not delete the Windows user.

15.4.5 Delete

Allows a PatchLink Administrator to remove a Windows User from being able to log on to PLUS and then delete the user from the local machine.

15.4.6 Export

Exports the lists of uses and their information to a comma-separated value (CSV) file.

PatchLink Update Server

15.5 User Management Security

The user management section of PLUS requires the *View User Management* access right. If a user does not have the correct access the access denied error message is displayed.

To be able to Create, Add, Edit, Remove, or Delete users within the *User Management* section of PLUS requires the *Manage Users* access right. If a user does not have the correct access, the *Create, Add, Edit, Remove* and *Delete* buttons are disabled.

To be able to export the user data to a comma-separated value (CSV) file requires the *Export User Data* access right. If a user does not have the correct access, the *Export* button is disabled.

Contact your *PatchLink Administrator* for more information on *PatchLink Update Security*.

15.6 User (Security) Roles

A User Role defines what a user can see, what they can do, and what they can perform those actions on. If a user is able to log in to PLUS but does not have any access they will not be able to view any pages, perform any functions on any groups or computers. This will literally see nothing, nor be able to do nothing. At any given time, there must be at least one user who has the Administrator User Role.

Every page, feature, function and individual action of PLUS is constrained to a series of Access Rights. Based on what Access Rights a role has defines what pages and functionality or actions the users who are assigned that role have.

By default there are four system-defined User Roles: Administrator, Manager, Operator and Guest. The PLUS Administrator can assign these roles to PatchLink users or use them as templates to create new User Roles. By default all groups and computers are added to these user roles when they are created or registered. The various roles are:

The screenshot shows the 'Users' management page in PatchLink. The title is 'User Management: Enabled User Roles' with a filter set to 'Enabled'. A table lists the following roles:

User Role Name	Type	Access Rights	Users	Groups	Computers
Administrator	System	52	25	34	28
Manager	System	49	7	34	8
Operator	System	39	3	34	8
Guest	System	16	11	34	9
Assistant Supervisor	Custom	39	0	19	4
Data Verification Office	Custom	39	1	34	8

At the bottom of the table, there are buttons for 'Add', 'Edit', 'Disable', and 'Export'. The total number of roles is 46.

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15.7 User Roles

15.7.1 Administrator

Any user who is assigned this User Role is considered a PatchLink Super-User, as they have full access to everything. Users of this role are the only users who can delegate newly installed computers to other user roles.

15.7.2 Manager

The Manager User role can manage every section of PLUS other than the Advanced Configuration Options and User Management.

15.7.3 Operator

The Operator user role can perform all routine operations (deploy, detect, export).

15.7.4 Guest

The Guest user role can access all of the pages but perform no functionality on what they see.

15.7.5 Custom

The custom user role is a role that is defined by a PatchLink Administrator. The PatchLink Administrator defines access rights, groups and computers that these roles have access to.

15.7.6 Disabled Custom

This customer user role has been disabled. Any users who are assigned this role do not have will not have any access to any of the PLUS sections, functions, computers or groups.

15.8 User Role List

15.8.1 User Role Name

The name of the user role.

15.8.2 Type

System or Custom, based on who created the role.

15.8.3 Access Rights

The number of access rights assigned to the user role.

15.8.4 Users

The number of users assigned this user role.

15.8.5 Groups

The number of groups assigned to the user role.

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15.8.6 Computers

The number of computers assigned to the user role.

15.9 Page Functions

15.9.1 Filter by

Filter your results selecting the desired item from the **Filter by** drop down menu in the upper right hand corner.

15.9.2 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

15.9.3 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

15.9.4 Checkboxes

Checkboxes are used to either select a single item or a group of items to initialize them for a certain function or selection. Checkboxes appear throughout the PLUS and are **not** visible in Netscape.

15.10 Action Menu



15.10.1 Add

The Role Property pages allow the PatchLink Administrator to create or edit a user role. The role can be assigned access rights to various PLUS functions, permission to access particular groups of computers, and permission to access individual computers. Use this page to specify basic role information. See [Section 19: Add a Role Wizard](#) for more information.

15.10.2 Enable

Allows a PatchLink Administrator to enable an existing (non-system) user role.

15.10.3 Edit

Allows a PatchLink Administrator to change an existing (non-system) user role. See [Section 20: Edit a Role](#) for more information.

15.10.4 Disable

Allows a PatchLink Administrator to disable an existing (non-system) user role.

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15.10.5 Remove

Allows a PatchLink Administrator to delete an existing (non-system) disabled user role.

15.10.6 Export

Exports the lists of user roles and their information to a comma-separated value (CSV) file.

15.11 User Roles Security

The user roles section of PLUS requires the [View User Management](#) access right. If a user does not have the correct access, the access denied error message is displayed.

To be able to Add, Edit, or Remove user roles within the User Role section of PLUS requires the [Manage Users](#) access right. If a user does not have the correct access, the [Add](#), [Edit](#), and [Remove](#) buttons are disabled.

To be able to export the user role data to a comma-separated value (CSV) file requires the [Export User Data](#) access right. If a user does not have the correct access, the [Export](#) button is disabled.

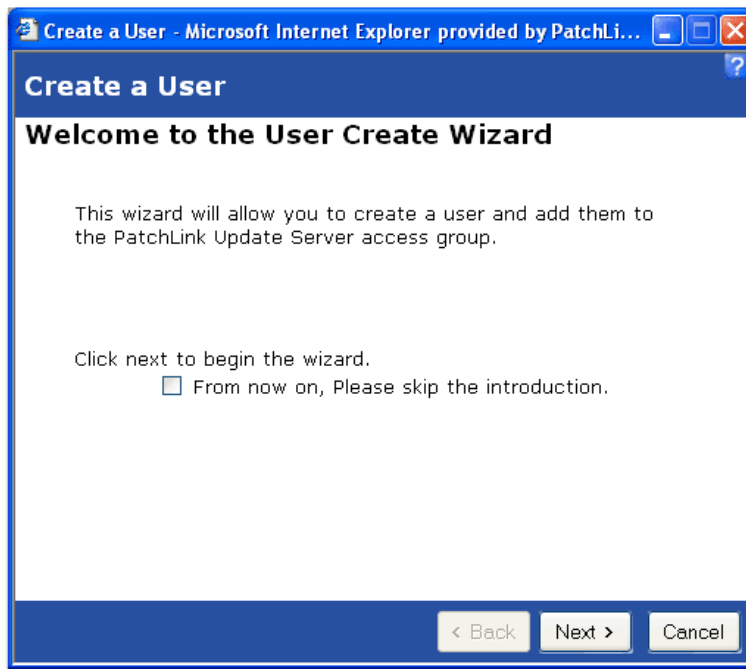
Contact your PatchLink Administrator for more information on [Patchlink Update Security](#).

16. Create a User Wizard

The **Create a User** Wizard allows PatchLink Administrator the ability to create local Windows users and give them access to PLUS. Enter basic information required to create the user.

16.1 Welcome

From the **Users** homepage, Users Tab, click on the **Create** button on the Action Menu. The Welcome Screen appears.



16.2 Screen Functions

16.2.1 Skip

The **Skip the Introduction** checkbox will determine if the Introduction page will be displayed each time the wizard is accessed. Click in the checkbox to prevent the Welcome screen from appearing the next time the Create a User Wizard is initialized.

16.2.2 Back

The **Back** button is disabled since this is the first page of the wizard. In subsequent screens, the **Back** button will initialize the previous screen.

16.2.3 Next

The **Next** button initializes the wizard's next screen.

16.2.4 Cancel

The **Cancel** button closes the wizard.

PatchLink Update Server

Click the **Next** button to enter User Information.

16.3 User Information

Enter User Information into the appropriate fields and select their **Role** from the dropdown menu. A User Role defines what a user can see, what they can do, and what they can perform those actions on. If a user is able to log in to PLUS, but does not have any access, they will not be able to view any pages, perform any actions or functions on any groups or computers. This is literally see nothing, nor be able to do nothing. At any given time, there must be at least one user who is assigned to the Administrator User Role.

The screenshot shows a web browser window titled "Create a User - Microsoft Internet Explorer provided by PatchLi...". The main content area is a form titled "Create a User" with a "User Information:" section. The form contains the following fields and controls:

- User Name:
- Password:
- Confirm Password:
- Password Reminder:
- Full Name:
- Office phone:
- Cell phone:
- Pager:
- Email:
- Description:
- Role:

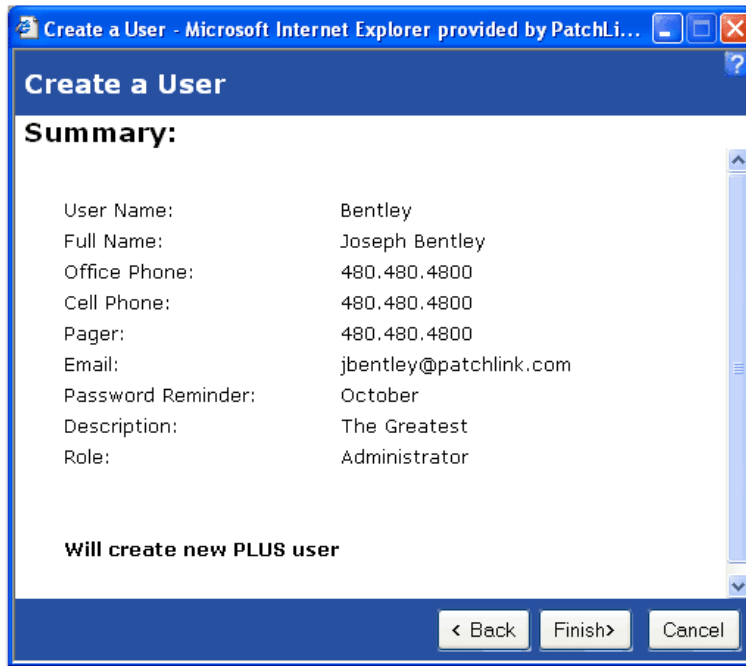
At the bottom of the form, there are three buttons: "< Back", "Next >", and "Cancel".

After entering in all User information, click the **Next** button to verify a summary of the data before the user is created.

PatchLink Update Server

16.4 Summary

Verify the accuracy of all entered User information. Click the **Back** button to initialize the previous User Information screen and edit user information. Click the **Next** button to initialize the creation of the user and to view the Status screen.



The screenshot shows a web browser window titled "Create a User - Microsoft Internet Explorer provided by PatchLi...". The page content is as follows:

Create a User	
Summary:	
User Name:	Bentley
Full Name:	Joseph Bentley
Office Phone:	480.480.4800
Cell Phone:	480.480.4800
Pager:	480.480.4800
Email:	jbentley@patchlink.com
Password Reminder:	October
Description:	The Greatest
Role:	Administrator

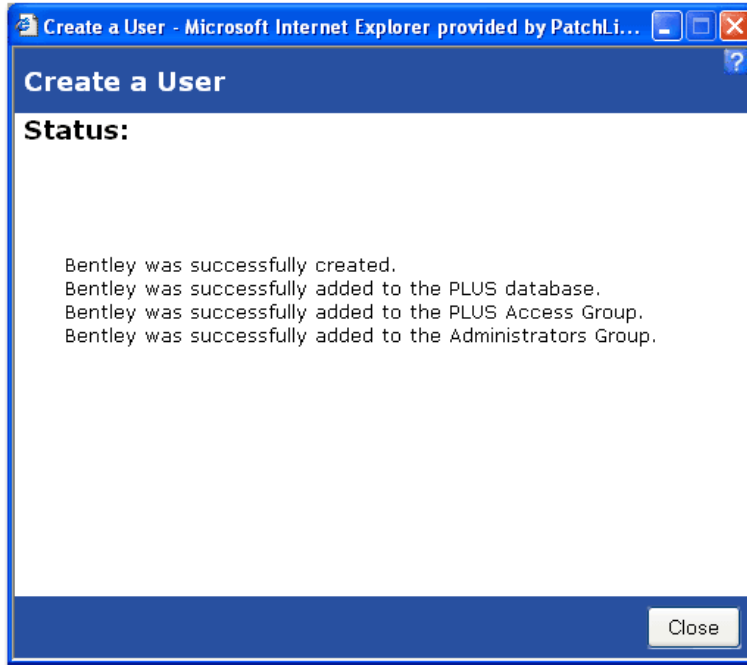
Will create new PLUS user

< Back Finish > Cancel

PatchLink Update Server

16.5 Status

The user was created and added to the PatchLink Update Server Access Group.



If the user was given access to a user role which has the Manage Users Access Right, they will also be added to the Windows Administrators group on the local PLUS computer.

Upon Closure of the Status window, the newly created user will appear on the Users homepage after it is refreshed.

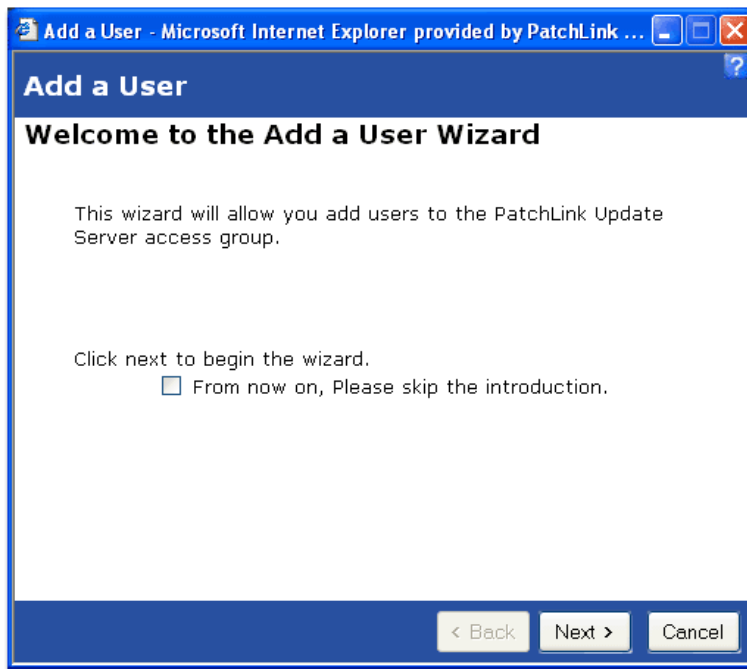
PatchLink Update Server

17. Add a User Wizard

The **Add a User** Wizard allows a PatchLink Administrator to give an existing Windows user access to log on to PLUS.

17.1 Welcome

From the **Users** homepage, Users Tab, click on the **Add** button on the Action Menu. The Welcome Screen appears.



17.2 Screen Functions

17.2.1 Skip

The **Skip the Introduction** checkbox will determine if the Introduction page will be displayed each time the wizard is accessed. Click in the checkbox to prevent the Welcome screen from appearing the next time the Add a User Wizard is initialized.

17.2.2 Back

The **Back** button is disabled since this is the first page of the wizard. In subsequent screens, the **Back** button will initialize the previous screen.

17.2.3 Next

The **Next** button initializes the wizard's next screen.

17.2.4 Cancel

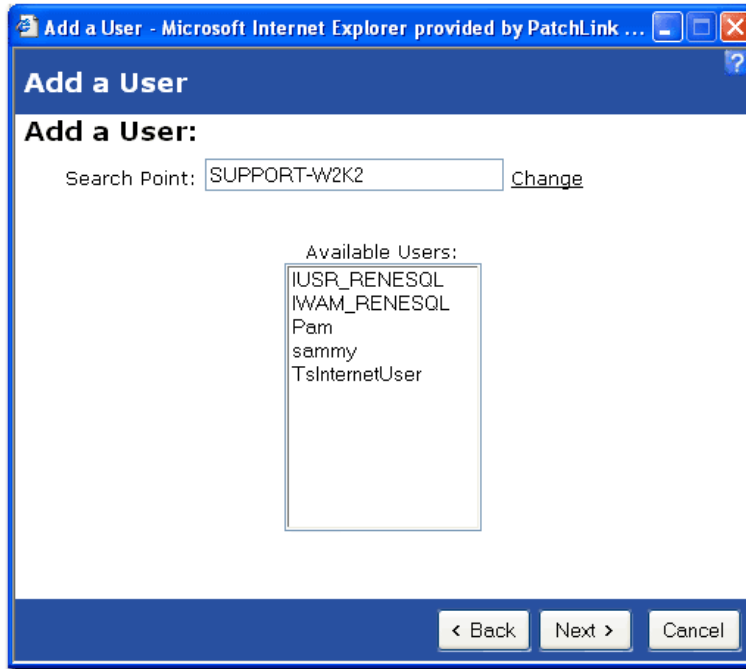
The **Cancel** button closes the wizard.

PatchLink Update Server

Click the **Next** button to enter User Information.

17.3 Add

Displayed are a list of users that are available (from your Created Users) to be added to the PatchLink Update Server Access Group.



17.3.1 Search Point: Change

The default location to check for users is the name of the computer where the PatchLink Update Server is installed on to. To change this, enter in the new search location in to the Search Point field and click on the Change hyperlink.

17.3.2 Available Users: Select

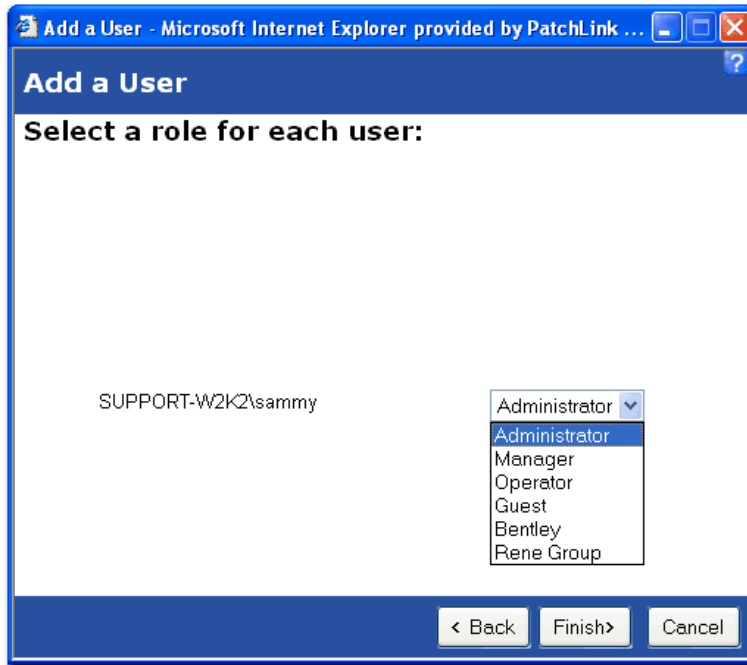
To select a user simply click on the user's name. To select multiple users, hold the **Ctrl** (control) key down and click on the user names.

Click the **Next** button to initialize the **Roles** screen.

PatchLink Update Server

17.4 Select a Role

This screen displays the available user roles to choose. The selected role will be assigned to the user.

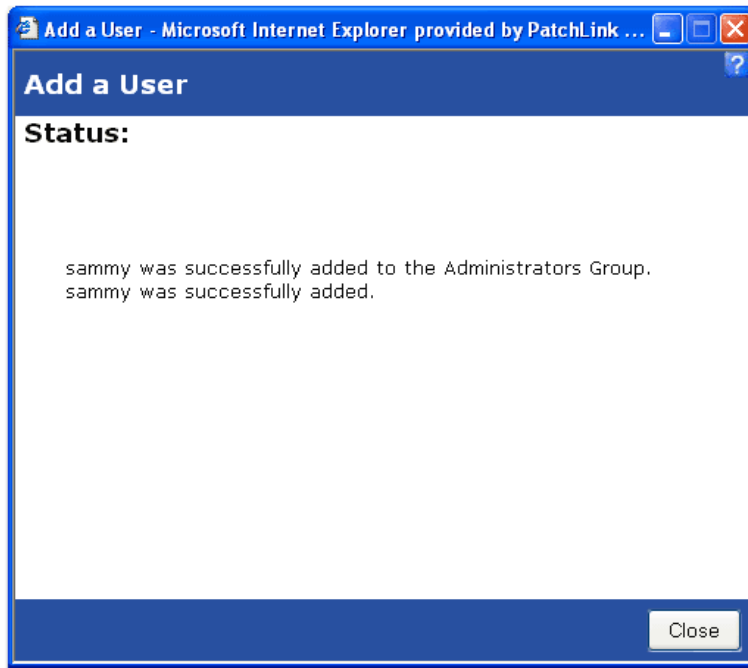


Select a User Role and click the **Finish** button.

17.5 Status

The status screen appears verifying the addition.

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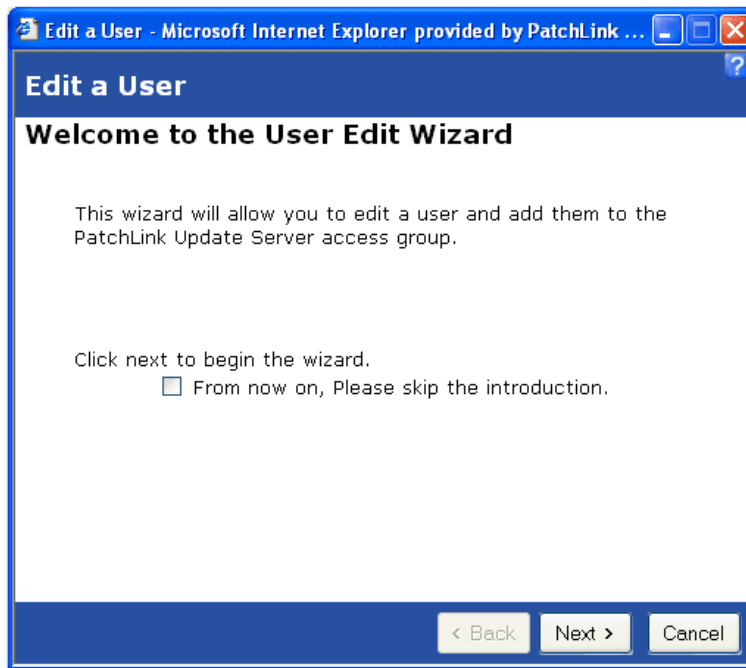
Upon clicking on the close button, the User screen is automatically refreshed with the User addition.

18. Edit a User Wizard

The **Edit a User Wizard** allows PatchLink Administrator the ability to edit a user's information and change their user role, if needed.

18.1 Welcome

From the **Users** homepage, Users Tab, select a User that you wish to edit by clicking in the checkbox next to the item and click on the **Edit** button on the Action Menu. The Welcome Screen appears.



18.2 Screen Functions

18.2.1 Skip

The **Skip the Introduction** checkbox will determine if the Introduction page will be displayed each time the wizard is accessed. Click in the checkbox to prevent the Welcome screen from appearing the next time the Edit a User Wizard is initialized.

18.2.2 Back

The **Back** button is disabled since this is the first page of the wizard. In subsequent screens, the **Back** button will initialize the previous screen.

18.2.3 Next

The **Next** button initializes the wizard's next screen.

18.2.4 Cancel

The **Cancel** button closes the wizard.

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Click the Next button to initialize the **Edit User** screen.

18.3 Edit Information

Displayed are the fields in which you entered information when you created a user.

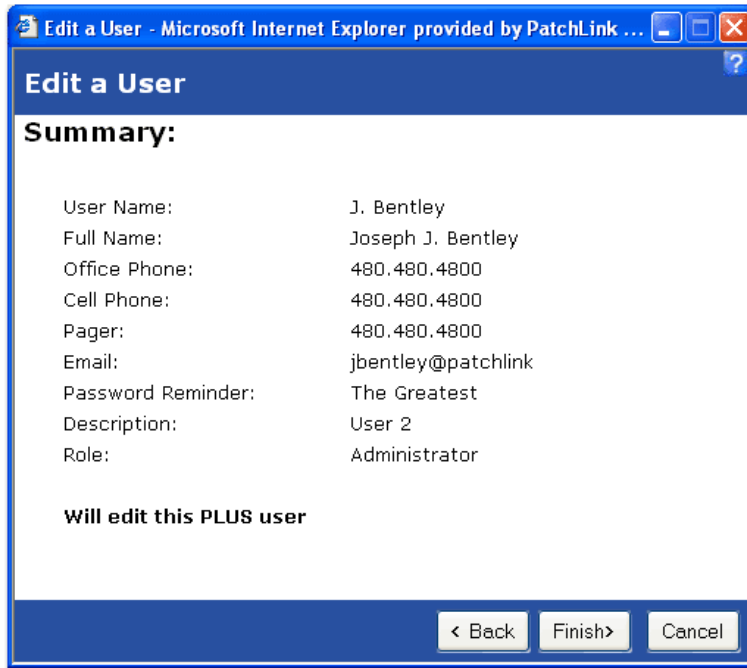
Edit a User J. Bentley:	
Password Reminder:	<input type="text" value="The Greatest"/>
Full Name:	<input type="text" value="Joseph J. Bentley"/>
Office phone:	<input type="text" value="480.480.4800"/>
Cell phone:	<input type="text" value="480.480.4800"/>
Pager:	<input type="text" value="480.480.4800"/>
Email:	<input type="text" value="jbentley@patchlink"/>
Description:	<input type="text" value="User 2"/>
Role:	<input type="text" value="Administrator"/>

Edit information and click the **Next** button.

18.4 Summary

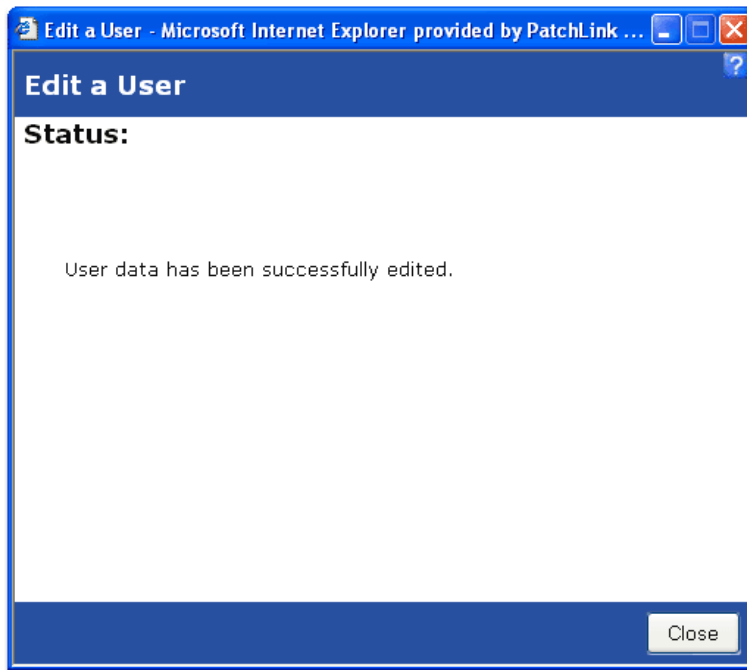
Verify the accuracy of all entered User information. Click the **Back** button to initialize the previous Edit User Information screen and edit user information. Click the **Next** button to initialize the edit of the user and to view the Status screen.

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18.5 Status

The status screen appears verifying the edit.



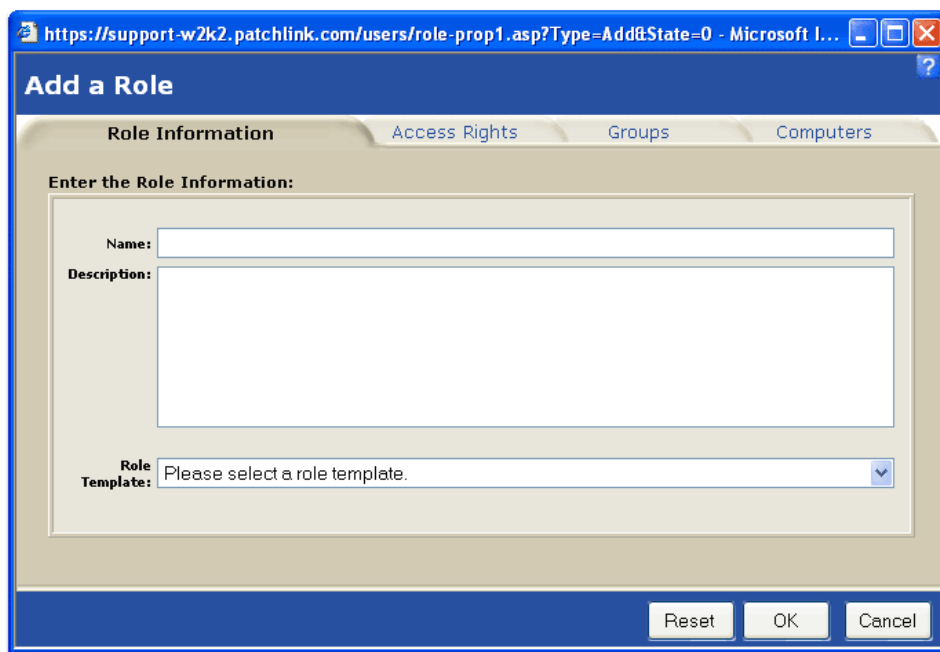
Upon Closure of the Status window, the newly edited user information will appear on the Users homepage item after it is refreshed and viewed.

19. Add a Role Wizard

The Role Property pages allow the PatchLink Administrator to create a user role. The role can be assigned access rights to various PLUS functions, permission to access particular groups of computers, and permission to access individual computers. Use the **Role Information** screen to specify basic role information.

19.1 Add a Role

From the Users homepage, Roles Tab, Click on the Add button on the Action Menu to initialize the **Add a Role** wizard.



19.1.1 Role Information

- ? Name
Enter the name of the user role to be created or that of the role being edited.
- ? Description
Enter the description of the user role.
- ? Role Template
When creating a role, use this to select a pre-existing system role to use as starting point for further customization. When editing a role, this will initially display "custom" to indicate that the role is not a system role. As in creating a role, use this control to set your role to one of the system templates as a starting point for further editing.

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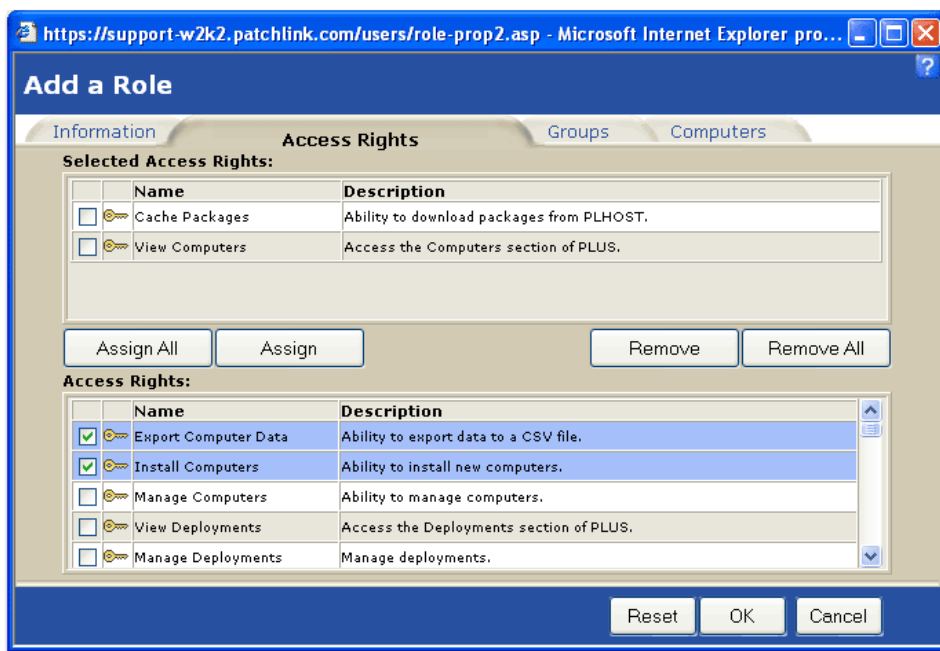
19.1.2 Screen Functions

- ? Access Rights Tab
Select this tab to specify this role's access rights to various PLUS functionalities.
- ? Groups Tab
Select this tab to specify the groups of computers that this role may access.
- ? Computers Tab
Select this tab to specify individual computers that this role may access.

Select the Access Rights Tab to initialize the Access Rights screen and assign rights.

19.2 Access Rights

The Role Property screens allow the PatchLink Administrator to create a user role. The role can be assigned access rights to various PLUS functions, permission to access particular groups of computers, and permission to access individual computers. Use the **Access Rights** to specify the access rights to PLUS functionalities assigned to this user role.



19.2.1 Access Rights Information

- ? Selected Access Rights
Select or Edit from the list of access rights that have been assigned to this user role.
- ? Access Rights
A list of all the access rights that can be assigned to a user role. Scroll through and click in the checkbox next to the desired right(s) to initialize and click the **Assign** button. The system populates the **Selected Access Rights** window with your selections. Use the **Assign All** button to populate the **Selected Access Rights** with ALL rights from the **Access Rights** window.

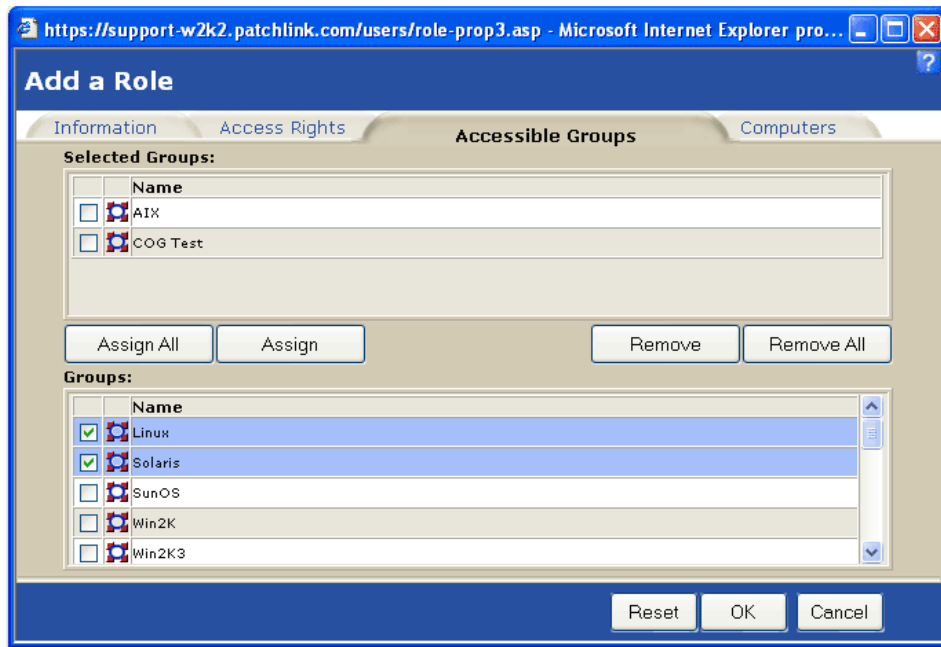
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19.2.2 Screen Functions

- ? Assign All
Click to assign all available access rights to the user role.
- ? Assign
After selecting any number of the access rights listed in the "Access Rights" (lower) pane, click here to assign these rights to the user role.
- ? Remove
After selecting any number of the access rights listed in the "Selected Access Rights" (upper) pane, click here to remove these rights from the user role.
- ? Remove All
Click to remove from the role all of the assigned access rights.
- ? Information Tab
Select this tab to specify this role's basic information.
- ? Groups Tab
Select this tab to specify the groups of computers that this role may access.
- ? Computers Tab
Select this tab to specify individual computers that this role may access.

19.3 Accessible Groups

The Role Property screens allow the PatchLink Administrator to create a user role. The role can be assigned access rights to various PLUS functions, permission to access particular groups of computers, and permission to access individual computers. Use the **Accessible Groups** screen to specify the groups of computers that this user role may access.



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19.3.1 Accessible Groups Information

? Selected Groups

A list of the groups of computers that have been assigned to this user role.

? Groups

A list of all the groups of computers that can be assigned to this user role.

Scroll through and click in the checkbox next to the desired group(s) to initialize and click the **Assign** button. The system populates the **Selected Groups** window with your selections. Use the **Assign All** button to populate the **Selected Groups** with ALL groups from the **Groups** window.

19.3.2 Screen Functions

? Assign All

Click to assign all available groups to the user role.

? Assign

After selecting any number of the groups listed in the "Groups" (lower) pane, click here to assign these groups to the user role.

? Remove

After selecting any number of the groups listed in the "Selected Groups" (upper) pane, click here to remove these groups from the user role.

? Remove All

Click here to remove from the role all of the assigned groups.

? Information Tab

Select this tab to specify this role's basic information.

? Access Rights Tab

Select this tab to specify this role's access rights to PLUS functionalities.

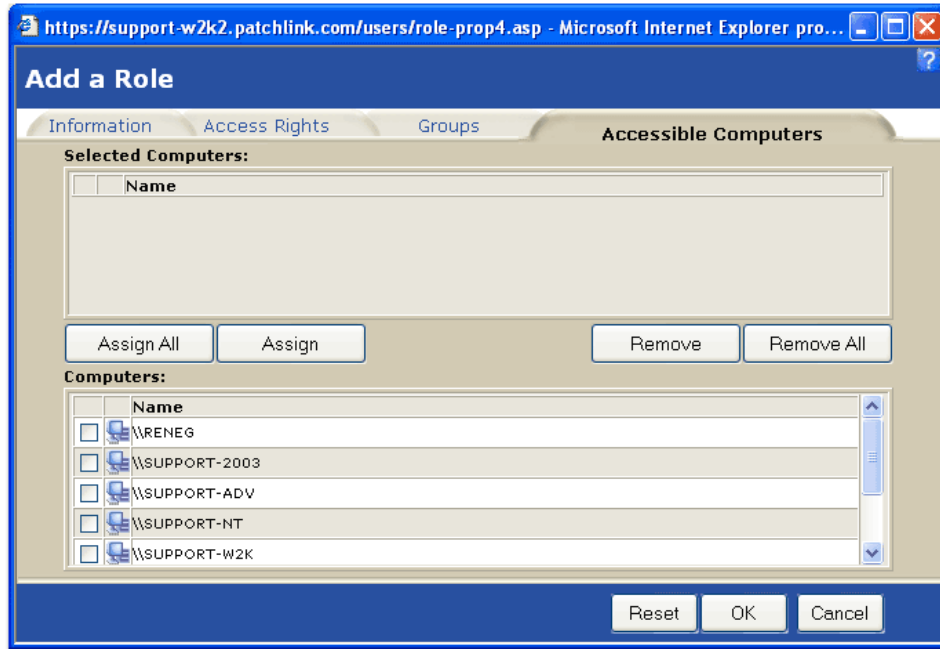
? Computers Tab

Select this tab to specify individual computers that this role may access.

19.4 Accessible Computers

The Role Property screens allow the PatchLink Administrator to create or edit a user role. The role can be assigned access rights to various PLUS functions, permission to access particular groups of computers, and permission to access individual computers. Use the **Accessible Computers** to specify the individual computers that this user role may access.

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19.4.1 Accessible Computers Information

- ? Selected Computers
A list of all the computers that have been assigned to this user role.
- ? Computers
A list of all the computers that can be assigned to this user role.

Scroll through and click in the checkbox next to the desired computer(s) to initialize and click the **Assign** button. The system populates the **Selected Computers** window with your selections. Use the **Assign All** button to populate the **Selected Computers** with ALL computers from the **Computers** window.

19.4.2 Screen Functions

- ? Assign All
Click to assign all available computers to the user role.
- ? Assign
After selecting any number of the computers listed in the "Computers" (lower) pane, click here to assign these computers to the user role.
- ? Remove
After selecting any number of the computers listed in the "Selected Computers" (upper) pane, click here to remove these computers from the user role.
- ? Remove All
Click here to remove from the role all of the assigned computers.
- ? Information Tab
Select this tab to specify this role's basic information.



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- ? Access Rights Tab
Select this tab to specify this role's access rights to PLUS functionalities.
- ? Groups Tab
Select this tab to specify the groups of computers that this role may access.

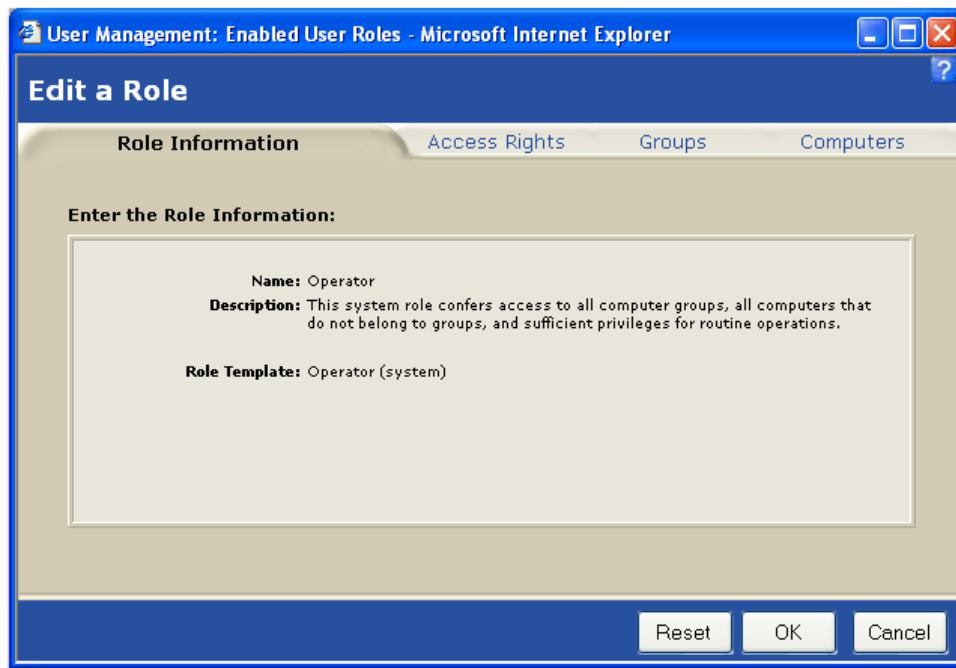
Upon closure of the Add a Role Wizard, the homepage will be refreshed with the newly entered Role.

20. Edit a Role

The Role Property screens allow the PatchLink Administrator to edit a user role. The role can be assigned access rights to various PLUS functions, permission to access particular groups of computers, and permission to access individual computers. Use this screen to view basic role information.

20.1 Edit a Role

From the Users homepage, click the Roles tab and select the Role you wish to edit by clicking in the checkbox next to it and clicking on the **Edit** button on the Action Menu. This initializes the **Edit a Role** wizard. To edit a role, you must first add one. See [Section 19: Add a Role Wizard](#) for more information.



20.1.1 Role Information

- ? Contains the Name, Description, and Role Template information about the specific role that you chose to Edit.

20.1.2 Screen Functions

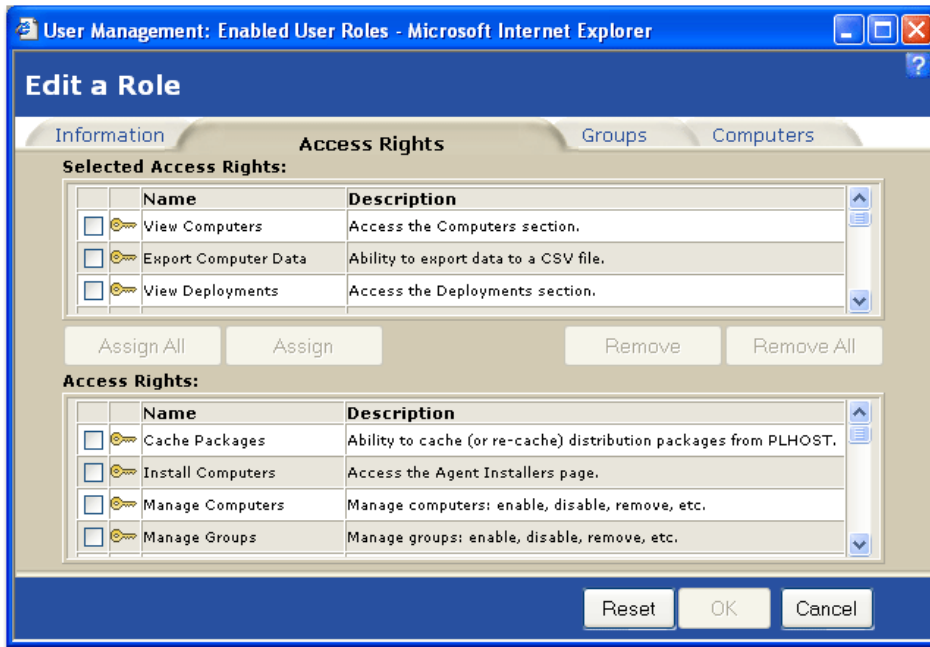
- ? Access Rights Tab
Select this tab to specify this role's access rights to various PLUS functionalities.
- ? Groups Tab
Select this tab to specify the groups of computers that this role may access.
- ? Computers Tab
Select this tab to specify individual computers that this role may access.

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Select the Access Rights Tab to initialize the Access Rights screen and assign rights.

20.2 Access Rights

The Role Property screens allow the PatchLink Administrator to edit a user role. The role can be assigned access rights to various PLUS functions, permission to access particular groups of computers, and permission to access individual computers. Use the **Access Rights** screen to specify the access rights to PLUS functionalities assigned to this user role.



20.2.1 Access Rights Information

? Selected Access Rights

Edit the list of access rights that have been assigned to this user role.

? Access Rights

A list of all the access rights that can be assigned to a user role. Scroll through and click in the checkbox next to the desired right(s) to initialize and click the **Assign** button. The system populates the **Selected Access Rights** window with your selections. Use the **Assign All** button to populate the **Selected Access Rights** with ALL rights from the **Access Rights** window.

20.2.2 Screen Functions

? Assign All

Click to assign all available access rights to the user role.

? Assign

After selecting any number of the access rights listed in the "Access Rights" (lower) pane, click here to assign these rights to the user role.

? Remove

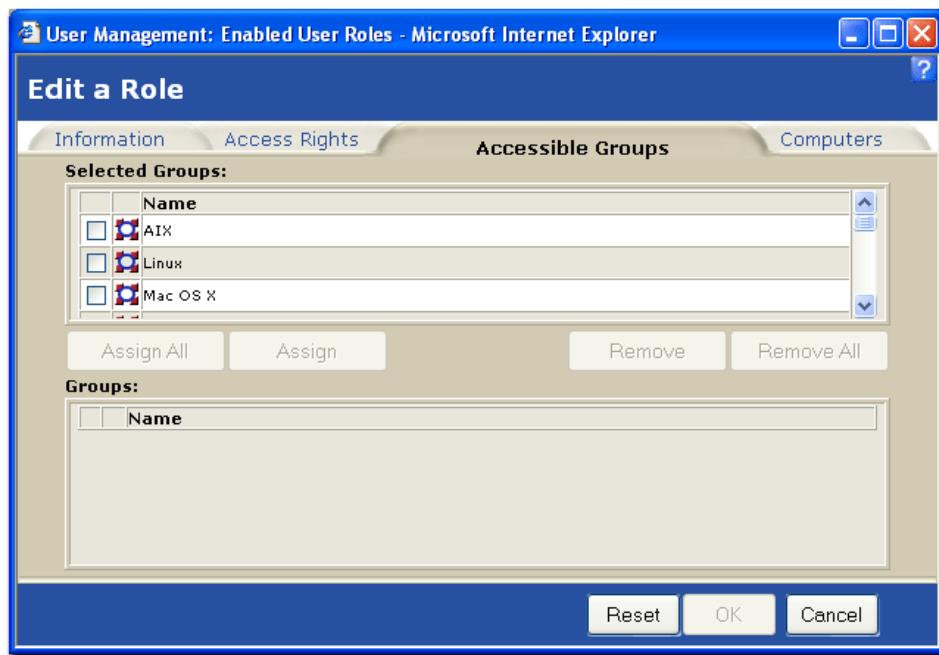
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After selecting any number of the access rights listed in the "Selected Access Rights" (upper) pane, click here to remove these rights from the user role.

- ? Remove All
Click to remove from the role all of the assigned access rights.
- ? Information Tab
Select this tab to specify this role's basic information.
- ? Groups Tab
Select this tab to specify the groups of computers that this role may access.
- ? Computers Tab
Select this tab to specify individual computers that this role may access.

20.3 Accessible Groups

The Role Property screens allow the PatchLink Administrator to edit a user role. The role can be assigned access rights to various PLUS functions, permission to access particular groups of computers, and permission to access individual computers. Use the **Accessible Groups** screen to specify the groups of computers that this user role may access.



20.3.1 Accessible Groups Information

- ? Selected Groups
A list of the groups of computers that have been assigned to this user role.
- ? Groups
A list of all the groups of computers that can be assigned to this user role.

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Scroll through and click in the checkbox next to the desired group(s) to initialize and click the **Assign** button. The system populates the **Selected Groups** window with your selections. Use the **Assign All** button to populate the **Selected Groups** with ALL groups from the **Groups** window.

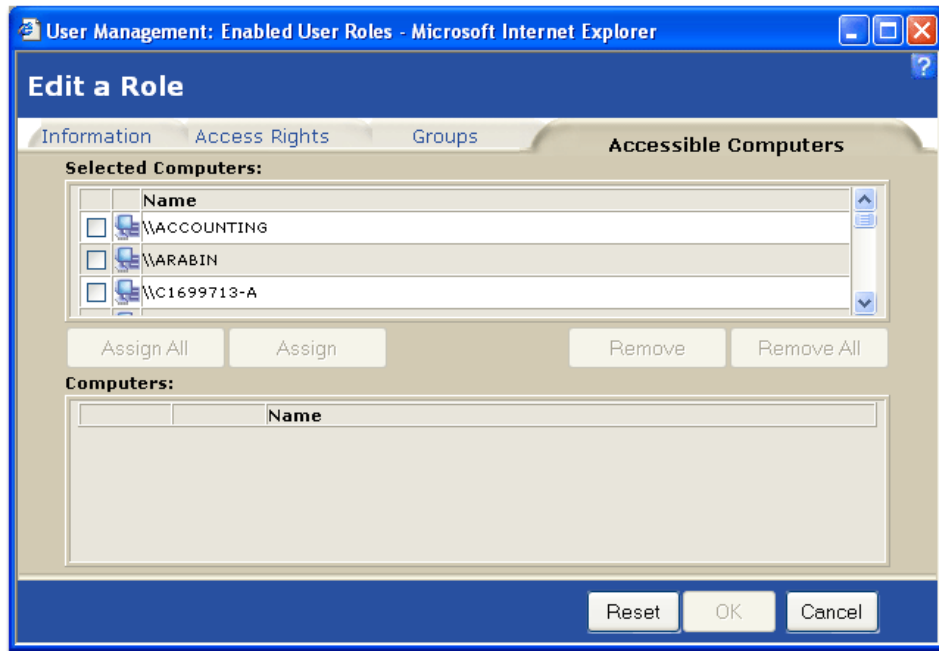
20.3.2 Screen Functions

- ? **Assign All**
Click to assign all available groups to the user role.
- ? **Assign**
After selecting any number of the groups listed in the "Groups" (lower) pane, click here to assign these groups to the user role.
- ? **Remove**
After selecting any number of the groups listed in the "Selected Groups" (upper) pane, click here to remove these groups from the user role.
- ? **Remove All**
Click here to remove from the role all of the assigned groups.
- ? **Information Tab**
Select this tab to specify this role's basic information.
- ? **Access Rights Tab**
Select this tab to specify this role's access rights to PLUS functionalities.
- ? **Computers Tab**
Select this tab to specify individual computers that this role may access.

20.4 Accessible Computers

The Role Property screens allow the PatchLink Administrator to edit a user role. The role can be assigned access rights to various PLUS functions, permission to access particular groups of computers, and permission to access individual computers. Use the **Accessible Computers** screen to specify the individual computers that this user role may access.

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20.4.1 Accessible Computers Information

- ? Selected Computers
A list of all the computers that have been assigned to this user role.
- ? Computers
A list of all the computers that can be assigned to this user role.

Scroll through and click in the checkbox next to the desired computer(s) to initialize and click the **Assign** button. The system populates the **Selected Computers** window with your selections. Use the **Assign All** button to populate the **Selected Computers** with ALL computers from the **Computers** window.

20.4.2 Screen Functions

- ? Assign All
Click to assign all available computers to the user role.
- ? Assign
After selecting any number of the computers listed in the "Computers" (lower) pane, click here to assign these computers to the user role.
- ? Remove
After selecting any number of the computers listed in the "Selected Computers" (upper) pane, click here to remove these computers from the user role.
- ? Remove All
Click here to remove from the role all of the assigned computers.



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- ? Information Tab
Select this tab to specify this role's basic information.
- ? Access Rights Tab
Select this tab to specify this role's access rights to PLUS functionalities.
- ? Groups Tab
Select this tab to specify the groups of computers that this role may access.

Upon closure of the Edit a Role Wizard, the homepage will be refreshed with the newly edited Role.

21. Options

Home | Reports | Inventory | Packages | Computers | Groups | Users | **Options** | Help |

The Advanced Configuration Options page displays six main option and configuration views on which PLUS relies on. They are: Subscription Service, Subscription Licenses, PLUS Defaults, Agent Policy Sets, E-Mail Notifications, and Support Information.

The screenshot shows the 'Options' page in the PatchLink interface. The 'Advanced Configuration Options' section is active, with the 'Subscription Service' tab selected. Below this, there are sub-tabs for Licenses, Defaults, Policies, E-Mail, and Support. The 'Subscription Service Information' section contains the following details:

- Last Subscription Poll:** 8/6/2003 12:10:09 PM
- Subscription Agent Status:** Sleeping
- Account ID:** 587342A9-810F-4413-814C-2E3BAA1B6625
- Subscription Communication Interval:** 1 Day at 03:00 (24-hour)
- Subscription Host URL:** https://www.patchlink.com/update/
- Proxy Host:** (empty field)

Below this information is a 'Subscription Service History' table with the following columns: Type, Status, Start Date, Stop Date, Duration, and Successful. The table lists various update events for Licenses, Packages, and Reports, all of which were completed successfully.

Type	Status	Start Date	Stop Date	Duration	Successful
Licenses	Completed	8/6/2003 12:10:09 PM	8/6/2003 12:10:28 PM	18 (secs)	True
Packages	Completed	8/6/2003 4:06:23 AM	8/6/2003 4:06:26 AM	3 (secs)	True
Reports	Completed	8/6/2003 3:00:03 AM	8/6/2003 4:05:51 AM	65.8 (mins)	True
Packages	Completed	8/6/2003 12:00:17 AM	8/6/2003 12:00:18 AM	2 (secs)	True
Packages	Completed	8/5/2003 1:08:17 PM	8/5/2003 1:08:22 PM	5 (secs)	True
Licenses	Completed	8/5/2003 12:05:08 PM	8/5/2003 12:05:11 PM	3 (secs)	True
Packages	Completed	8/5/2003 10:03:32 AM	8/5/2003 10:03:35 AM	4 (secs)	True
Packages	Completed	8/5/2003 8:47:25 AM	8/5/2003 8:47:26 AM	2 (secs)	True
Packages	Completed	8/5/2003 4:02:49 AM	8/5/2003 4:02:52 AM	3 (secs)	True
Reports	Completed	8/5/2003 3:00:03 AM	8/5/2003 4:02:34 AM	62.5 (mins)	True
Packages	Completed	8/5/2003 12:00:11 AM	8/5/2003 12:00:13 AM	2 (secs)	True
Packages	Completed	8/4/2003 5:40:52 PM	8/4/2003 5:40:54 PM	2 (secs)	True
Packages	Completed	8/4/2003 4:26:06 PM	8/4/2003 4:26:07 PM	1 (secs)	True
Packages	Completed	8/4/2003 4:16:39 PM	8/4/2003 4:16:40 PM	1 (secs)	True
Packages	Completed	8/4/2003 2:58:59 PM	8/4/2003 2:58:59 PM	1 (secs)	True
Packages	Completed	8/4/2003 2:56:36 PM	8/4/2003 2:56:38 PM	1 (secs)	True
Packages	Completed	8/4/2003 2:44:41 PM	8/4/2003 2:44:42 PM	1 (secs)	True
Packages	Completed	8/4/2003 2:37:32 PM	8/4/2003 2:37:33 PM	1 (secs)	True
Packages	Completed	8/4/2003 2:17:19 PM	8/4/2003 2:17:20 PM	2 (secs)	True

At the bottom of the page, there are buttons for 'Save', 'Update Now', and 'Export'.

21.1 Subscription Service Information

21.1.1 Subscription Service Information

- ? Last Subscription Poll
The date and time of when the subscription agent last contacted the host site for new updates.
- ? Subscription Agent Status
The current status of the subscription agent.<td>
- ? Account ID
The identification number of your account with the host site. It is created when the PatchLink Update Server first registers itself with the host site.

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- ? Subscription Communication Interval
The amount of time (number of minutes, hours or days) the subscription agent will wait between contacting the host site. Select the desired time from the drop down menu and select the Save button on the Action Menu to validate the change.
- ? Subscription Host URL
The URL (or web address) of the host site.
- ? Proxy Host
The proxy host information the subscription agent uses, if it is going through a proxy. Enter the desired proxy information and select the Save button on the Action Menu to validate the change.

21.1.2 Subscription Service History

This is a history of the tasks the subscription agent has done or is doing. It tells:

- ? Type
The *Type* of the agent task.
- ? Status
The *Status* of an agent task.
- ? Start Date
The *Start Date* is when the task started.
- ? Stop Date
The *Stop Date* is when the task was completed.
- ? Duration
The *Duration* is how long the task took.
- ? Successful
Successful is whether or not the task completed successfully or ended in failure.

21.2 Page Functions

21.2.1 Licenses Tab

Licenses tab allows a PatchLink User to display the Subscription Licenses tab of the Options section. This is where information on agent licenses are displayed.

21.2.2 Defaults Tab

Defaults tab allows a PatchLink User to display the PLUS Defaults tab of the Options section. This is where default settings about PLUS and default agent policies are located.

21.2.3 Policies Tab

Policies tab allows a PatchLink User to display the Agent Policy Sets tab of the Options section. This is where agent policies can be grouped together in to a define policy set, which can be assigned to groups.

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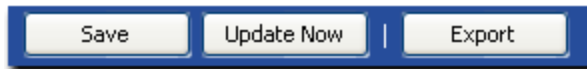
21.2.4 E-Mail Tab

E-Mail tab allows a PatchLink User to display the E-Mail Notification tab of the Options section. This is where e-mail addresses are saved including what PLUS notifications each entry will receive.

21.2.5 Support Tab

Support tab allows a PatchLink User to display the Support Information tab of the Options section. This is where basic support information about PLUS is displayed.

21.3 Action Menu



21.3.1 Save

Allows the PatchLink User the ability to save the changes to either the Subscription Communication Interval or Proxy Host.

21.3.2 Update Now

Allows the PatchLink Administrator the ability to initiate Replication to keep PLUS up to date with the latest Vulnerability Reports, Distribution Packages, and Subscription Licenses.

21.3.3 Export

Allows the PatchLink User the ability to export the Subscription Data to a comma-separated value (CSV) file.

21.4 Subscription Service Security

The Subscription Service tab of the Options section requires the View Options:Subscription Security Access Right. If a user does not have the correct access, the display will automatically redirect the user over to an Options tab that they do have access to. If the user does not have access to any Options tabs, they will receive an access denied error message.

Save requires the Manage Options Security Access Right. If a user does not have the correct access, the button is disabled.

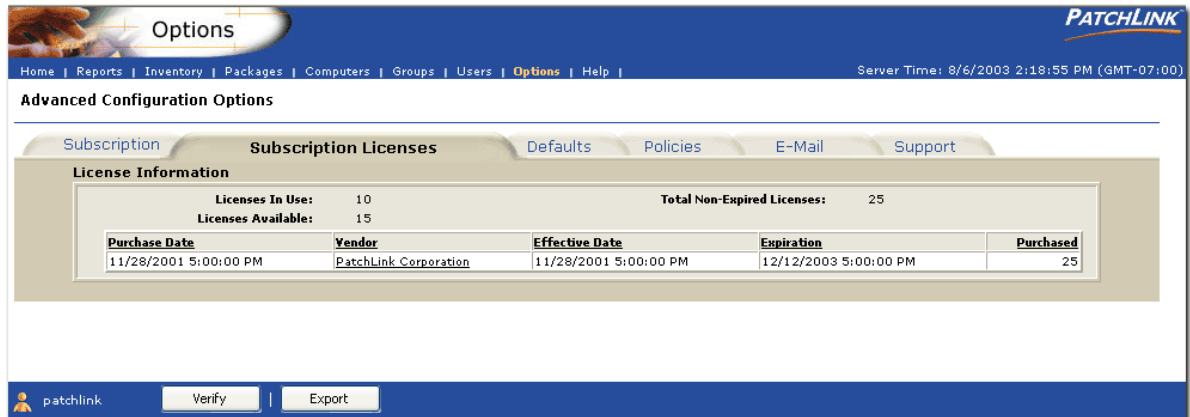
Update Now requires the Manage Options Security Access Right. If a user does not have the correct access, the button is disabled.

Export requires the Export Subscription Data Security Access Right. If a user does not have the correct access, the button is disabled.

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21.5 Subscription Licenses

The Advanced Configuration Options page displays six main option and configuration views on which PLUS relies on. They are: Subscription Service, Subscription Licenses, PLUS Defaults, Agent Policy Sets, E-Mail Notifications, and Support Information.



The screenshot shows the 'Options' page for PatchLink. The 'Advanced Configuration Options' section is active, with 'Subscription Licenses' selected. The 'License Information' summary shows:

- Licenses In Use: 10
- Licenses Available: 15
- Total Non-Expired Licenses: 25

Below the summary is a table with the following data:

Purchase Date	Vendor	Effective Date	Expiration	Purchased
11/28/2001 5:00:00 PM	PatchLink Corporation	11/28/2001 5:00:00 PM	12/12/2003 5:00:00 PM	25

At the bottom of the page, there are 'Verify' and 'Export' buttons.

21.5.1 License Information

- ? Licenses In Use
The number of licenses the PatchLink Update Server has in use by registered agents.
- ? Licenses Available
The total number of licenses that are left available.
- ? Total Non-Expired Licenses
The total number of licenses the PatchLink Update Server that are not expired.

Each time you purchase a license, a license group entry is created that represents that purchase. The list of License Groups are displayed, and for each License Group is shown:

- ? Purchase Date
The date the license group was purchased.
- ? Vendor
Tells who the license group was purchased from. The name is also a web link, so by clicking on it, you will be taken to their homepage.
- ? Effective Date
The date the license group becomes effective.
- ? Expiration
The date the license group expires.
- ? Purchased
The amount of licenses purchased.

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21.6 Page Functions

21.6.1 Subscription Tab

Subscriptions tab allows a PatchLink User to display the PLUS Subscription information. This is where the Subscription Communication Interval and the Proxy host information can be entered and saved.

21.6.2 Defaults Tab

Defaults tab allows a PatchLink User to display the PLUS Defaults tab of the Options section. This is where default settings about PLUS and default agent policies are located.

21.6.3 Policies Tab

Policies tab allows a PatchLink User to display the Agent Policy Sets tab of the Options section. This is where agent policies can be grouped together in to a define policy set, which can be assigned to groups.

21.6.4 E-Mail Tab

E-Mail tab allows a PatchLink User to display the E-Mail Notification tab of the Options section. This is where e-mail addresses are saved including what PLUS notifications each entry will receive.

21.6.5 Support Tab

Support tab allows a PatchLink User to display the Support Information tab of the Options section. This is where basic support information about PLUS is displayed.

21.7 Action Menu



21.7.1 Verify

Allows the PatchLink Administrator the ability to initiate License Replication to keep PLUS up to date with the latest Subscription Licenses.

21.7.2 Export

Allows the PatchLink User the ability to export the License Data to a comma-separated value (CSV) file.

21.8 Subscription License Security

The License tab of the Options section requires the [View Options: Licenses Security Access Right](#). If a user does not have the correct access, hyperlink is disabled.

Export requires the [Export Subscription Data Security Access Right](#). If a user does not have the correct access, the button is disabled.

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21.9 PLUS Defaults

The Advanced Configuration Options page displays six main option and configuration views on which PLUS relies on. They are: Subscription Service, Subscription Licenses, PLUS Defaults, Agent Policy Sets, E-Mail Notifications, and Support Information.

Computer Agent Options for PatchLink Update Server - Microsoft Internet Explorer provided by PatchLink Corporation

Address: <https://support-w2k2.patchlink.com/default.asp?page=admin2&seltab=agents>

Options

Home | Reports | Inventory | Packages | Computers | Groups | Users | **Options** | Help | Server Time: 8/6/2003 2:26:56 PM (GMT-07:00)

Advanced Configuration Options

Subscription | Licenses | **PLUS Defaults** | Policies | E-Mail | Support

PatchLink Update Server (PLUS) Default Account Policies and Information

Total Agents Registered: 10	PLUS Machine Name: SUPPORT-W2K2
Detection Agent Total: 2	PLUS URL: support-w2k2.patchlink.com
Deployment Agent Total: 8	Connection Mode: https://
	Concurrent Deployment Limit: 10

Deployment Agent Default Logging Level: Detailed

Hours of Operation: Enable

Deployment Agent Default Communication Interval: 2 Minutes

Agent Start Time: 12:00 AM

Agent Stop Time: 12:00 AM

Notes:

- The **Concurrent Deployment Limit** defines how many agents can receive active deployments at the same time. If an agent takes longer than 60 minutes to finish its deployment, it is no longer counted against this limit.
- The policies that an agent may receive are calculated as follows:
 - A superset of the assigned **Agent Policy Sets** for the enabled groups that the agent is a member of. The **Empty Policy** contains no policies so those groups which assign the **Empty Policy** as its **Agent Policy Set** are ignored.
 - If there are no non-**Empty Policy Sets** or any enabled groups that the agent belongs to, then the **PLUS Default Policies** are used.
- The superset is calculated as follows:
 - Communication Interval** is the shortest amount of time in which the agent shall sleep between its checks with **PLUS** for work. This value may be defined in Minutes, Hours or Days. If an agent has not communicated by over two interval periods, the agent is displayed as **Offline**. The **Communication Interval** is **required** for the agents to operate properly.
 - Logging Level** determines how much information is saved to a log file (also the Application Event Log where applicable) about what the agent is doing. The four various levels are:
 - None** - Only errors are logged.
 - Basic Info** - Return only the very basic information about what the agent is doing.
 - Detailed** - Return more information on what the agent is doing, but every step is not logged.
 - Debug** - Verbose logging on what the agent is doing.
 The **Logging Level** is **required** for the agents to operate properly. The file names and locations are:
 - Linux** - /usr/local/patchlink/update/log/updateagent.log
 - NetWare** - /export/home/patchlink/update/log/updateagent.log
 - Solaris** - PUPDATE.LOG
 - Windows** - C:\Program Files\PatchLink\Update Agent\PatchLink Update Agent.log
 - Hours of Operation** is the longest period of time that the agent will actively communicate with **PLUS**. How often it checks during this period is defined by the **Communication Interval**. If an agent is outside of its **Hours of Operation**, the agent is displayed as **Sleeping**. The **Hours of Operation** is an **optional** setting.

patchlink Save Export

PatchLink Update Server

21.9.1 PLUS Default Account Policies and Information

- ? Total Agents Registered
The total number of agents registered to the PatchLink Update Server Detection Agent Total
- ? Detection Agent Total
The total number of detection agents registered to the PatchLink Update Server PLUS Machine Name
- ? Deployment Agent Total
The total number of deployment agents registered to the PatchLink Update Server PLUS Machine Name
- ? PLUS Machine Name
The name of the computer in which the PatchLink Update Server is installed on.
- ? PLUS URL
The URL of the PatchLink Update Server.
- ? Connection Mode
The connection mode in which the PatchLink Update Server is acting in. It is either *HTTP://* which is insecure mode, or *HTTPS://*, which is secure mode.
- ? Concurrent Deployment Limit
The *concurrent deployment limit* defines how many agents can receive active deployments at the same time. If an agent takes longer than 60 minutes to finish its deployment, it is no longer counted against this limit. The purpose of this limit is to throttle the number of deployments given to agents across the entire PatchLink Update Server (PLUS).
An example of this is the case of multiple deployments being created to run at the same time. Though each may have its own sequential limit of how many agents may perform the deployment at any one time, all of the deployments are running at the same time and this may cause the performance of the server to decrease.
- ? Deployment Agent Default Logging Level
The level at which the agent is logging messages about its actions. The various levels are: None, Basic Information, Detailed, Debug.
- ? Deployment Agent Default Communication Interval
The amount of time (number of minutes, hours or days) is the length of time the client agent will wait between contacting the PatchLink Update Server.
- ? Hours of Operation
Clicking on the Enable button will enable the *Agent Timer*. Start and Stop times can be assigned for the agent to poll the PatchLink Update Server

Clicking on the disable button will disable the *Agent Timer*. The agent will no longer have a start and a stop time. It will start communicating with the PatchLink Update Server as soon as it is assigned this policy and will continue till the policy or the agent is removed.

PatchLink Update Server

- ? Agent Stop Time
The time at which the agent will stop contacting the PatchLink Update Server.
- ? Agent Start Time
The time at which the agent will start contacting the PatchLink Update Server.

21.10 Page Functions

21.10.1 Subscription Tab

Allows a PatchLink User to display the Subscription Service tab of the Options section. This is where information on Service Replication (Reports, Packages, and Licenses) are displayed.

21.10.2 Licenses Tab

Allows a PatchLink User to display the Subscription Licenses tab of the Options section. This is where information on agent licenses are displayed.

21.10.3 Policies Tab

Allows a PatchLink User to display the Agent Policy Sets tab of the Options section. This is where agent policies can be grouped together in to a define policy set, which can be assigned to groups.

21.10.4 E-Mail Tab

Allows a PatchLink User to display the E-Mail Notification tab of the Options section. This is where e-mail addresses are saved including what PLUS notifications each entry will receive.

21.10.5 Support Tab

Allows a PatchLink User to display the Support Information tab of the Options section. This is where basic support information about PLUS is displayed.

21.11 Action Menu



21.11.1 Save

Allows the PatchLink Administrator the ability to save License Replication the changes to the PLUS and Agent Defaults.

21.11.2 Export

Allows the PatchLink User the ability to export the License Data to a comma-separated value (CSV) file.

PatchLink Update Server

21.12 PLUS Defaults Security

The Defaults tab of the Options section requires the View Options:Defaults Security Access Right. If a user does not have the correct access, hyperlink is disabled.


Save requires the Manage Options Security Access Right. If a user does not have the correct access, the button is disabled.

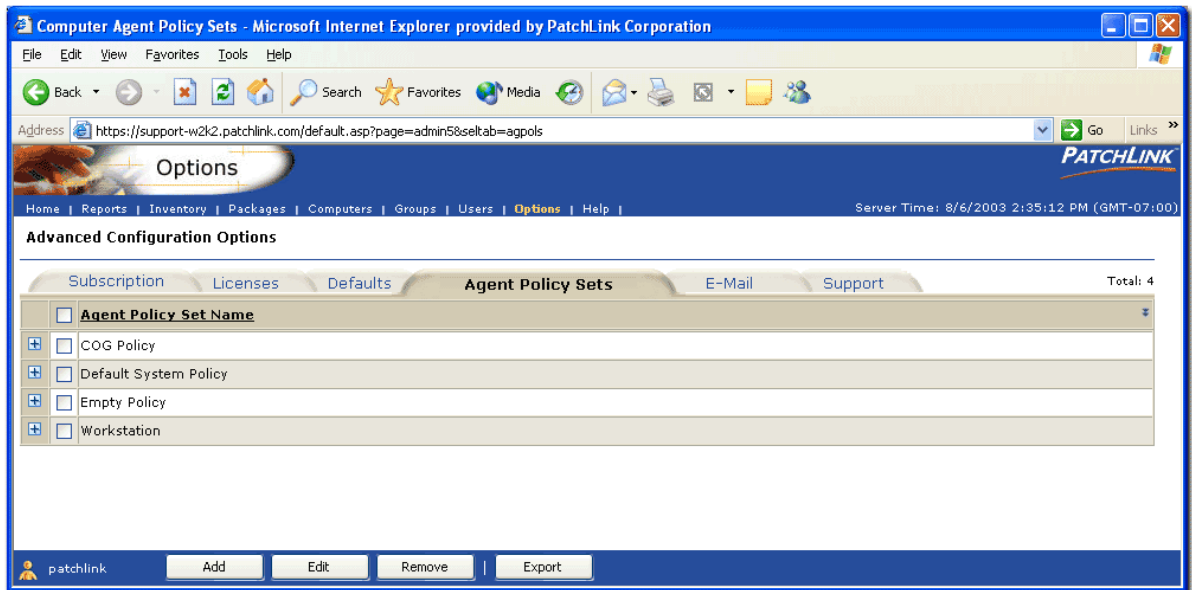
Export requires the Export Subscription Data Security Access Right. If a user does not have the correct access, the button is disabled.

PatchLink Update Server

21.13 Agent Policy Sets

The Advanced Configuration Options page displays six main option and configuration views on which PLUS relies on. They are: Subscription Service, Subscription Licenses, PLUS Defaults, Agent Policy Sets, E-Mail Notifications, and Support Information.

A set of constraints that govern the agent features of communication interval, logging level, and the agent start and stop times. An agent policy is associated with a group and is applied to all the members of that group. For every newly created group, the system creates a default agent policy. Click the  to view additional information and statistics about the policy.



21.13.1 Agent Policy Set Name





- ? Policy Name
The name of the policy. There are two types of policies: System and User
- ? Policy Type
This indicates whether the policy was created by a user or by the system
- ? Trace Level
The logging level that is chosen at the time of Policy generation.
- ? Operation Start Time
The time at which the agent will start communicating with the PatchLink Update Server.
- ? Operation Stop Time
The time at which the agent will stop communicating with the PatchLink Update server.
- ? Description
The description that is entered at the time of Policy generation.

PatchLink Update Server

- ? Created On
The date and time the policy was created
- ? Created By
The user who created the policy
- ? Last Modified On
The date and time the policy was last modified
- ? Last Modified By
The user who last modified the policy
- ? Communication Interval
The amount of time (number of minutes, hours or days)the client agent will wait between contacting the PatchLink Update Server.

21.14 Page Functions

21.14.1 Display and Hide

Click the  to display additional information and statistics about the represented item. Click the  to hide this information from view. The information is refreshed each time it is displayed. The information expansion functionality (, ) is only available for Microsoft Internet Explorer at this time.

21.14.2 Sort

The sort function enables views by Ascending (default) or Descending order by clicking on a sort enabled column heading or the sort icon.

21.14.3 Mouse Overs

Additional information may be displayed by hovering your mouse pointer over an enabled icon or link.

21.14.4 Subscription Tab

Allows a PatchLink User to display the Subscription Service tab of the Options section. This is where information on Service Replication (Reports, Packages, and Licenses) are displayed.

21.14.5 Licenses Tab

Allows a PatchLink User to display the Subscription Licenses tab of the Options section. This is where information on agent licenses are displayed.

21.14.6 Defaults Tab

Allows a PatchLink User to display the PLUS Defaults tab of the Options section. This is where default settings about PLUS and default agent policies are located.

21.14.7 E-Mail Tab

Allows a PatchLink User to display the E-Mail Notification tab of the Options section. This is where e-mail addresses are saved including what PLUS notifications each entry will receive.

PatchLink Update Server

21.14.8 Support Tab

Allows a PatchLink User to display the Support Information tab of the Options section. This is where basic support information about PLUS is displayed.

21.15 Action Menu



21.15.1 Add

Allows the PatchLink Administrator the ability to create a new Agent Policy Set using the Agent Policy Set Property Page. See [Section 22: Add a Policy Wizard](#) for more information.

21.15.2 Edit

Allows the PatchLink Administrator the ability to edit a selected Agent Policy Set using the Agent Policy Set Property Page. See [Section 23: Edit a Policy Wizard](#) for more information.

21.15.3 Remove

Allows the PatchLink Administrator the ability to delete a selected Agent Policy Set.

21.15.4 Export

Allows the PatchLink User the ability to export the Subscription Data to a comma-separated value (CSV) file.

21.16 Agent Policy Sets Security

The Policies tab of the Options section requires the [View Options: Policies Security Access Right](#). If a user does not have the correct access, hyperlink is disabled.

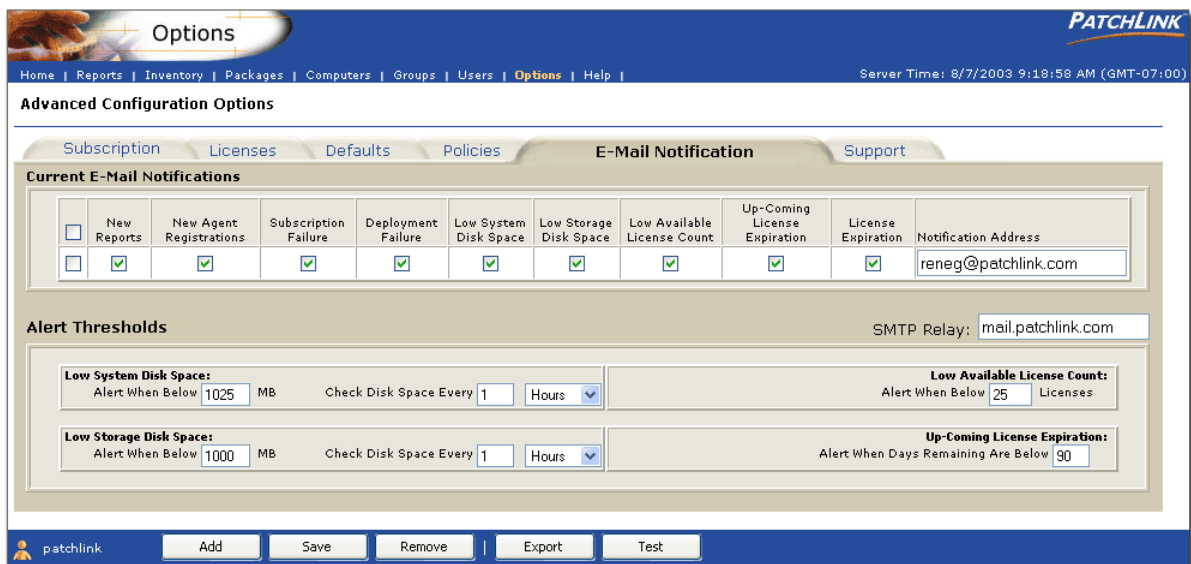
Export requires the Export [Subscription Data Security Access Right](#). If a user does not have the correct access, the button is disabled.

PatchLink Update Server

21.17 Advanced E-Mail Notifications

The Advanced Configuration Options page displays six main option and configuration views on which PLUS relies on. They are: Subscription Service, Subscription Licenses, PLUS Defaults, Agent Policy Sets, E-Mail Notifications, and Support Information.

Set up PLUS to alert you via email when certain thresholds are reached.



21.17.1 Current E-Mail Notifications

- ? **New Reports**
By selecting this notification, you will be sent an e-mail notification each time new reports are downloaded via the subscription agent from the host site.
- ? **New Agent Registrations**
By selecting this notification, you will be sent an e-mail notification each time a new agent registers up to the PatchLink Update Server.
- ? **Subscription Failure**
By selecting this notification, you will be sent an e-mail notification each time the subscription agent task fails.
- ? **Deployment Failure**
By selecting this notification, you will be sent an e-mail notification each time a client agent fails at deploying a package.
- ? **License Expiration**
By selecting this notification, you will be sent an e-mail notification whenever a license group expires.
- ? **Notification Address**
The e-mail addresses that will be notified when any of the following events occur.

PatchLink Update Server

21.17.2 Alert Thresholds

? Low System Disk Space

By selecting this notification, you will be sent an e-mail notification whenever the disk space on the system volume goes under this value (in megabytes). Besides an input field to be able to change this value (under the Alert Thresholds section) there is another field which is the Check Disk Space Interval. This value is the amount of time (number of minutes, hours or days) that the PatchLink Update Server will wait between checking the system disk space.

? Low Storage Disk Space

By selecting this notification, you will be sent an e-mail notification whenever the disk space on the storage volume goes under this value (in megabytes). Besides an input field to be able to change this value (under the Alert Thresholds section) there is another field which is the Check Disk Space Interval. This value is the amount of time (number of minutes, hours or days) that the PatchLink Update Server will wait between checking the storage disk space.

? Low Available License Count

By selecting this notification, you will be sent an e-mail notification whenever the license count gets below this value. This value can be changed by changing it in the Alert Thresholds section.

? Up-Coming License Expiration

By selecting this notification, you will be sent an e-mail notification whenever a license group is about to expire within this value (in Days). This value can be changed by changing it in the Alert Threshold section.

21.18 Page Functions

21.18.1 Subscription Tab

Allows a PatchLink User to display the Subscription Service tab of the Options section. This is where information on Service Replication (Reports, Packages, and Licenses) are displayed.

21.18.2 Licenses Tab

Allows a PatchLink User to display the Subscription Licenses tab of the Options section. This is where information on agent licenses are displayed.

21.18.3 Defaults Tab

Allows a PatchLink User to display the PLUS Defaults tab of the Options section. This is where default settings about PLUS and default agent policies are located.

21.18.4 Policies Tab

Allows a PatchLink User to display the Agent Policy Sets tab of the Options section. This is where agent policies can be grouped together in to a define policy set, which can be assigned to groups.

PatchLink Update Server

21.18.5 Support Tab

Allows a PatchLink User to display the Support Information tab of the Options section. This is where basic support information about PLUS is displayed.

21.19 Action Menu



21.19.1 Add

Allows the PatchLink Administrator the ability to add a new e-mail notification entry.

21.19.2 Save

Allows the PatchLink Administrator the ability to save the e-mail notification changes as well as the changes notification alert thresholds.

21.19.3 Remove

Allows the PatchLink Administrator the ability to remove selected e-mail notification entries.

21.19.4 Export

Allows the PatchLink User the ability to export the Subscription Data to a comma-separated value (CSV) file.

21.19.5 Test

Allows the PatchLink Administrator the ability to send a e-mail to a selected e-mail address to verify that e-mails are getting through.

21.20 Advanced E-mail Notifications Security

The E-Mail tab of the Options section requires the [View Options: E-Mail Security Access Right](#). If a user does not have the correct access, hyperlink is disabled.

Save requires the [Manage Options Security Access Right](#). If a user does not have the correct access, the button is disabled.

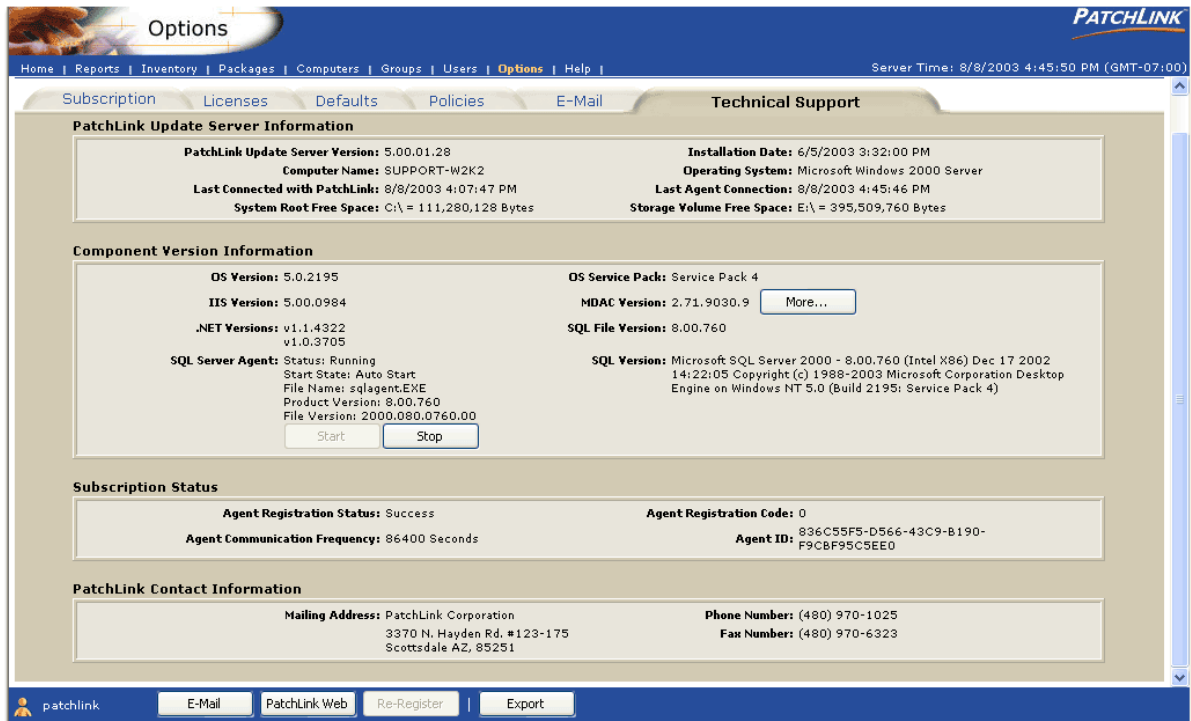
Export requires the [Export Subscription Data Security Access Right](#). If a user does not have the correct access, the button is disabled.

PatchLink Update Server

21.21 Technical Support

The Advanced Configuration Options page displays six main option and configuration views on which PLUS relies on. They are: Subscription Service, Subscription Licenses, PLUS Defaults, Agent Policy Sets, E-Mail Notifications, and Support Information.

View Technical Information about PLUS



The screenshot shows the 'Options' page in the PatchLink application, specifically the 'Technical Support' tab. The page is divided into several sections:

- PatchLink Update Server Information:**
 - PatchLink Update Server Version: 5.00.01.28
 - Installation Date: 6/5/2003 3:32:00 PM
 - Computer Name: SUPPORT-WZK2
 - Operating System: Microsoft Windows 2000 Server
 - Last Connected with PatchLink: 8/8/2003 4:07:47 PM
 - Last Agent Connection: 8/8/2003 4:45:46 PM
 - System Root Free Space: C:\ = 111,280,128 Bytes
 - Storage Volume Free Space: E:\ = 395,509,760 Bytes
- Component Version Information:**
 - OS Version: 5.0.2195
 - OS Service Pack: Service Pack 4
 - IIS Version: 5.00.0984
 - MDAC Version: 2.71.9030.9 (More...)
 - .NET Versions: v1.1.4322, v1.0.3705
 - SQL File Version: 8.00.760
 - SQL Server Agent: Status: Running, Start State: Auto Start, File Name: sqlagent.EXE, Product Version: 8.00.760, File Version: 2000.080.0760.00 (Start/Stop buttons)
 - SQL Version: Microsoft SQL Server 2000 - 8.00.760 (Intel X86) Dec 17 2002 14:22:05 Copyright (c) 1988-2003 Microsoft Corporation Desktop Engine on Windows NT 5.0 (Build 2195; Service Pack 4)
- Subscription Status:**
 - Agent Registration Status: Success
 - Agent Registration Code: 0
 - Agent Communication Frequency: 86400 Seconds
 - Agent ID: 836C55F5-D566-43C9-B190-F9CBF95C5EE0
- PatchLink Contact Information:**
 - Mailing Address: PatchLink Corporation, 3370 N. Hayden Rd., #123-175, Scottsdale AZ, 85251
 - Phone Number: (480) 970-1025
 - Fax Number: (480) 970-6323

At the bottom of the page, there are buttons for 'E-Mail', 'PatchLink Web', 'Re-Register', and 'Export'.

21.21.1 PatchLink Update Server Information

- ? PatchLink Update Server Version
The version number of the PatchLink Update Server.
- ? Computer Name
The name of the computer, which the PatchLink Update Server was installed on.
- ? Last Connected with PatchLink
The last date and time that the subscription agent connected up with the host site.
- ? System Root Free Space
The amount of free disk space for the system volume.
- ? Installation Date
The date PLUS was installed.
- ? Operating System
The operating system that PLUS is running on.

PatchLink Update Server

- ? Last Agent Connection
The last date and time any agent has connected up with the PatchLink Update Server.
- ? Storage Volume Free Space
The amount of free disk space for the storage volume.

21.21.2 Component Version Information

- ? OS Version
The extra operating system information.
- ? IIS Version
The version number of the IIS web server.
- ? .NET Version
The version number of the .NET Framework(s) installed on the server
- ? SQL Server Agent: Clicking the Start / Stop button will start or stop the SQL Server Agent.
Displays the following:
 - The current status
 - The start up state
 - SQL Agent Filename
 - Product Version number
 - File Version number
- ? OS Service Pack
The service pack information about the operating system.
- ? MDAC Version
The version number of MDAC. Click on the MDAC to view all of the MDAC component version numbers.
- ? SQL File Version
The version number of the SQL Server File: SQLServer.exe.
- ? SQL Version
The SQL Server version information.

PatchLink Update Server

21.21.3 Subscription Status

- ? Agent Registration Status
The status of the registration process for the subscription agent against the host site.
- ? Agent Registration Code
The status code number for the registration status message.
- ? Agent Communication Frequency
The amount of time (number of minutes, hours or days) is the length of time the subscription agent will wait between contacting the host site.
- ? Agent ID
The ID number given to the subscription agent upon registration by the host site.

21.21.4 PatchLink Contact Information

- ? Mailing Address
- ? Phone Number
- ? Fax Number

21.22 Page Functions

21.22.1 Subscription Tab

Allows a PatchLink User to display the Subscription Service tab of the Options section. This is where information on Service Replication (Reports, Packages, and Licenses) are displayed.

21.22.2 Licenses Tab

Allows a PatchLink User to display the Subscription Licenses tab of the Options section. This is where information on agent licenses are displayed.

21.22.3 Defaults Tab

Allows a PatchLink User to display the PLUS Defaults tab of the Options section. This is where default settings about PLUS and default agent policies are located.

21.22.4 Policies Tab

Allows a PatchLink User to display the Agent Policy Sets tab of the Options section. This is where agent policies can be grouped together in to a define policy set, which can be assigned to groups.

21.22.5 E-Mail Tab

Allows a PatchLink User to display the E-Mail Notification tab of the Options section. This is where e-mail addresses are saved including what PLUS notifications each entry will receive.

PatchLink Update Server

21.23 Action Menu



21.23.1 E-Mail

Allows the PatchLink User the initiate an e-mail, using the user's default e-mail client, to a select number of PatchLink Departments.

21.23.2 PatchLink Web

Allows the PatchLink User to instantly bring up the PatchLink Update Technical Support web site.

21.23.3 Re-Register

Allows the PatchLink Administrator the ability to initiate the process to register (or re-register) the PLUS Subscription Agent against PLHOST. This button is only available when the Subscription Agent has not successfully registered against PLHOST.

21.23.4 Export

Allows the PatchLink User the ability to export the Subscription Data to a comma-separated value (CSV) file.

21.24 Technical Support Security

The Support tab of the Options section requires the [View Options: Support Info Security Access Right](#). If a user does not have the correct access, hyperlink is disabled.

Export requires the [Export Subscription Data Security Access Right](#). If a user does not have the correct access, the button is disabled.

22. Add a Policy Wizard

This wizard allows you to create and add a policy to the PatchLink Update Server. You can specify the policy attributes by entering data in the fields of the wizard.

Go to the **Options** homepage and select the **Agent Policy Sets** tab. Click on the **Add** button to add a on the Action Menu. This will initialize the **Add a Policy** Wizard.

22.1 Policy Information

Add a Policy - Microsoft Internet Explorer

Add a Policy

Policy Information

Enter the Policy Information:

* Name:

Description:

*Communication Interval: Minutes

Logging Level:

Hours of Operation: Agent Start: Stop Time:

* indicates a required field.

PatchLink Update Server

22.1.1 Name

Input a Name for your Policy (required)

22.1.2 Description

Add a Description of your Policy (optional)

- ? Enter in the desired Communication interval: The amount of time (number of minutes, hours or days) is the length of time the client agent will wait between contacting the PatchLink Update Server.
- ? Enter in the desired Logging Level: The level at which the agent is logging messages about its actions. The various levels are:
 - None
 - Basic Information
 - Detailed
 - Debug

22.1.3 Hours of Operation

Clicking on the Enable button will enable the Agent Timer. Start and Stop times can be assigned for the agent to poll the PatchLink Update Server

Clicking on the button will disable the Agent Timer. The agent will no longer have a start and a stop time. It will start communicating with the PatchLink Update Server as soon as it is assigned this policy and will continue till the policy or the agent is removed.

Agent Stop Time: The time at which the agent will stop contacting the PatchLink Update Server.

Agent Start Time: The time at which the agent will start contacting the PatchLink Update Server.

22.2 Page Functions

22.2.1 Save

Saves the field values that you manually entered

22.2.2 Cancel

Exits the wizard and does not save any changes to the field values.

22.2.3 Reset

Resets the field values to their original state

Upon refreshing the Options homepage, the Policy will be added and appears under the Agent Policy Set Name

23. Edit a Policy Wizard

This wizard allows you to change the attributes of an existing policy set. You can edit and specify the policy attributes by entering data in the fields of the wizard.

Go to the **Options** homepage, select the **Agent Policy Sets** tab, and select the policy that you wish to edit by clicking in the checkbox next to that specific policy. Click on the Edit button on the Action Menu. This will initialize the **Edit a Policy** Wizard.

23.1 Policy Information

Edit a Policy

Policy Information

Enter the Policy Information:

* Name:

Description:

*Communication Interval:

Logging Level:

Hours of Operation:

Agent Start: Stop Time:

* indicates a required field.

PatchLink Update Server

23.1.1 Name

Edit the Name for your Policy

23.1.2 Description

Edit the Description of your Policy

- ? Enter in the desired Communication interval: The amount of time (number of minutes, hours or days) is the length of time the client agent will wait between contacting the PatchLink Update Server.
- ? Enter in the desired Logging Level: The level at which the agent is logging messages about its actions. The various levels are:
 - None
 - Basic Information
 - Detailed
 - Debug

23.1.3 Hours of Operation

Clicking on the Enable button will enable the Agent Timer. Start and Stop times can be assigned for the agent to poll the PatchLink Update Server

Clicking on the button will disable the Agent Timer. The agent will no longer have a start and a stop time. It will start communicating with the PatchLink Update Server as soon as it is assigned this policy and will continue till the policy or the agent is removed.

Agent Stop Time: The time at which the agent will stop contacting the PatchLink Update Server.

Agent Start Time: The time at which the agent will start contacting the PatchLink Update Server.

23.2 Page Functions

23.2.1 Save

Saves the field values that you manually entered.

23.2.2 Cancel

Exits the wizard and does not save any changes to the field values.

23.2.3 Reset

Resets the field values to their original state.

Upon refreshing the Options homepage, the edited Policy will be added and appears under the Agent Policy Set Name.

24. Hardening the PLUS

Steps that can be taken to harden a PatchLink Update Server

There are a few steps that can be taken to harden a PatchLink Update Server that is to be put on the public Internet. You can opt to implement some or all of these suggestions, and these are of course just guidelines:

24.1 INSTALL YOUR SERVER WITH SSL:

Purchase a valid certificate from Verisign, Entrust, Thawte etc for your IIS web server, and use it with PatchLink Update. This process just involves installing your .CER certificate file before rebooting after the main filecopy phase of the installation. The advantage is that with an SSL certificate installed, all agent communication and all administration is now fully encrypted - and so there is no way to spoof or snoop communications on the wire.

24.2 TURN OFF NON-CRITICAL SERVICES:

Microsoft Windows2000 ships with all the features turned on. There are a number of services you may wish to turn off (eg: RPC, Remote Registry, etc) to reduce the risk of hacker attacks. PatchLink doesn't encourage this type of lockdown - we would suggest using port blocking or a firewall instead, however if you are careful this can be an effective approach.

The following are *required* services to run PatchLink Update:

- ? wwwpublishing
- ? IIS Admin Service
- ? Mssqlserver
- ? Sqlserver agent
- ? PatchLink Update

24.3 REMOVE YOUR SERVER FROM THE DOMAIN:

You probably don't have your machine in a corporate domain if it is out on the Internet! For safety's sake you should have as few people being able to login to the server as possible - just use local accounts.

24.4 USE DECENT PASSWORDS:

Worm attacks frequently try to log in with weak / commonly used passwords (letmein, no password, etc) so please don't use them. For an Internet secure password we would recommend DOD standard 12 characters with alpha, numeric, punctuation and mixed case characters all being represented in your password.

PatchLink Update Server

24.5 TURN OFF WINDOWS NETWORKING:

Click on My Network Places, Select "Properties" from its popup menu, Choose the "Local Area Connection", Select "Properties" from its popup menu. This will show you the "Local Area Connection Properties" ... the properties of your main network card (there may be multiple network cards in your server). Go ahead and select "File and Printer Sharing for Microsoft Networks" and push the "Uninstall" button to remove MS file & print network service. NOTE: do NOT uninstall the "Client for Microsoft Networks" as it is required by MS SQL Server and MS Internet Information Server.

24.6 LOCK OFF ALL BUT THE REQUIRED TCP/IP PORTS:

Within "Local Area Connection Properties" window, select "Internet Protocol

TCP/IP" and push the "Properties" button. On the Properties dialog, push the "Advanced..." button, then click the "Options" tab, select "TCP/IP filtering" and push the "Properties" button. You are now able to set specific port filters for your computer, so that you can 'firewall' off all but the ports that you need:

- => Check the "Enable TCP/IP Filtering" checkbox
- => Select the "Permit Only" TCP Ports button
 - Add port number 443
 - Add port number 80 (not needed if you followed step 1)
 - No other ports are required, though you may want to allow DNS out, maybe TS or VNC
- => Select the "Permit Only" UDP Ports button
 - No UDP ports are required, leave this section blank

Once you save these settings and reboot your server, your machine will now be fully isolated from TCP/IP access except through HTTP/HTTPS. If you lock out everything except port 80/port443, you will also have to add an entry to your HOSTS file in the \winnt\system32\drivers\etc directory so that your server can get to www.patchlink.com to pick up its patch subscription:

```
206.124.169.50 www.patchlink.com
216.205.112.66 storage12.patchlink.com
```

24.7 PUT YOUR UPDATE SERVER BEHIND A FIREWALL:

Only allow Port 443 out (so it can pull down its subscription) and Port80/Port443 in. This is normally an easier alternative to (6), however if your company does not have a hardware or software firewall, you can use method (6) to get the same level of network isolation.

24.8 APPLY THE MSDE SQL PATCHES:

Apply these patches so you don't get the SLAMMER worm on your server, apply the most recent applicable patches for IIS, SQL, and the Operating System.

25. PLUS Reference

25.1 PLUS Security

There are multiple layers to security for PatchLink Update:

- ? Web Site Authentication
- ? Web Site Encryption via SLL
- ? User (Security) Roles

25.1.1 Web Site Authentication

Internet Information Services (IIS) controls authentication in to the PLUS web site, which means the operating system itself is validating users and their passwords when they log in to the site. Control of who has access and who does not, at this level, is controlled by a local user group.

25.1.2 Web Site Encryption via SSL

SSL provides an encrypted wrapper around all web communication to and from the product. Since all communication is over the web, this means by installing PLUS in to SSL mode and then adding an SSL certificate to the PLUS web site will provide a wall around customer's data, away from prying eyes.

25.1.3 User (Security) Roles

Every feature, page and action throughout PLUS has been assigned to a series of Access Rights. Combining these access rights + together form a user role. Roles also contain a list of groups and computers (which do not belong to the list of groups). Put this all together and PLUS now contains a mechanism in which regardless of how you authenticated in to the PLUS web application, what you can do is defined solely by your PatchLink Administrator. If a user does not have an User Role, or it is disabled, and their access immediately is denied to everything.

25.2 Error Pages

The PatchLink Update Server provides four distinct error pages. These pages are:

25.2.1 Insufficient Browser Capabilities

This page is displayed whenever a user visits the PatchLink Update Server with a browser incapable of properly processing the site. The minimum browser requirements are provided on this page, along with links to download the latest versions of popular browsers



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25.2.2 Requested Page Not Found

This page is displayed whenever a user attempts to navigate to a address that does not exist on the PatchLink Update Server. Links are provided to common sections of the PatchLink Update Server to assist the user in returning to the site.

25.2.3 Login Failure

This page is displayed whenever a user fails to provide valid credentials for access to the PatchLink Update Server.

25.2.4 System Component Version Conflict

This page is display whenever a system component version conflict is detected. The system components of the PatchLink Update Server are checked every time a user logs into the site. If a conflict is detected, this page is displayed providing the component(s) that failed to meet the required version. The PatchLink Update Server also attempts to notify the system administrator via email of the conflict.

26. Programmer's Reference

Programmer's reference gives you some samples and examples of the coding necessary to perform advanced functions on PLUS.

26.1 PLCCAgent Script Object

The Agent scripting host contains the imbedded object *PLCCAgent*. This object provides quick functions to the Windows Registry, Agent Environment, and Output.

26.2 PLCCAgent GetOSVersion Method

The **GetOSVersion** function obtains information about the version of the operating system that is currently running.

26.2.1 Syntax

object.**GetOSVersion** (strOS, iMajor, iMinor, iBuild, strServicePack)

26.2.2 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>strOS</i>	Win95, Win98, WinME, WinNT, Win2K, WinXP
<i>iMajor</i>	Major version (NT 4.0 Major = 4)
<i>iMinor</i>	Minor Version
<i>iBuild</i>	Build Number
<i>strServicePack</i>	Service Pack Number

26.2.3 Example

PLCCAgent.GetOSVersion szOS, iMajor, iMinor, iBuild, szPS

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26.3 PLCCAgent GetPolicy Method

26.3.1 Description

The **GetPolicy** function obtains the value for an agent policy.

26.3.2 Syntax

object.**GetPolicy** (*strName*, *strValue*)

26.3.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>strName</i>	"Interval", "IntervalType", "TraceLevel"
<i>strValue</i>	Returned value of a policy

26.4 PLCCAgent InitiateSystemShutdown Method

26.4.1 Description

Used to restart machine.

26.4.2 Syntax

object.**InitiateSystemShutdown**

26.4.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.

26.4.4 Remarks

Causes the machine to restart. See Window SDK API [ExitWindowsEx](#) 

26.5 PLCCAgent PollHost Method

26.5.1 Description

The **PollHost** function tells the agent to poll the host as soon as this package containing this script completes.

26.5.2 Syntax

object.**PollHost** ()

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26.5.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.

26.6 PLCCAgent RegCloseKey Method

26.6.1 Syntax

object.**RegCloseKey**(hKey)

26.6.2 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>hKey</i>	Handle to open key

26.6.3 Return

Returns non zero value if successful.

26.6.4 Example

```
If PLCCAgent.RegOpenKey( 0, "HKLM\Software\Microsoft\Windows\CurrentVersion",
hKey ) then
    ' Key opened successfully
    PLCCAgent.CloseKey( hKey )
End if
```

26.7 PLCCAgent RegEnumKey Method

26.7.1 Description

The **RegEnumKey** function enumerates subkeys of the specified open registry key. The function retrieves the name of one subkey each time it is called.

26.7.2 Syntax

object.**RegEnumKey** (hKey, strEnumKey, iIndex)

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26.7.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>hKey</i>	Handle to an open registry key.
<i>strEnumKey</i>	A variable that receives the name of the subkey in string form. This function copies only the name of the subkey, not the full key hierarchy.
<i>iIndex</i>	Specifies the index of the subkey to retrieve. This value should be zero for the first call to the RegEnumKey function and then incremented for subsequent calls

26.7.4 Return

Returns non zero value if successful.

26.7.5 Remarks

To enumerate subkeys, an application should initially call the **RegEnumKey** function with the *iIndex* parameter set to zero. The application should then increment the *iIndex* parameter and call the **RegEnumKey** function until there are no more subkeys (until the function returns 0). While an application is using the **RegEnumKey** function, it should not make calls to any registry functions that might change the key being queried.

26.7.6 Example

```
If PLCCAgent.RegOpenKey( 0, "HKLM\Software\Microsoft\Windows\CurrentVersion",
hKey ) then
    iKeyIndex = 0 ' Must start with 0
    do while PLCCAgent.RegEnumKey( hKey, szKey, iKeyIndex )
        PLCCAgent.Write "Key = " & szKey & vbcrLf
        iKeyIndex = iKeyIndex + 1 'Next Key
    loop
    PLCCAgent.CloseKey( hKey )
End If
```

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26.8 PLCCAgent RegEnumValue Method

26.8.1 Description

The **RegEnumValue** function enumerates the values for the specified open registry key. The function copies one indexed value name and data block for the key each time it is called.

26.8.2 Syntax

object.**RegEnumValue**(hKey, strEnumValue, iIndex)

26.8.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>hKey</i>	Handle to an open registry key.
<i>strEnumValue</i>	A variable that receives the value name in string form.
<i>iIndex</i>	Specifies the index of the value to retrieve. This value should be zero for the first call to the RegEnumValue function and then incremented for subsequent calls

26.8.4 Return

Returns non zero value if successful.

26.8.5 Remarks

To enumerate *values*, an application should initially call the **RegEnumValue** function with the *iIndex* parameter set to zero. The application must increment the *iIndex* parameter and call the **RegEnumValue** function until there are no more *values* (until the function returns 0).

26.8.6 Example

```
' Read all Values from a Key and output them to the Host
If PLCCAgent.RegOpenKey( 0, "HKLM\Software\Microsoft\Windows\CurrentVersion",
hKey ) then
  iKeyValue = 0 ' Must start with 0
  do while PLCCAgent.RegEnumValue( hKey, szValue, iValueIndex )
    PLCCAgent.Write "Value = " & szValue & vbcrLf;
    iKeyValue = iKeyValue + 1 'Next Value
  loop
  PLCCAgent.CloseKey(hKey )
End if
```

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26.9 PLCCAgent RegOpenKey Method

26.9.1 Description

Returns the registry value named by *strName*.

26.9.2 Syntax

object. **RegOpenKey**(hRootKey, strKey, strValue)

26.9.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>hRootKey</i>	Handle to previous open key (0=none)
<i>strKey</i>	Key name to open.
<i>hRetKey</i>	Return Handle to open key.

26.9.4 Return

Returns non zero value if successful.

26.9.5 Remarks

If *hRootKey* is 0, *StrName* must begin with one of following root key names . Otherwise, this key must be a subkey of the key identified by the *hRootKey* parameter. The **RegOpenKey** function uses the default security access mask to open a key.

Root Key Name	Description
HKCU	HKEY_CURRENT_USER
HKLM	HKEY_LOCAL_MACHINE
HKCR	HKEY_CLASSES_ROOT

26.9.6 Example

```
If PLCCAgent.RegOpenKey( 0, "HKLM\Software\Microsoft\Windows\CurrentVersion",
hKey ) then
    ' Key opened successfully
End if
PLCCAgent RegQueryValue Method
```

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26.10 PLCCAgent RegRead Method

26.10.1 Description

Returns the registry value named by *strName*.

26.10.2 Syntax

object.**RegRead**(strName, strValue,iType)

26.10.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>strName</i>	Value name to read.
<i>strValue</i>	Data read from registry.
<i>iType</i>	An Integer variable that receives a code indicating the type of data stored in the specified value. 1 = REG_SZ, 2 = REG_EXPAND_SZ, 4 = REG_DWORD

26.10.4 Remarks

StrName must begin with one of following root key names:

Root Key Name	Description
HKCU	HKEY_CURRENT_USER
HKLM	HKEY_LOCAL_MACHINE
HKCR	HKEY_CLASSES_ROOT

The **RegRead** method supports only REG_SZ, REG_EXPAND_SZ, REG_DWORD and REG_BINARY data types. If the registry has other data types, **RegRead** returns 0.

26.10.5 Example

The following example reads a value from the registry:

```
Dim Value
if ( PLCCAgent.ReadReg (
"HKLM\Software\Microsoft\Windows\CurrentVersion\ProductId", Value, Type ) then
PLCCAgent.Write "The Product is " & Value & vbCrLf
endif
```


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26.11 PLCCAgent RegSetValue Method

26.11.1 Description

The **RegSetValue** function sets the data and type of a specified value under a registry key.

26.11.2 Syntax

object.**RegSetValue**

26.11.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>hKey</i>	Handle to an open registry key.
<i>strSubKey</i>	A string containing the name of the value to set.
<i>Type</i>	A code indicating how the data is to be stored. 1 = REG_SZ, 2 = REG_EXPAND_SZ, 4 = REG_DWORD < /FONT >
<i>Value</i>	Variable that contains the data to set in the registry. If an Integer variable is a VarType of vbInteger and the Type is set to 1 (REG_SZ) then the value will be converted to a decimal string and stored as a REG_SZ. The same holds true for a string stored as an Integer.

26.11.4 Return

Returns non zero value if successful.

26.11.5 Remarks

All variables in VBScript/JScript are Variant in nature(meaning the variable could represent any type from integers, strings, to arrays); therefore, conversion of data types could yield undesirable results. If storing an Integer (REG_DWORD) try passing an Integer variable.

26.11.6 Example

```
If PLCCAgent.RegOpenKey( 0, "HKLM\Software\Microsoft\Windows\CurrentVersion",
hKey ) then
Value = "This is a string"
Type = 1 ' 1 = String or REG_SZ
PLCCAgent.RegSetValue( hKey, "Test", Value, Type )
PLCCAgent.CloseKey( hKey )
End if
```

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26.12 PLCCAgent SetReturnCode Method

26.12.1 Description

The **SetReturnCode** function is used to alter the package status. If during a PreScript or PostScript execution the script decides that this package has not accomplished its task, it may set a return code and a description of what went wrong. If set return code is used in the pre-script the package files will not be downloaded and the error returned to the host.

26.12.2 Syntax

object.**SetReturnCode** (*iRc*, *strRCDescription*)

26.12.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>iRC</i>	A return code. Range must be from 1-255
<i>strRCDescription</i>	A string description of the return code

26.12.4 Example

PLCCAgent.SetReturnCode 1,"This install didn't work!"

26.13 PLCCAgent Write Method

26.13.1 Description

Used to return data to the Host Server.

26.13.2 Syntax

object.**Write**(output)

26.13.3 Parameters

Parameter	Description
<i>object</i>	PLCCAgent object.
<i>output</i>	String data to be sent to Host

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26.13.4 Remarks

Output can be vbString, vbInteger, or vbLong. vbInteger and vbLong are converted to string prior to send.

The agent supports two different scripts, Pre-Script and Postscript. Therefore two output streams will be received by the Host for each script.

Note: There is currently no user interface provided at the host to view the contents of this stream. A future version may provide a user and/or programmatic interface to this stream.

26.13.5 Example

```
PLCCAgent.Write "Hello World" & vbCrLf
```

27. Glossary

Terms, definitions and definitions for terminology used throughout the PatchLink Update Server.

Agent

A software routine that resides in the background and waits to perform an action when a specified event occurs.

Agent Policies

An agent's behavior is defined by its policies. The three main policies are:

- ? Hours of Operation
- ? Communication Interval
- ? Logging Level

Though the policies can be overridden locally on the computer via the PatchLink Update Control Panel Applet, they will be reset whenever the policies are changed by the PatchLink Administrator on PLUS.

ATL Controls

ATL (Active Template Library, formerly called ActiveX Template Library) is a Microsoft program library (set of prepackaged program routines) for use when creating Active Server Page (ASP) code and other ActiveX program components with C++ (including Visual C++) that runs in a browser to enhance the user experience.

Authentication

The act of verifying that a user has access to a system or function of a software application running on the web server.

Authenticode

Authenticode is a technology based on industry standards that provides a method for developers to digitally sign their code (.EXE, .CAB, .OCX, and .CLASS files). When code is signed, the company signing the code vouches that the code is safe and free of viruses, and takes responsibility for the code.

Browser

Application software that allows the user to access and view documents on the Internet or World Wide Web.

Code Signing

The process of digitally signing programs for verification purposes.

Control Panel Applet

PatchLink provides an applet found in the Control Panel that allows easy interaction with the PatchLink Update Agents. The Action menu in applicable sections allows this interaction. See the Action Menu in each section for applicability.

Client

In relation to Agent-to-Client language, a client is used in reference to, and may also be, a computer, node, server, or system.

Cross Platform

Open interfaces now allow some programs to run on different platforms (operating systems) or to interoperate with different platforms through mediating programs.

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Deployment Agent

This Deployment Agent is a service running on the computer that performs two primary tasks: 1) communicates with PLUS and gathers its updated agent policies and deployments to perform and 2) executes those deployments then sends the results back to PLUS. Since this service is required to run all the time, its behavior is defined by agent policies set by the PatchLink Administrator on PLUS.

Detection Agent

The Detection Agent is executed either by a user manually from the computer or automatically by the deployment agent when the Discover Applicable Updates System Task is the next deployment for the agent to perform. It is this process in which the discovery and vulnerability analysis is performed on the computer. The Detection Agent will communicate with the PLUS to send up its system information and inventory and based on the system information, PLUS begins to send down the vulnerability reports which are determined to be applicable to the computer. The Detection Agent will continue this process until there is no vulnerability reports left to do.

DHCP

Dynamic Host Configuration Protocol is a protocol that lets network administrators manage centrally and automate the assignment of Internet Protocol (IP) addresses in an organization's network.

Discovery Agent

Provides both hardware and software information about a computer on which the Update Agent has been installed. There is no requirement to install the discovery agent, as it will be automatically deployed as needed by the Update Server.

DNS Names

The domain name system (DNS) is the way that Internet domain names are located and translated into IP (Internet Protocol) addresses. A domain name is a meaningful and easy-to-remember "handle" for an Internet address.

Firewall

A firewall is a set of related programs, located at a network gateway server that protects the resources of a private network from users from other networks.

FTP

File Transfer Protocol, a standard protocol, is the simplest way to exchange files between computers on the Internet. (IETF/W3C RFC959)

Host Name

The server computer name that typically is the DNS name (e.g., www.patchlink.com).

HTTP

The Hypertext Transfer Protocol (HTTP) is the set of rules for exchanging files (text, graphic images, sound, video, and other multimedia files) on the World Wide Web. (IETF/W3C RFC2616)

HTTPS

HTTPS Secure Hypertext Transfer Protocol is a Web protocol developed by Netscape and built into its browser that encrypts and decrypts user page requests as well as the pages that are returned via HTTP over SSL by the Web server.

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IIS

Internet Information Server is a group of Internet servers (Web or HTTP, FTP, and Gopher) and other capabilities for Microsoft's Windows NT Server operating system.

IP

Internet Protocol is the network transmission standard for Internet communication.

LDAP

Lightweight Directory Access Protocol is a software protocol for enabling anyone to locate organizations, individuals, and other resources such as files and devices in a network, whether on the Internet or on a corporate intranet.

MSDE

Microsoft Data Engine is an enabling technology that provides local data storage and is completely compatible with the Microsoft SQL Server(tm) version 7.0 code base. This technology transforms Access from a simple file-server database application into an extremely powerful and highly scalable client-server solution for any size organization.

OSD

Open Software Distribution is an Extensible Markup Language (XML) grammar. It creates a standard way to describe software components -- their versions, their underlying structure and their relationships to other components. This is the standard for using the Internet for automatic software updates.

Password

A unique code entered with the User Name to access a computer on a network or a particular function of a software application.

PatchLink Administrator

Any user who is assigned any of the PLUS access rights which control the functionality of PLUS or its deployments is considered a PatchLink Administrator. This is not to be confused with the PatchLink Super-User, who is assigned the Administrator user role.

PatchLink Super-User

Any number of users can be assigned the Administrator user role and thus can be called a PatchLink Super-User.

PatchLink User

Any user who has access to authenticate in to PLUS is considered a PatchLink User.

PLHOST

PLHOST is an acronym for the PatchLink Update **Host** Server. PLUS obtains its subscription of patches from these central repositories where vulnerability reports and their associated patches are located.

PLUS

PLUS is an acronym for the PatchLink Update **S**erver. PLUS allows users to be able to determine what vulnerabilities are not patched on their networks.

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Port

Number A port number is a way to identify a specific process to which an Internet or other network message is to be forwarded when it arrives at a server.

Proxy Server

In an enterprise that uses the Internet, a proxy server is a server that acts as an intermediary between a workstation user and the Internet so that the enterprise can ensure security, administrative control, and caching service. A proxy server is associated with or part of a gateway server that separates the enterprise network from the outside network and a firewall server that protects the enterprise network from outside intrusion.

Server

A computer that provides file sharing and various other servers between many users and computers on a network.

SQL Server

A trademark for a Microsoft database server that utilizes SQL. SQL Server is a popular database management system for Windows NT environments.

SSL

Secure Sockets Layer is a program layer created by Netscape for managing the security of message transmissions in a network.

TCP/IP

Transmission Control Protocol/Internet Protocol is the basic communication language or protocol of the Internet.

UDP

User Datagram Protocol is a communications method (protocol) that offers a limited amount of service when messages are exchanged between computers in a network that uses the Internet Protocol (IP).

Update Agent Software

that is installed on computers which enable PatchLink Update to distribute files and software onto those computers.

User Name

A unique name for access purposes assigned to a user of a computer on a network.

User Role

A user role contains a chosen set of PatchLink access rights and computers and/or groups on which those access rights may pertain to. There are four system user role templates a PatchLink Administrator may use to create custom user roles that fit in a more precise manner with the security policies of an organization. When a user role is assigned to a PatchLink User, that user now has access to view certain pages, perform certain functions on the assigned computers and/or groups.



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Verisign Certificate

VeriSign, Inc, provides Internet-based trust services needed by websites, enterprises and individuals to conduct secure communications and electronic commerce on-line. A VeriSign certificate is issued after a person's or company's identity is verified and enables them to digitally sign programs that run in a browser, or to prove authenticity of a given web site address.

Vulnerability

A breach from the original design, concept or intended behavior of a computer's hardware or software which leaves the computer, or any piece of it, in an exposed state. Malicious users can use this to force other unattended actions to be performed. Vulnerabilities are often caused by defects or bugs, though this is not always the case. Many times the very configuration may result in unexpected exposures. Even out of date documentation may be labeled as a vulnerability as un-informing a user of how to perform actions in the preferred manner may result in systems being widely exposed.

Vulnerability Report

A series of signatures designed to determine a computer is applicable to the vulnerability. Once a computer has been determined that it is applicable to a given vulnerability, the report's fingerprints determine the patch status of the computer.

Vulnerability Report Analysis

The results for a given (or all) vulnerability report(s).

Web Server

A program that publishes content using the HTTP protocol so that it can be viewed using any type of compliant browser from any location on the connected Intranet or Internet.

X.500

An acronym for CCITT Directory Services Protocol that is an industry standard for directory information contents.

XML

eXtensible Markup Language is a flexible way to create common information formats and share both the format and the data on the World Wide Web, intranets, and elsewhere.

Version	Revision Date	Change Description	Author
1.0	08/22/03	Initial Document	J. Bentley