

Evaluator's Guide

Vector Asset Management

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Introduction

This guide is a concise, hands-on introduction to the Vector Asset Management Suite and its key features. For more detailed information, refer to the Vector AM User Manuals, or contact us using the details supplied at end of this guide.

Flexible Architecture

Vector Asset Management uses a simple, powerful and scalable architecture. The Vector AM Console is the control point for interactive and scheduled PC management functions. To manage the PCs on your network from the Console, simply install the Vector AM Client software. Clients can be any mixture of networked, standalone and laptop PCs.

Manage your Hardware Assets

Hardware Inventory functions enable you to monitor your organization's PC systems from DOS to Windows 2003. A wealth of accurate hardware configuration information is automatically available, and you can also remotely collect system information, such as environment variables and specified INI file settings.

Identify Network Devices

The network device discovery process interrogates intelligent devices using SNMP to determine key asset characteristics. This will identify resources such as printers and scanners, as well as connectivity devices such as routers and switches. The administrator can provide SNMP Community Strings for discovery to use, as well as seed IP addresses.

Locations

This feature associates IP address and port-number ranges with "friendly" names. This can be used to provide a meaningful description of the physical location of any connected network assets.

Network Topology Diagrams

This section of the Console Tree is used to create diagrams showing the relationships between devices in specific IP address and port number ranges.

Collect User Information

Automate the collection of user information, such as location and telephone number, using the customizable user-prompting facility. Pick-lists and data validation controls simplify user entries and ensure reliability and consistency.

Effective Software Inventory

Identify the software applications installed within your organization at the click of a button. The customizable Applications Library and discovery utilities enable you to identify and manage all the applications installed across your network.

Manage Software Deployment

Package Policy Manager helps you control the deployment of software throughout your organization. By defining rules on where applications must be, can be and must not be installed, you can pro-actively manage your users' requirements. In addition, the Software Metering module enables you to identify where applications are actually being used - an invaluable resource for managing costs.

Report Library

Vector AM includes over 50 pre-formatted reports that provide a wide range of Desktop Management information. Additionally, the Database Viewer gives you a customizable, immediate view of asset data. Save your Views in HTML format to make them available through your intranet.

Reliable Software Distribution

The Vector AM Software Distribution module provides an easy-to-use, centralized method for installing applications and system updates. Working with standard installers,

such as MSI and InstallShield, it can be used to manage and control the installation of third-party software with a minimum of preparation.

Protect and Restore Applications

Vector Diagnostics protects and restores applications by taking snapshots of the applications installed on your networked PCs. You can repair applications interactively from the Console, and fix common problems automatically using Diagnostics self-healing - sometimes before users are aware of the problem!

Vector Diagnostics also provides change analysis capabilities. By comparing application and PC settings against a baseline or at different points in time you can quickly identify and correct changes that caused a problem.

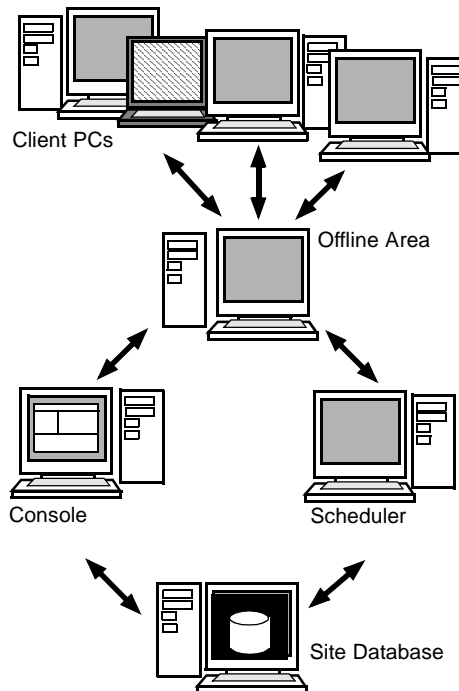
Track and Manage Support Issues

Vector HelpDesk is a Web-based system for tracking and managing support issues and calls. It features a fully-configurable workflow system that enables you to tailor the system to the way you work, and account-controlled access that enables you to manage the data available to different types of user. Integration with the Vector AM Inventory gives support staff direct access to information on users and their PCs.

Vector AM Architecture

Vector Asset Management gives you a real grasp of your organization's assets. Its flexible and scalable architecture enables Vector AM to support all PCs within your organization, even when they are not permanently connected to a network. In addition, the auditing facility enables you to support PCs that are never connected to a network.

Furthermore, because Vector AM uses the same Microsoft Windows Networking functions as Windows Explorer, it provides maximum compatibility across networks.



Vector Asset Management contains the following components.

Clients

Clients are computers on your network that are managed from the Vector AM Console. In default mode, each Client PC pushes raw data to an intermediate location, called the Offline Area, on a server share. You can automate the rollout of a large number of Client applications using the Distribute Client Software operation, or Logon Scripts. For the evaluation, the Client application is installed using a Client Kit configured at the Console.

Offline Area

The Offline Area is a shared directory that can be located anywhere on your network. Client PCs store their raw inventory data in this area. From there, it is retrieved by Consoles and Schedulers and saved to the Site database. Consoles and Schedulers also use the Offline Area to transfer instructions, such as software distribution details, to PCs on the network. Multiple Offline Areas can be used to support larger or distributed Sites.

Console

The Console provides the interface to your Site. It enables you to perform tasks (known as operations) on Clients interactively, or to schedule them as Jobs. It also enables you to access Client data through pre-formatted Reports, to control the Client PCs, and to perform Site maintenance tasks. You can create multiple Consoles to spread the workload across network, and each Console can access multiple Site databases.

Scheduler

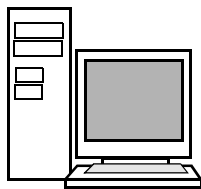
Schedulers automate the execution of Vector AM operations. They can run operations when network activity is low, and automate regular tasks, such as the collection of inventory data. A Scheduler can run as a conventional application, or as a service. To spread the inventory workload and minimize network traffic in segmented networks, Schedulers can be set up on any PC where the Console application is installed.

Site Database

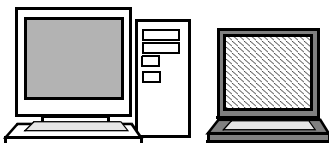
You can use a Microsoft Access, Microsoft SQL Server Desktop Engine (version 2000a SP3 or later), Microsoft SQL Server (version 7 SP3 or later), or Oracle (version 8.1.5 or later) for your Site database. Site databases are accessed from Consoles and Schedulers.

Getting Started

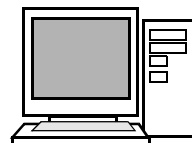
You can install and run Vector Asset Management on one PC. However, to get the most out of your evaluation, we recommend the following set up for testing and demonstration purposes:



One PC running Windows 2000, XP or 2003 to host your Site database, Offline Area, Console, Scheduler and Client.



Up to twenty networked computers on which to deploy the Vector AM Client software.



Another Windows 2000, XP, or 2003 system to host an additional Console and Scheduler.

Installing from CD

To install the Console and Scheduler from the Vector Asset Management CD:

- 1 Insert the CD and wait for the Autorun program to appear. If the Autorun does not appear, start AUTORUN.EXE from the root directory of the CD.
- 2 Follow the installation instructions. In the Installation Options screen, select:

Microsoft Data Access Components if MDAC 2.80 or later is not installed on your system.

Microsoft SQL Server Desktop Engine if you want to use MSDE to create your Site database. (If MSDE is not installed, Enterprise automatically uses Microsoft Access for evaluation Sites - you do not need to install Access to use it).

Vector Asset Management Console to install the Vector AM Console application.

- 3 Click Next and follow the instructions to complete the Console installation.

Installing from the Web

To install the Console and Scheduler from the Vector Asset Management Web site:

- 1 Download the Vector AM kit from www.vector-networks.com.
- 2 Run the self-extracting installation program and follow the instructions. In the Installation Options screen, select:

Microsoft Data Access Components if MDAC 2.80 or later is not installed on your system.

Microsoft SQL Server Desktop Engine if you want to use MSDE to create your Site database. (If MSDE is not installed, Vector AM automatically uses Microsoft Access for evaluation Sites - you do not need to install Access to use it).

Vector Asset Management Console to install the Vector AM Console application.

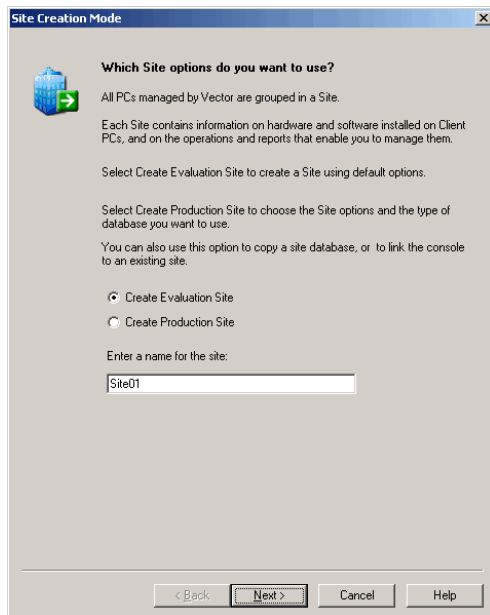
- 3 Click Next and follow the instructions to complete the Console installation.

Creating a Site

Because you must create a Site database before you can store data and work with Vector AM, the Site Creation Wizard starts automatically the first time you open the Console. This section describes how to create an evaluation Site using the default settings in the Site Creation Wizard. If MSDE is installed, the wizard automatically creates an MSDE database. Otherwise, it creates a Site database using Microsoft Access.

Using the Site Wizard

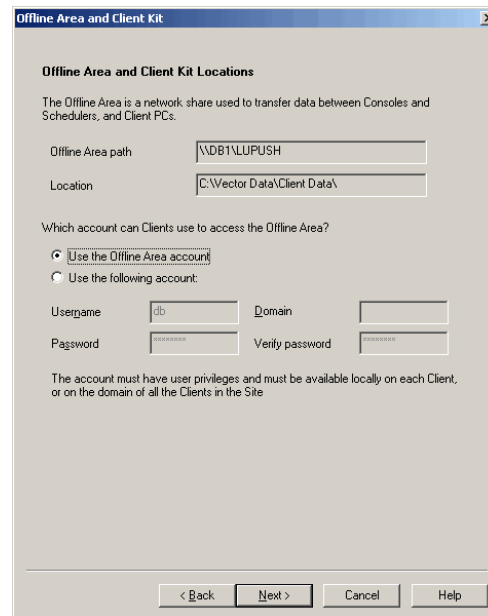
- 1 To start the Console, click the Windows Start button, then choose Programs, Vector Asset Management, Asset Management Console.



- 2 Read the information in the Wizard's Site Creation Mode dialog, then select Create Evaluation Site.

This option creates all the Site components needed by Vector Asset Management: a Site database, an Offline Area to which Clients save their data and a configured Client Kit to deploy to the PCs you want to manage.

- 3 Enter a name for the Site database.
- 4 Click Next to display the Offline Area and Client Kit dialog.

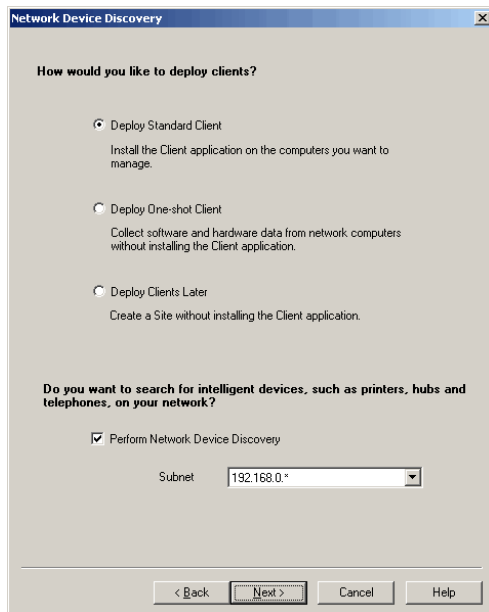


- 5 By default, Vector AM Clients access the Offline Area using the account supplied during the Console installation. If you want your Clients to use a different account to access the Offline Area, select the Use the following account option and enter the account details.

The account must have user-level privileges, and must be valid for all Client PCs. If the account belongs to a domain, you must also enter its Domain name.

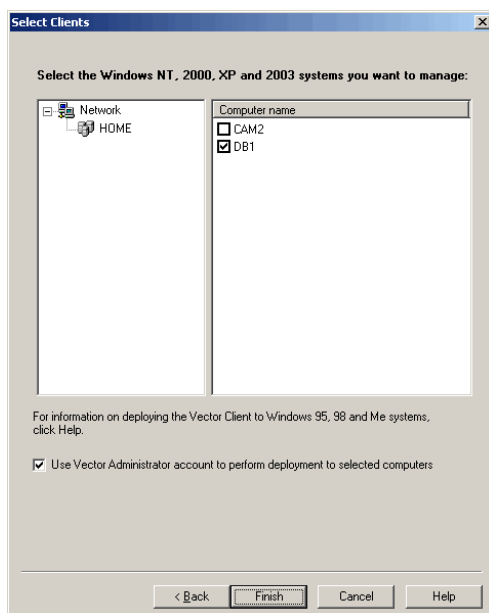
- 6 Click Next to continue.
- 7 The Client Deployment and Network Device Discovery dialog (shown below) enables you to choose the type of Client you want to work with. Select Deploy Standard Client. This option installs the Client enables you to use the full range of Vector AM services and modules.
- 8 Check "Perform Network Device Discovery" and select a local IP range to enable automatic discovery of network devices (network devices have to be SNMP-enabled to be detected). The Network Device Discovery job will execute once the site has been created. The job may take several minutes to complete.

If your network uses community strings, you must configure the Network Devices Scan. This is in the Network Devices folder once the Site has been created.



9 Click Next to continue.

10 The Select Clients dialog lists the Domains and Organizational Units found on your network. To specify which nodes you want to deploy the Client to, select one or more entries in the Tree, and select the nodes to which you want to deploy the Client.



The Wizard can only deploy the Client to Windows NT, 2000, XP Professional, and 2003 systems. For information on deploying the Client software to other platforms, or deploying after Site creation is complete, refer to Chapter 3 of the Vector Asset Management User manual.

11 If you want to specify the account that Vector AM can use to perform the Client deployment, deselect the Use Enterprise Administrator account to perform deployment to selected computers option. Otherwise, click Finish to create your Site.

12 The new Site is created and opened in the Vector AM Console. This then displays the Deployment and Inventory Progress dialog, so you can follow the Client deployment on each node you selected.

13 When a Client deployment is complete, the Current Action field displays the message: Click here to view Inventory Report. To view a summary of the Client hardware, click this entry.

You can also view the inventory details of the Client at any time by right-clicking its entry in the All Clients group of the Console's Clients folder.

You can now start work by expanding the Site in the Console's Tree and selecting a folder.

Tour of the Console

Clients

Lists the PCs managed by Vector AM. PCs are grouped automatically according to their properties.

Network Devices

Intelligent devices found by the discovery process are displayed here.

Client Deployment

Deploy the Vector AM Client software to the PCs you want to manage.

Operations

Contains the management tasks you can perform. Select a folder to display the associated operations.

Jobs and Schedulers

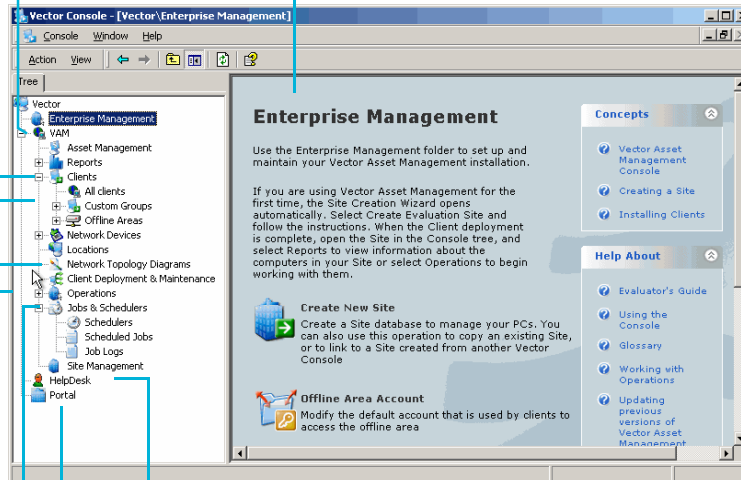
Lists the scheduled operations for the Site, and the Schedulers available to manage them.

Sites

Contain Clients and the operations you can perform on them.

Console View

Lists the contents of the selected folder with context-sensitive help. To view all the Clients in the Site, select All Clients in the Clients Folder.



Portal

Makes Vector AM data available to authorized users across the Internet using interactive reports.

HelpDesk

Lists and manages help desk issues and support calls.

Diagnostics

Identifies the causes of software problems, and protects and restores critical applications.

Viewing Clients

The Client PCs managed by a Site are listed in the Clients folder of the Console Tree. It contains the following sections:

All Clients lists all the Clients in your Site. All Clients are automatically added to this folder, so it is a good place to check that new Clients have been added to your Site.

Custom Groups contains collections of Clients that have similar characteristics, such as PCs that use a specific Bus type, or where a particular operating system is installed.

Offline Areas lists the Offline Areas assigned to your Site and the Clients they contain.

Active Directory If you have installed Active Directory on your network, Vector AM automatically creates a group for each Organizational Unit containing Client PCs.

To view the Clients in a group, select the appropriate folder in the Clients Tree.

Using Groups

Groups enable you to organize and identify Clients that have similar characteristics. You can also use them to select multiple PCs whenever you perform an Operation. Vector AM automatically adds a selection of useful groups to the Custom Groups section when you create a Site. However, because no two

organizations are the same, Vector AM enables you to create groups for your own use.

To create a new group, right-click the Console's Custom Groups folder, and choose Add Group from the shortcut menu.

To customize a pre-defined group for your own use, right-click the group's entry, and choose Modify Group.

Refer to the online help for information on selecting a group's Clients.

Viewing Inventory Data


One of the most important aspects of Vector AM is its ability to provide direct, centralized access to detailed information on an organization's computers. This section looks at the some of the asset information you can access from the Console.


Hardware Details

- 1 In the Clients folder, select All Clients to list the Clients at your Site.
- 2 Right-click a Client, and choose Hardware Details from the shortcut menu. The Hardware Inventory window displays an instant survey of the Client information stored in the Site database.



- 3 The data is divided into sections. Click a section in the Hardware Inventory list on the left of the window to display its data.

- 4 Select another Client in the Compare with list. Differences between the Clients are indicated by the difference  icon.

- 5 Click  to close the dialog.

Software Details

Software inventory data is shown in the Software Identification Manager. To display the software found on a Client:

- 1 Right-click the Client and choose Software Details from the shortcut menu.

The details are shown in four sections:

Confirmed Identifications lists applications identified by application definitions in the Vector AM Applications Library.

Provisional Identifications lists applications identified using version information extracted from each application's executable files.

Registry Identifications lists applications identified using installation information from the Clients' operating system.

Unidentified Software lists the directories that contain executable files which Vector AM is unable to identify.

The Applications Library tab enables you to view the rules that Vector AM uses to confirm software identifications.

Client	Resource	Application	Version	Type	Location	Platform	Status
DB-V2K	C	Adobe Type Manager		UTILITY	(WINNT\System32)	Windows/DOS	Unch
DB-V2K	C	HTML Help Workshop		WWW	(Program Files)\HTML H...	Windows/DOS	Unch
DB-V2K	C	InstallShield? Setup Engine		SYSTEM	(Program Files)\Common...	Windows/DOS	Unch
DB-V2K	C	MS Info	5.00	UTILITY	(Program Files)\Common...	Windows/DOS	Unch
DB-V2K	C	MS Internet Connection Wizard		WWW	(Program Files)\Interne...	Windows/DOS	Unch
DB-V2K	C	MS Internet Explorer	6.0 SP1	WWW	(Program Files)\Interne...	Windows/DOS	Unch
DB-V2K	C	MS NetMeeting	3.01	NETWORK	(Program Files)\NetMeet...	Windows/DOS	Unch
DB-V2K	C	MS Outlook Express	6.00	EMAIL	(Program Files)\Outlook...	Windows/DOS	Unch
DB-V2K	C	MS SQL Server	2000	DATABASE	(Program Files)\Microso...	Windows/DOS	Unch
DB-V2K	C	MS Windows Installer	3.1	SYSTEM	(WINNT\System32)	Windows/DOS	Unch
DB-V2K	C	MS Windows Installer	2.0	SYSTEM	(WINNT\MSI31\Uninst...	Windows/DOS	Unch
DB-V2K	C	Windows 2000 Professional	SP-4	OS	(WINNT)	Windows/DOS	Unch
DB-V2K	C	Windows Media Player	9.00	UTILITY	(Program Files)\Window...	Windows/DOS	Unch

- 2 Select the Confirmed Identifications tab and click Details button to show information about individual installations. Deselect the Details button to show the information for each application. When you have finished viewing the Software Details, close the window.

Client Properties

In addition to gathering information on the software and hardware of Client PCs, Vector AM can also collect and store information for each Client user. User Prompts enable you to define questions to collect information from PC users, or to collect data directly from system files on the PC.

To view the properties currently held for a Client, right-click its entry in the Console, and choose Properties.

Package Policy Manager

Package Policy Manager enables you to plan and monitor the software installed on PCs so you can control the rollout of applications to your organization's users. Use it to manage software requirements across the network, to control your organization's spending by monitoring license usage, and to identify the use of prohibited or illegal software.

For example, if everyone in your Accounts department uses Microsoft Excel 2000, you can create a Package Policy that associates the department and the application. The Package Policy Manager can then compare the policy with actual installations to identify where Excel is correctly installed, and, more importantly, to identify the PCs where it is not installed, or where the wrong version is installed.

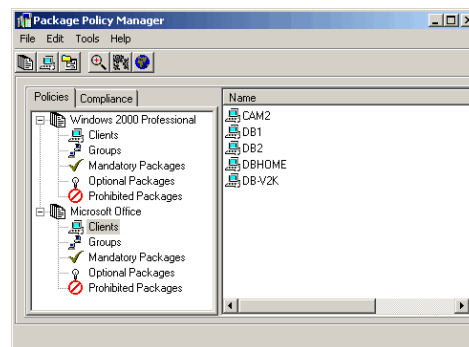
Creating a Package Policy

- 1 In the Asset Management folder, click the Specify Package Policies operation to open the Package Policy Manager.
- 2 Right-click the Tree View and choose Add Policy from the shortcut menu to display the Package Policy Details dialog.
- 3 In the Name field, type a name for the new policy and click the OK button.

Adding Clients to a Policy

- 1 In the Tree View, expand the package policy you just created.

- 2 Right-click Clients and choose Add Client from the shortcut menu to display the Add Clients dialog.
- 3 In the Add Clients dialog, select the Clients you want to add to the policy.
- 4 Click the OK button to add your selections to the policy and close the dialog.



Adding Packages to a Policy

- 1 In the Policies tree, select Mandatory Packages, Optional Packages, or Prohibited Packages to add a software package to that category.

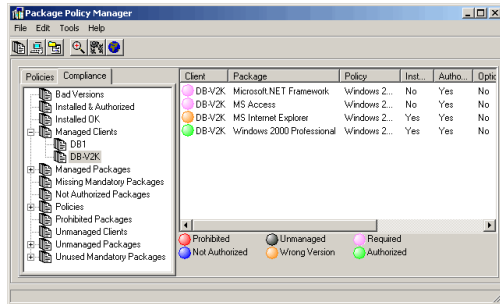
The List View displays the packages that are currently assigned to the option.

- 2 Choose the Edit, Add Package command to open the Add Packages dialog.
- 3 In the Add Packages dialog, select the package you want to add to the option, then click the OK button.

Analyzing your Software Assets

When you have created package policies, you can use the Package Policy Manager to check how well the PCs in your organization conform to your policies:

- 1 In the Package Policy Manager, choose the Tools, Run Analysis menu command.
- 2 Select the Compliance tab. This contains the categories that identify the compliance status of software on your network.



- 3 Click the report you want to view. The results of the analysis are displayed on the right of the window.

Software Metering

While Package Policy Manager helps you regulate the software installed on your network, Software Metering enables you to monitor where software is being used, who is using it and the length of time each application is used for. You can then use Vector AM's pre-defined reports to identify and predict software usage requirements across your organization.

This data is not normally available until the day after you commence software metering because, by default, Vector AM analyzes the metering data once per day at midnight.

Viewing Software Usage Data

- 1 Select Software Metering in the Console's Operations folder.
- 2 Double-click the Software Total Users by Day Report.

Software metering also enables the Package Policy Manager to generate the Unused Mandatory Applications report.

Database Views

The Database Viewer provides customizable views of the Site database. It gives you access to any software, hardware and user data held in the database, enables you to

create and print custom Reports on your inventory and asset data and enables you to make your data available in HTML format.

Running Database Views

- 1 Select the Console's Reports folder and open one of the subfolders. These contain a selection of pre-defined Database Views and Reports.
- 2 Click a Database View. The View shows fields of information for the selected Clients.
- 3 Click Details at the bottom of the Database Viewer.

The Details section contains the SQL (Structured Query Language) definition for this View. If you are familiar with SQL, you can modify this query to customize the information displayed in the Viewer. Alternatively, you can use the SQL Wizard to create the SQL using the natural language interface.

- 4 When you have finished, close the Database Viewer.

Reporting

Vector AM is supplied with over 50 pre-formatted Reports, covering such areas as Client Properties, Hardware Inventory details, Software Inventory information, and Software and Hardware Change History. Reports can be previewed from the Console, and printed and exported in various formats.

Previewing Reports

- 1 In the Console's Reports folder, select Current Data Reports, and select a report type.
- 2 Click a Report in the Reports View.
- 3 In the Select Clients dialog, select the Clients for which you want to create a report. The Report is displayed.

- If you want to print the Report, click the Printer button in the window's Toolbar. To see more of the Vector AM Reporting facilities, repeat this procedure for different Client selections and Reports.

The Vector AM Portal

The Vector AM Portal provides organization-wide, click-through reporting for Vector Asset Management. Each report in the Portal automatically extracts data from a selected Site and provides analysis capabilities for asset managers. Reports are divided into themes, which concentrate on specific aspects of IT asset management.

The screenshot shows two overlapping browser windows. The background window is the 'Vector Reporting Portal' in Microsoft Internet Explorer, displaying a navigation sidebar with options like 'Check license compliance', 'Check software utilisation', and 'Package policy compliance'. The foreground window is a report titled 'Software Utilisation by Application' in Microsoft Internet Explorer. The report contains a list of applications and a bar chart titled 'Top 10 Applications by Number of Unused Copies'.

Application	Unused Copies
PC-Duo	26
MS InternetConnection Wizard	21
MS Windows Installer	21
Windows Media Player	21
MS Internet Explorer	18
MS Outlook Express	17
MS Info	15
MS Access	13
MS NetMeeting	13
Windows Movie Maker	13

- Insert the CD and wait for Autorun to appear. (If Autorun does not appear, start AUTORUN.EXE from the root directory of the CD.) In the Autorun screen, select Install Portal and follow the prompts.
Alternatively, download the Portal from the Web site and run the self extractor.
- When the installation is complete, the Portal Site Wizard is displayed so you can choose which Vector AM Sites to make available to Portal users. Select the Sample Site to view the Portal reports using test data.

Installing the Portal

You can evaluate Vector AM Portal from the PC on which the Vector AM Console is installed. Other users can access the Portal using Internet Explorer. To install Vector AM Portal:

- Make sure IIS (Internet Information Services) is installed on the PC you want to use to host the Portal. (To install IIS click Add/Remove in the Windows Control Panel, and select Add/Remove Windows Components.)

- To access the Portal from the Console, open the Portal folder and enter the following URL in the address field:

`//servername/pcdeportal/logon.asp`

where *servername* is nodename of the PC on which the Portal is installed.


When you first access the Portal, it asks permission to install the Vector Asset Management Report Navigator, which displays the available reports in your browser. Click the Yes button to continue. Afterwards,


you can link to the Portal from the Console or through its logon page as long as you have the correct access permissions.


To allow other users to access the Portal logon page directly through their browsers, add their names to the PCDEPortalUsers group created by the installer.

Viewing Portal Reports

Portal reports are organized hierarchically. This enables you to view a summary of all your data, to drill-down and view details by individual PC, and to view data graphically.

To open a report, click the  button in the section you want to work with, and select the report title.

To view the details of a report, double-click a section heading (marked by the expand  icon in the section list).

To view the details of a specific section in a report, click the Group Tree  button in the toolbar, and select the section in the Report Tree. To return to a previously viewed section of the report, select its entry in the bread crumb trail shown below the report title.

Inventory

Vector Asset Management provides a comprehensive range of computer management facilities. You can obtain up-to-date information on your PCs at any time using the inventory operations.

Hardware Inventory

Two variants of the Update Hardware Inventory operation are supplied in the standard Vector AM installation. Both are used to collect Client data from the Offline Area:

Update Hardware Inventory Interactively presents the results in the Hardware Inventory window so that you can view the results before deciding whether to save the results to the Site database.

Update Hardware Inventory creates a scheduled job that saves the Client data to the database without displaying the results.

Customizing Operations

Like other Vector AM operations, you can create variants of the hardware inventory operations and then optimize them to suit your requirements by right-clicking the operation icon and choosing Customize.

Running Hardware Operations

- 1 In the Console's Hardware Scan folder, click Update Hardware Inventory Interactively.
- 2 In the Select Clients dialog, select the Clients for which you want to collect inventory data and click the OK button. Vector AM collects the data from the Offline Area.

The data is displayed in the Hardware Inventory window. Select a Client in the window's Inventory for list to display its inventory data. Select an entry in Hardware Inventory list to view the details for that section.

- 3 Click the Save All button to save the information to the database, then close the dialog.

User Prompting

The Get User Data operation distributes prompt files, which enable you to request information from users and their PCs. This section describes how to configure the operation to distribute a customized prompt file.

Creating a New User Prompt

- 1 In the Operations folder, select User Prompt Questions. Right-click the Get User Data operation and choose Customize.
- 2 In the Customize dialog, select the Hardware tab.

The Get User Data operation is a variant of the Update Hardware Inventory operation with only the User Prompting options enabled.

- 3 Click the Edit button to open the User Prompt Editor and display the file. The Editor enables you to create and modify user prompt files.
- 4 Edit the Introduction field to customize the standard introductory message that is displayed to users.
- 5 In the Editor, click the Add button to enter a new database key. The new key is displayed in the Database keys list.
- 6 Select the General tab, and enter the question that you want to display to users in the User prompt field.

General	Type	Case	Length	Pick List
Database key				
User prompt				
Help				
Default value				

- 7 Use the Type, Case and Length tabs to restrict user replies to specific formats and improve the consistency of the data entered. For example, you can convert replies into uppercase text, or limit the length of user input.

Alternatively, use the Pick List tab to create your own list of pre-defined answers from which users can choose.

- 8 If you want to collect environment variables, network settings and INI file settings, click the Browse button.
- 9 When you have created your user prompt, click the Apply button. Choose Save As in the File menu to save the file.
- 10 Close the User Prompt Editor to return to the Customize dialog.

Distributing User Prompts

- 1 In the User Prompt Refresh Customize dialog, click the Browse button, then select the prompt file you saved.
- 2 Click the Reload button to embed the revised questions in the operation.
- 3 Click the OK button to save the new operation.
- 4 Click the Get User Data operation, select a Client in the Select Clients dialog and click the OK button.

The new questions are distributed to the Client through the Offline Area. The user is prompted with the questions when the Client is next scheduled to check the Offline Area, or at the next PC reboot.

- 5 To force the Client PC to display the prompts immediately, click Start in its Windows Taskbar, then select Programs, Vector Asset Management Client and select Vector AM Client Startup. Your questions are included in the user prompts. Answer the questions.
- 6 In the Console, click the Update Hardware Inventory Interactively operation. The new information is displayed in the User Prompt Responses section of the Hardware Inventory window.

- 7 Click the Save All button to save the results in the database.

- 8 To display the Client data, right-click the Client and choose Properties.

Software Inventory

Software inventory operations collect information on the applications installed on Client PCs. Using a customizable, regularly-updated Applications Library, and proprietary discovery technologies, they can automatically recognize many commonly-used applications. The stored inventory data can then be used to manage your system assets, to produce inventory reports, and to plan software installations and upgrades.

When a software inventory operation detects files on a Client, Vector AM attempts to identify the applications they belong to by first comparing them with the definitions in the Applications Library, and then by searching for version information encoded in the file properties. If Vector AM is unable to identify files using either of these methods, it lists the file locations in the Unidentified Software tab of the Software Identification Manager.

In addition, the Registry Identifications tab lists applications identified using installation information collected from the Clients' operating system.

Because it does not rely on installed files to identify software, the Registry Identifications tab may contain applications that are also listed in other tabs. You can remove these duplicates by linking a registry identification with a confirmed identification.

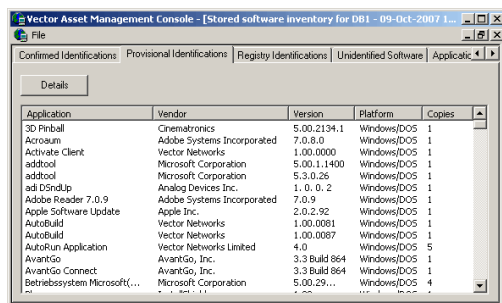
Performing Software Scans

- 1 Click the Update Software Inventory Interactively operation. This enables you to view the latest inventory data from your Clients before saving it to your Site database.
- 2 In the Select Clients dialog, select the Clients you want to scan and click OK.

The Console collects and analyzes data from the Offline Area, and displays the results in the Confirmed Identifications, Provisional Identifications, Registry Identifications and Unidentified Software tabs of the Software Identification Manager. Each tab can display the information in two ways:

To show whether the installation has changed since the Client's previous software inventory, and to display the directory location in which each instance of each application was detected, select the Details button

To view a summary of the results by the applications detected, deselect the Details button.



Application	Vendor	Version	Platform	Copies
3D Pinball	Cinematronics	5.00.2134.1	Windows/DOS	1
Acrosum	Adobe Systems Incorporated	7.0.6.0	Windows/DOS	1
Activate Client	Vector Networks	1.00.0000	Windows/DOS	1
addtool	Microsoft Corporation	5.00.1.1400	Windows/DOS	1
addtool	Microsoft Corporation	5.3.0.26	Windows/DOS	1
adi D5ndUp	Analog Devices Inc.	1. 0. 0. 2	Windows/DOS	1
Adobe Reader 7.0.9	Adobe Systems Incorporated	7.0.9	Windows/DOS	1
Apple Software Update	Apple Inc.	2.0.2.92	Windows/DOS	1
AutoBuild	Vector Networks	1.00.0061	Windows/DOS	1
AutoBuild	Vector Networks	1.00.0067	Windows/DOS	1
AutoRun Application	Vector Networks Limited	4.0	Windows/DOS	5
AvantGo	AvantGo, Inc.	3.3 Build 864	Windows/DOS	1
AvantGo Connect	AvantGo, Inc.	3.3 Build 864	Windows/DOS	1
Betriebssystem Microsoft(...	Microsoft Corporation	5.00.29...	Windows/DOS	4

- 3 Choose Save Results in the File menu to save the results to the Site database.

You can customize software inventory operations to choose which applications are identified and reported by Vector AM and which Client locations are searched for inventory data. For more information on configuring operations to your requirements, see Customizing Software Inventory operations in the Vector AM User Manual.

To promote provisionally identified or unidentified software to the Confirmed Identifications list, right-click an entry in the Details view and choose Create Identification Rules to open the Software Identification Wizard. Using simple steps, this guides you through the process of creating rules to customize and extend the Application Library for your organization.

Software Distribution

Software Distribution enables you to remotely install and update software packages on PCs across your organization's networks. Distributing software is performed in the following stages:

- Prepare a package installation kit on a network server using the instructions supplied with the software.
- Configure the Package Distribution Definitions using the Package Definition Editor.
- Use the Software Distribution Wizard to select the package you want to distribute, to specify its installation method, and to deliver the information to each Client's Offline Area.

The Client's Software Distribution Agent installs the application the next time the Client checks the Offline Area, or when the PC is next rebooted. You can monitor the progress of distribution operations using the Software Distribution Jobs Viewer, or the centralized error and progress logs.

The next sections take a closer look at some of these stages. For a comprehensive guide to Software Distribution, refer to the User Manual.

Specifying How Packages are Installed

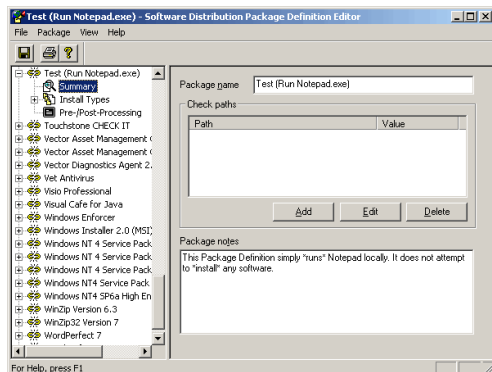
The Package Definition Editor enables you to create and edit Package Definitions, which contain details about how each application must be installed.

- 1 In the Software Distributions folder, click the Edit Distribution Definitions operation to start the editor.

The Package Definition Editor lists the currently available Package Definitions in its Tree View. Vector AM is supplied with Package Definitions for a wide range of applications.

- 2 To view the details of a Package Definition, click its plus symbol.

- 3 Select the Summary section in the expanded definition. The editor displays the name of the package, any notes, and the check paths.



Check paths are the locations of files supplied with a package, such as EXE files. They are tested before installing an application and, if any of the files are present, Vector AM assumes the package is already installed and does not attempt to reinstall it. Check paths are also tested after the installation to check whether it has been successful.

You can enter the file size in bytes for any Check paths. If the specified file is found, but has a different size, such as when you are updating a package, the installation will still proceed.

- 4 Expand the Package's Install Types section and select an Install Type.

Many packages offer different types of installation to support different operating systems or optional components. You can create a different install type for each combination of installation commands and command switches, and group them in a single definition.

- 5 Select the Package's Pre-/Post-Processing section. This specifies any commands that must be executed before and after the package is installed.
- 6 To conclude this look at the Package Definition Editor, scroll down the list and locate the Test (Run Notepad.exe) Package Definition to simulate a software distribution.
- 7 Expand the Test (Run Notepad.exe) information. Notice the Install command for this Package is set to run Notepad on the local Client.

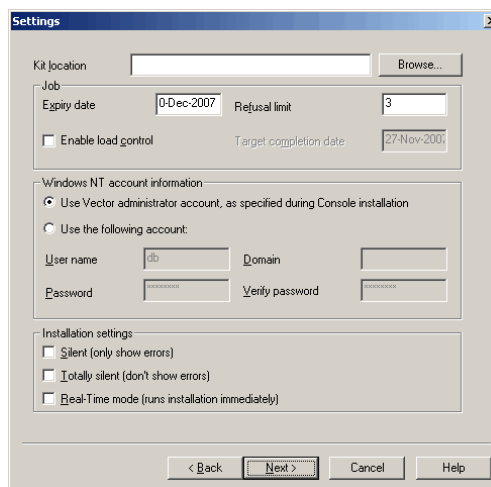
For a typical Package Definition, the Install command points to the installation kit's SETUP.EXE, located on a suitable file server.

- 8 Close the Package Definition Editor.

Performing Distributions

- 1 In the Console, click the Distribute Software operation. The Select Clients dialog is displayed.
- 2 Select the Clients to which you want to distribute the software and click OK. The Select Package dialog is displayed.
- 3 The Select Package dialog enables you to select the Package Definition you want use to distribute the software. Select Test (Run Notepad.exe) from the list.
- 4 Click Next to open the Client Filter dialog.

This dialog filters out Clients from the distribution. The filters are based on the Platforms supported and a free disk space check. For this demonstration, do not make any changes.
- 5 Click Next to display the Settings dialog.



The Settings dialog is used to confirm the location of the application's Installation kit, and to specify the last date on which the system will attempt to install the application.

The Kit location is specified as a UNC path, including any account information needed to access the kit location and install the software. Use the Windows NT account information section to provide these details. You must specify a valid Admin-level account if the Package requires a privileged installation.

- 6 For this demonstration, leave the Kit location empty, and enter today's date in the Expiry date field.
- 7 The Refusal limit field controls the maximum number of times that PC users can refuse an installation when prompted. Type 0.
- 8 The options in the Installation settings section enable you to choose how the package will be installed. Select Real-Time mode to start the installation as soon as possible, and click Next to display the Monitoring and Logging dialog.
- 9 Make sure the Monitor distribution feedback for this job check box is selected, and enter a Job name. This name identifies the activities associated with the operation.
- 10 If you want to record the progress of the installation and any errors encountered during the distribution in separate log files, use the Browse buttons to specify the name and location of the files.

- 11 Click the Finish button to complete the Software Distribution Wizard.

The Software Agent uses the local PC's path and runs Notepad.exe as the installation command (as specified in the Package Definition). When the Notepad window appears, close it.

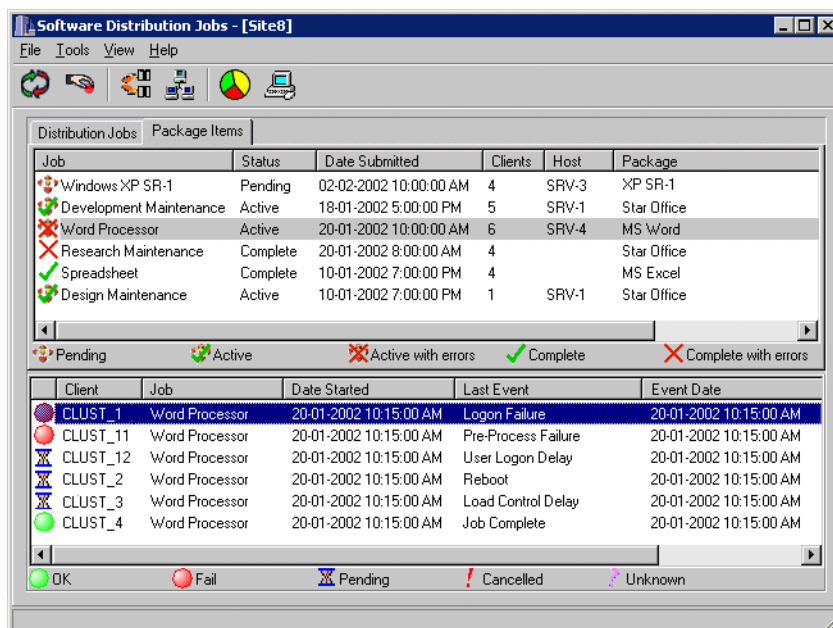
You can customize the Distribute Software operation to set default values for kit locations, expiry dates, account details and log file locations.

The Software Distribution Agent

After completing the Wizard, the distribution information is transferred to the specified Client PCs using the Offline Area.

Each Client's Software Distribution Agent collects the information from the Offline Area the next time the Client is scheduled to check the Offline Area, or at the next PC reboot. The Agent then connects to the installation kit and runs the specified command.

To monitor the progress of the software installation, click the Monitor Software Distribution operation in the Console to open the Software Distribution Jobs Viewer.



Diagnostics

Vector Diagnostics protects and restores computer environments by taking automatic and scheduled snapshots of applications installed on your network computers. It can protect any software from small utilities to business critical software with no limit on the number of protected applications.

Vector Diagnostics also provides change analysis capabilities to help determine the cause of a problem. By comparing application and PC settings against a baseline or at different points in time, you can quickly identify and correct changes that caused a failure.

Diagnostics Architecture

Vector Diagnostics contains the following components:

Diagnostics Agents

Agents are installed on each network PC. They gather audit data and create Snapshots of installed software when requested by the Console.

SupportSite

The SupportSite is a shared directory that manages communication between Consoles and Agents, and contains audit reports, profiles, installation kits, license information and configuration settings.

Console

The Diagnostics folder in the Console is used to create profiles, to audit applications and to protect, diagnose and fix applications.

Installing Diagnostics

You can evaluate Diagnostics from the PC on which the Vector AM Console is installed. This will host the SupportSite and a local Agent. To install Vector Diagnostics:

- 1 Insert the CD and wait for Autorun to appear. (If Autorun does not appear, start AUTORUN.EXE from the root directory of the CD.) In the Autorun screen, select Install Diagnostics and follow the prompts.

Alternatively, download Diagnostics from the Web site and run the self extractor.

- 2 In the Autorun screen, select Install Diagnostics and follow the prompts. Select Complete as the Setup Type, and enter a username and password for an account that has access to the share. The share is created with everyone – full control.

Diagnosing Applications

Before you can diagnose an application, you must first create a Profile. It specifies the files, registry keys, and other components required by the application. Diagnostics includes tools to automate the creation of Profiles, and sample Profiles are available in the Diagnostics Profiles folder. See the online help for information about Profiles.

When you have generated a Profile, you can audit and protect the application:

Audit generates a baseline of the working application from the PC where it is installed. This produces a detailed view of how the application is currently installed. If the application subsequently fails, this data enables you to make a comparison between the working state and the broken state, and to identify possible problems.

Protect produces an audit report, and creates a backup of the files used by the application. When a fault is detected, Diagnostics uses this to offer potential fixes, enabling you to repair the application quickly and easily. Protected applications can also be self-healed using repair jobs. Repair jobs are scheduled audits that automatically fix any problems they detect.

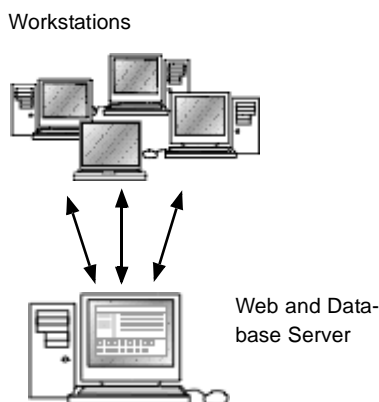
You can audit and protect applications by right-clicking on any PC in the Entire Network folder and choosing Audit or Protect. You can select any PC where the Diagnostics Client is installed, or select groups of PCs by opening a Site in the Sites folder.

HelpDesk

Vector HelpDesk is a Web-based system for centrally tracking and managing help desk issues and calls. Because Vector HelpDesk is Web-based, you have access to issues from any browser, anywhere, any time from either an Access or SQL database. And since it's on the Web, deployment costs are minimized - there is nothing to install on supported PCs.

Although Vector HelpDesk is Web-based, it works like a Windows application, not like a set of static HTML pages. It uses pop-up dialogs for tasks like generating reports and attaching files to records. When you run a query, view a record, or submit a new issue, HelpDesk dynamically updates its interface.

HelpDesk Architecture



Vector HelpDesk contains the following components.

HelpDesk Web

HelpDesk Web is a Web-based application that users run to enter issues, query the database, and generate reports. Each Web view is an instance of HelpDesk Web. Web views are generated using the Web View Editor.

HelpDesk Web Server

HelpDesk Web Server is the Web server component of HelpDesk Web and should be installed on a Web server (a PC running Internet Information Services). The HelpDesk

Web Server installation includes a Microsoft Windows service (Mq Issue Agent) that generates and sends e-mail notifications.

HelpDesk Admin

HelpDesk information can be stored in one central database, known as a project, or distributed across multiple databases for different application areas or business units within your organization. Projects have common user accounts, group privileges and administration utilities, but they help you separate discrete domains of information. This enables you to optimize your system to suit the way you work.

HelpDesk Admin is a Microsoft Windows application for administering Vector HelpDesk projects.

Web View Editor

Web View Editor is a Microsoft Windows application that enables you to create Web Views for your Vector HelpDesk projects. Web Views are HTML/ASP pages that provide access to Vector HelpDesk projects through a Web browser.

HelpDesk Web Admin

HelpDesk Web Admin is a Web-based administration tool. It allows you to perform additional administrative tasks over the Web.

Installing HelpDesk

You can evaluate HelpDesk from the PC on which the Vector AM Console is installed. This PC will host the HelpDesk installation. Other users will be able to access the HelpDesk from Internet browsers.

IIS (Internet Information Services) must be installed to run HelpDesk. To install IIS click Add/Remove in the Windows Control Panel, and select Add/Remove Windows Components. To install Vector HelpDesk:

- 1 Insert the CD and wait for Autorun to appear. (If Autorun does not appear, start AUTORUN.EXE from the root directory of

the CD.) In the Autorun screen, select Install HelpDesk and follow the prompts.

Alternatively, download HelpDesk from the Web site and run the self extractor.

- 2 In the Autorun screen, select Install HelpDesk and follow the prompts. Select Complete as the Setup Type and accept all the default options.
- 3 Enter a username and password in the HelpDesk Notification Service dialog. This sends e-mail notifications when a change is made to any monitored field in the HelpDesk. Evaluation license keys can be found in README.HTM.
- 4 If you want to synchronize HelpDesk with Active Directory or Domain, select the user groups you want to import and click OK.
- 5 The Link Site Wizard opens and detects any local Vector AM Sites. Follow the instructions, and select the sample Vector Asset Management Site.

Using HelpDesk

The HelpDesk installation includes several default accounts designed to demonstrate the workflow of HelpDesk. You can log on with any of the following accounts:

admin has full administrative privileges and a password of *admin*.

demo has full administrative privileges and no password.

guest has limited privileges.

analyst, group leader, employee are role-based accounts with different user permissions and access rights. They do not require a password.

To log on to Vector HelpDesk:

- 1 Start your browser and open the Web view logon page, <http://server/helpdesk>, where **server** is the name of your Web server.
- 2 In the Logon Name field, type the user name and password you want to use.
- 3 Click Logon. HelpDesk lists the Web views that your account has permission to open.
- 4 Click a Project / View to open the Web view.


Finding and Listing Issues

Use the Query, Sort, and Layout lists to generate and format lists of issues in the Summary List. A layout is the set of columns displayed in the Summary List. The Summary List displays the results of a query as pages. The number of results can be defined by the HelpDesk administrator.

Building Ad-hoc Queries

The Ad-hoc Query Editor enables you to build queries that test the value of a single field. Predefined queries can find broad categories of issues, such as all open issues or all assigned issues. You can also search for issues submitted during a specific period, or keywords in the various issue fields.

To define an ad-hoc query:

- 1 Logon to HelpDesk using the Admin or Demo account, and click the Show  button on the Toolbar.

Access to the Ad-hoc Query Editor is controlled by the privileges associated with the logon account.

- 2 In the Field list, click the issue field you want to search.
- 3 In the Test list, click a query operator, enter the value you want to search against in the Value field and press Enter. Alternatively, choose a search value from the Value list.

HelpDesk Web Views

With HelpDesk Web views, you can provide separate views for employees and for help desk staff. Each view is accessed through the same Web-based interface. The main difference between views is the set of queries and fields available in the view:

Queries determine what issues users can retrieve from the project database. This enables you to restrict employee access to issues they submitted, while allowing support staff to access all issues in the database.

Fields determine what information users can view and modify in each issue. Fields can be used to prevent employees from seeing the fields used to track and resolve issues.

The screenshot displays the Vector HelpDesk web interface. At the top, there is a navigation bar with icons for various functions: Software, Hardware, Reports, History, E-mail, Conversation, Queue, Contacts, Password, Defaults, Options, Help, Switch, and Log Off. Below this is a search bar with a query set to 'All Issues', a sort option of 'Escalation Level (Asc)', and a layout set to 'Assigned'. A search input field and a 'Go' button are also present.

The main area shows a table of issues with columns for Issue ID, Priority, Assigned Date, Time, Owner, Problem Area, and Summary. The table contains five rows of data, with the most recent issue (ID 11) highlighted. The summary for issue 11 is 'Unable to receive email'.

Below the table, there is a detailed view of the selected issue (ID 10). This view includes tabs for Overview, Description, Resolution, Detail, Contact, Inventory, SLA, and Child Issues. The 'Overview' tab is active, showing fields for Contact (Employee), Owner (Help Desk Analyst), Progress (New), Priority (High), Service Type (E-mail), Computer Name (SOMEPC), Source (Web), Assigned Work Team, State (Open), Severity (High), Problem Area (System - Email), and Problem Area - Other. A summary field contains the text: 'When I open outlook it reports "Exchange Server Unreachable"'. At the bottom, there is a status bar with 'Issue: 10' and a prompt 'Ready. Click New to create a new issue.' along with 'New', 'Save', 'Copy', 'Cancel', and 'Print' buttons.

Default Views

The HelpDesk contains two default views:

HelpDesk Displays all issues and issue information. Intended for use by support staff, the HelpDesk view defines the issue lifecycle and enforces workflow rules.

Employee Displays only the issues and information submitted by employees. It enables employees to submit new issues and check the progress of existing issues, but prevents them from viewing notes and information added by the support staff.

Issue Tracking

Organizations normally have a well-defined process for handling calls. In Vector AM HelpDesk, this process is implemented as a workflow. Each step in the process corresponds to a possible value of the Progress field. For example, the steps for resolving a simple problem might be New, Assigned, In Progress, and finally, Resolved.

To move an issue to the next step in the process, users change the value of the Progress field.

Log on as employee and create a new issue. Try logging on as different users and follow your issue through the workflow by changing the Progress field. For more information on flow charts, refer to the manual or the online help.

E-mail Integration

HelpDesk can be configured to accept issues from accounts on one or more e-mail servers. This process can be highly automated, with HelpDesk identifying new contacts, creating issues and threading continuing messages together. The Mailbox Workflow Rules Engine analyzes incoming messages and routes them to the appropriate process or destination, while ignoring spam. Status update e-mails can also be routed automatically to the originator and other interested parties. This is part of the web-based self-service interface, which allows users to query or update their issues without involving a support engineer.

Accessing Inventory Information

HelpDesk now provides direct access to the detailed software and hardware information held in the Vector AM Site database. This

simplifies the process of logging new support issues and enables support staff to understand and identify problems quickly so speeding up issue resolution. To access the data, enter the PC name in the HelpDesk Web view.

Distributed Architecture

You have already set up and populated a Site database. The next stage in your evaluation is to install another Console and Scheduler to share this database. Before installing other distributed Consoles, you must first share the database.

This description of how to set up multiple Consoles is for evaluation purposes only. Because Access and MSDE are single user systems, we recommend you do not use them with multiple Consoles or Schedulers for live support tasks.

Sharing the Site Database

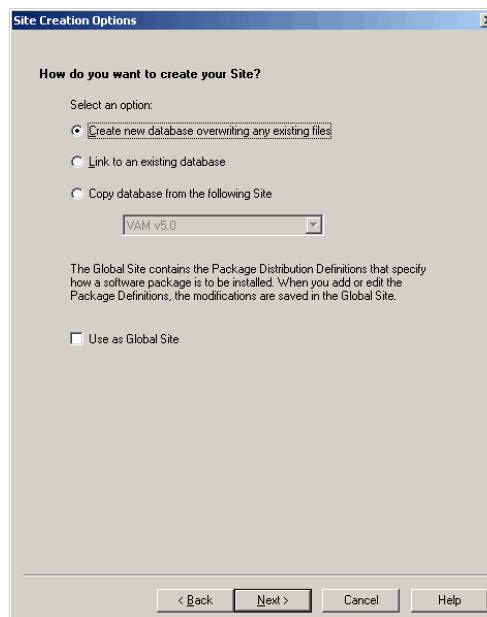
- 1 At the PC where the Console is installed, use Windows Explorer to navigate to the Vector Data\Databases directory. To share the directory, right-click its entry in Explorer and choose Sharing.
- 2 Select the Shared as option, then enter a Share Name of LUDATA.
- 3 Click Permissions to open the Access Through Share Permissions dialog, then click Add to set the access permissions for this shared directory. For evaluation purposes, use Guest access and full permissions.

The Site database is shared and accessible from other Consoles. You can now install another Console and Scheduler, and submit and monitor Scheduled Jobs in a distributed environment.

Creating multiple Consoles

- 1 Install Vector AM on the computer you want to use as a second Console.
- 2 Start the Console. The Site Creation Wizard starts automatically.
- 3 In the Site Creation Mode dialog, select the Create Production Site option, and enter the name of your existing Site. Click the Next button to continue.
- 4 Select the Database Type used by your Site, and click the Next button to continue.

- 5 In the Site Creation Options dialog, select Link the Console to an existing Site database, then click the Next button.



- 6 In the Database Configuration dialog, enter the details of the Site database, and click the Next button to continue.
- 7 In the Client Deployment dialog, select Deploy Clients Later, and click the Finish button.

Vector AM creates a Data Source Name on the new Console, which points to the database specified in the Location field.
- 8 In the new Console Tree, select the Site. You are now sharing the Site database with your original Console, and the Client data you have previously collected is immediately available.

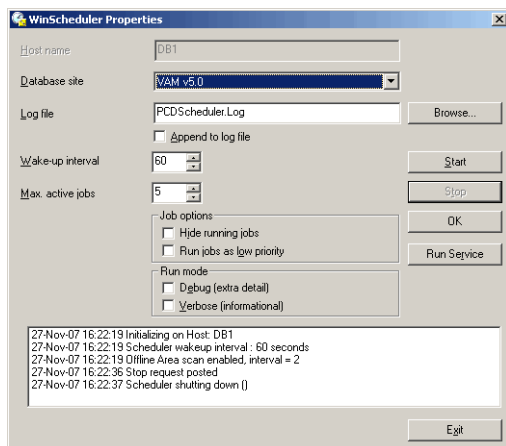
Configuring the Scheduler

The Scheduler for the new Console must now be configured to work with the shared Site. To do this, you must set up the Database path definition and other Scheduler parameters.

- 1 Click the Configure Scheduler operation in the Site Management folder. The

Scheduler appears as an icon in the System Tray of the Windows Taskbar.

- 2 Double-click the icon in the System Tray to display the WinScheduler Properties dialog.



- 3 Click Stop to stop Scheduler. Select your Site in the Database site list.
- 4 Enter a location and name for the Scheduler Log file, or click Browse to select a file. By default, the file is saved to Vector Data\Logs, but any available path can be used.
- 5 Click Start to restart the Scheduler, then click OK to close the dialog.

Alternatively, if you want the Scheduler to be available to run Jobs when no user is logged on, click Run Service.

Checking the Scheduler Status

In the Console's Jobs and Schedulers folder, select Schedulers, and check the status of the local Scheduler.

The Scheduler from the original Console, and the Scheduler from the new Console are listed with a status of Active.

For information on the Scheduler status, check the log file specified in the WinScheduler Properties dialog.

Jobs

A Job is a combination of an operation, the Clients on which the operation is to be performed, settings that specify when the operation is to be run and logging instructions.

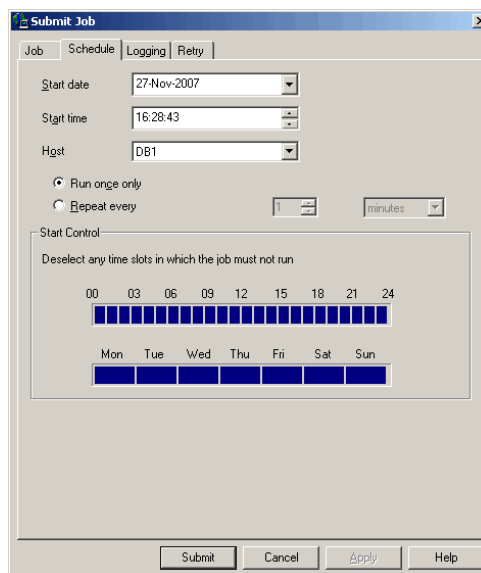
Jobs save their results to the Site database, and can generate events. All jobs can be monitored from the Console using the Scheduled Jobs View. Software distribution jobs can also be monitored at each stage using the Software Distribution Jobs Viewer.

Submitting a Job

- 1 In the Software Scan folder, click the Update Software Inventory operation.
- 2 In the Select Clients dialog, select the Clients for which you want to collect software inventory data, and click OK. The Submit Job dialog is displayed.
- 3 In the Job tab, enter a Job name.
- 4 Select the Schedule tab. In the Host list, select the Scheduler that will be responsible for running the job.

The Host list contains all the Schedulers available to run scheduled operations at the current Site.

You can specify a default Scheduler for an operation using the General tab in the operation's Customize dialog.



- 5 The Schedule tab is also used to specify how often you want the Job to run. Select Repeat every and enter 60 minutes, then deselect the slots in which you don't want the Job to start.
- 6 Accept the defaults in the Logging tab, then click Submit to schedule the operation.

Monitoring Job Progress

- 1 Click Scheduled Jobs in the Jobs and Schedulers folder to display the Jobs View. Your Job has a status of Pending until it is scheduled to start.
- 2 On completion, the Job is deleted if it was scheduled to run once, or placed in Pending status if it was scheduled to repeat.
- 3 If you want to run a Pending Job again, without waiting for the 60 minute interval, right-click the Job and choose Run Now from the shortcut menu.
- 4 When the Job is finished, select Job Logs in the Jobs and Schedulers folder to look at the results of the first run. The Job Log View is displayed.
- 5 Right-click the Job in the Job Logs View, and choose View Client Log from the shortcut menu.
- 6 After inspecting the Client Log, right-click the Job in the Job Log View again and choose View Event Log.

Concluding the Evaluation

This completes your overview of Vector Asset Management. To evaluate the product further, look at some of the other features, such as One-shot Auditing, which enables you to collect inventory data from PCs without installing the Client application, and the Macintosh Client, which enables you to collect and manage inventory data from Macintosh computers on your network. You can also refer to the User Manuals and online help, which contain in-depth information about the various product features.

Contact Us

If you have any questions regarding the Vector Asset Management Suite, please consult the User Manuals included in this kit, or contact us directly:

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Vector Asset Management on the Web

For the latest information, software and updates, visit Vector Networks' Web site at www.vector-networks.com.