

KORREKTUR

Inventory this

Do you know what's going on in your machines? If you want to keep closer tabs on your computer systems, you'll need to get an inventory tool. Nätverk & Kommunikation ran some tests to find out what some of these tools are like, and has picked a Norwegian, and worthy, winner. **Av Johan Modig**

Inventory tools offer numerous benefits. First and foremost, you save wear and tear on your feet because you no longer have to run around your company and fuss with each and every computer in order to list what hardware is sitting inside, and what software has been installed.

In addition, you have a good tool for tasks such as listing all the workstations with less than 256 megabytes of memory, or those that are pressed for hard drive space. That is information that is good to have during the planning stages before you roll a new OS out onto your desktops. A third benefit, and one that is at least as important, is that you gain control over the number of installed copies of a given piece of software. A quick check against your licenses will show whether you have bought too many or too few. If you're lucky, a good software inventory can save you money.

At the starting line

At the starting line we find six hungry contestants, all of whom offer fast, accurate and comprehensive inventory functionality. Scandinavia is well represented with Snow Inventory (Norway) and Vidamic Netlog (Sweden), both of which are pure inventory programs. Snow Software also has more to offer

TESTED PRODUCTS:

- Enterprise Directory Reporter
- Snow Inventory 2.07
- PC-Duo 1.2
- Vidamic Netlog 2.0
- Inventory 5.0
- Webcensus

this test. The classic PC-Duo is a complete client administration package, with functions for the network distribution of software and remote control. However, according to information from the Swedish distributor, it is possible

to purchase individual modules, so we thought that we were justified in looking at just the inventory section. Enterprise Directory Reporter (EDR) from Aelita Software is a tool for gaining complete control over all aspects of Active Directory and Exchange Server. Inventory functionality was naturally a part of what we looked at.

At their own request, Tally Systems entered their lighter product in the inventory field. Webcensus is a rather unusual creation that is entirely web-based. The administrator gets a private office at Tally, and the inventory is then conducted in that agents that are downloaded directly by the users, or distributed on the network in some other way, send data over the Internet to the server. This system has both advantages and disadvantages, as we shall see.

Finally, Inventory came in with a strong entry, which formerly went under the name Linauditor. This is a dedicated inventory product that boasts being the only one in this test that inventories Mac and Linux computers.

Installation and agent distribution

All of the tested products are essentially constructed along the same lines, except for Webcensus. A central database receives information from small programs ("agents") that are running on the computers to be inventoried.

The results of the inventory and tools for post-processing of inventory data are presented

in an administrative interface that runs on the database server, or on a standalone computer.

The way in which the agents are distributed on the network is a point of interest when an inventory is to be run. Snow Inventory's agent can be distributed in a number of different ways that vary in appropriateness depending on how the network is configured and where the computers to be inventoried are located.

The agent can be installed locally on each computer to be inventoried after its behaviour has been configured by the administrator. In the case of Snow, the results of the inventory are stored in an ini-file that accompanies the installation. Information is stored there concerning which data are to be sent when the inventory is complete, as well as information regarding the agent's behaviour during the actual act- ➔

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steps for getting valid and reliable results

- **Each and every one of the tested applications was installed with its accompanying database.** A number of them were able to work with, e.g. SQL Server, which may be a good choice if a large number of computers are to be inventoried. We also made sure to distribute the agent software in the appropriate manner.
- **Inventories were performed on a number of computers** using all the tested products, and we then assessed the overall handling and user interface.
- **Once the inventories were complete,** we assessed the scope of the information presented for each inventoried computer.
- **Finally, we attempted to create a number of filters** to pull up information from the inventory databases, and evaluated how well the process worked.

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in its product portfolio, for those who are interested in adding on.

Two of the products are intended to be more than just inventory programs, even though that is the functionality that was the focus of



TEST EDITOR CHOOSES
THE WINNER

Precise Norwegian was clearly best in test

Snow Inventory generates the most detailed reports while at the same time being tidy, elegant and efficient, easy to use and extremely flexible in terms of network installation.

A bit further down we find the Swedish product **Vidamic Netlog** which, despite its lack of certain heavyweight functions, performed extremely well. However, the wish list for this product includes a more powerful database than Access File and the ability to export data.

The middle of the pack continues with two products that are actually capable of more functionality than we looked at in this test. **Enterprise Directory Reporter** from Aelita Software works best with Active Directory. We liked the user interface and the detailed reports, but found that it was difficult to create customized filters and searches in the database. **PC-Duo 1.2**, which is about to be replaced by version 2.0, was at its best when it came to hardware inventories, which were highly detailed and well presented.

Inventory was found to work better on Mac than on Linux or Windows, where we were less impressed with the results, despite the product's respectable age and presumed level of maturity. The bright spot was the flexible and efficient agent configuration model wizard.

Tally Systems should have submitted their heavier product, T.S. Census, for the test. They came in last place with their **Webcensus** which, despite a technically interesting approach, did not perform well in certain parts of the test.

⇒ al inventory process. The Standalone Edition offers an alternative to an installed agent. Here a configured agent is put on a network disk to which everyone has access. The agent is conveniently started via a login script, and the file containing the inventory data is sent to a central location in the network for further processing by the server section. To enable large numbers of clients to write to the site location, an arbitrary file name is generated that contains enough characters to make a name conflict practically impossible.

Configure first, then deploy

A similar process is encountered in inventories where you first configure your agent in a wizard before deploying it on a network volume. Instead of each inventoried computer generating a file, **Inventory** uses a common file that is filled in with data.

Using either **Snow** or **Inventory** it is possible to distribute the agent by an alternative means, such as by CD or e-mail, to reach those computers that do not log onto the network or which do not access the network volume for some other reason. The problems arise when data are to be sent back to the server. Either the user has to handle them manually or, as is the case with **Snow**, the agent can e-mail the results to a selectable e-mail address with a user-specified subject line. The server section then checks the account and searches for the information with the proper subject line, and then retrieves the information to the database.

Vidamic Netlog is certainly not as flexible but, on the other hand, the user gets a lot of help in setting up the system. Here again the agent is distributed via a distributed network volume, but it is not possible to choose where it will be placed in relation to the server, but rather it must be on the same computer. The agent in the login script is also copied to a local directory, so that it is not possible to run an inventory without some trace on the client itself.

PC-Duo, which is indeed intended to do a bit more than just inventory, must have a client installed on the computer that is to be inventoried. This is most easily achieved by using the **Landeploy** tool, which pushes the client software out onto computers in the network. Naturally it has to be run with administrator authorizations on all the computers. The computers on which the agent is to be installed are selected in **Landeploy**.

Aelita EDR works somewhat differently. The domain administrator **Data Collection Manager** first starts on the server, distributing itself out on the network to collect data from the selected computers. It is also responsible for collecting information about AD and Exchange but, as noted, we did not consider those areas in this particular test. The process is very tidy and flexible, but more dependent on the right assumptions being in place than many of the other solutions.

Finally, **Webcensus** is quite different, given its web-based model. When you log onto the administrator account for the first time, you get to determine how you want the inventory to proceed. You can either download an agent and distribute it in a manner similar to those described above, or you can e-mail links to the agent to your users, or create the links on your intranet.

The disadvantage with the latter models is that they demand the active participation of the users, and you cannot just blindly assume that everyone will follow orders. It is an interesting solution on the whole, but we were not particularly impressed. It is worth noting that if you are just interested in a one-time inventory, you can buy a license for just one month's use for a very low price. All the data can be retrieved and presented in Excel. The winner in the installation and agent distribution

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BEST IN TEST N&K FEB. 2003

Snow Inventory 2.07

Supplier: Snow Software

Price/250 clients: SEK 72,000

Price/2500 clients: SEK 537,000.

Both prices include one year of support and updates.

Database: Access (default), SQL-server, Oracle or others via ODBC

Agent: The agent is installed or started from the network volume.

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HANDLING/GUI 30% x 4 = 1.2

Good. All components in the system are easy to use, and you seldom need to consult Help.

RICHNESS OF DETAIL 30% x 5 = 1.5

Excellent. Both hardware and software inventories were highly comprehensive. Clearly produced the test's most comprehensive inventories.

FILTERING/QUERIES 20% x 4 = 0.8

Good. Simple, but sometimes slightly unclear which units are being used. Requires that you know what the wildcards from SQL mean (such as % and _).

INSTALLATION/FLEXIBILITY

20% x 5 = 1.0

Excellent. The system can be installed in a number of ways, depending on what suits the user best. It also works well for inventorying computers outside of the local network. Multi-tier solution for large installations.



SUMMA

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round is undoubtedly **Snow Inventory**, which is very well thought-out and flexible, so that you can access all your computers with the least possible amount of effort.

The server section

At the other end of the system (relative to the

Enterprise Directory Reporter 5.1

Supplier: Aelita
Price/250 clients: SEK 31,250
Price/2500 clients: SEK 262,500
 Both prices include one year of support and updates. Note that EDR is licensed per user account.
Database: MSDE (included) or SQL Server 2000
Agents: Not installed (in normal case)

Vidamic Netlog 2.0

Supplier: Vidamic Security
Price: SEK 8995 per server (SEK 6995 for schools and municipalities). Free support. Updates required about once a year, price depends on scope.
250 clients: SEK 16,250
2500 clients: SEK 162,500
Database: Access
Agent: The agent is started from the network volume

PC-Duo 1.2

Supplier: Vector Networks
Price/250 clients: SEK 58,750
Price/2500 clients: SEK 347,500
 Both prices include one year of support and updates.
Database: Access (default), SQL-server, Oracle or other via ODBC
Agents: Installed agent

Inventory 5.0

Supplier: Inventory Ltd.
Price/250 clients: SEK 37,800
Price/2500 clients: SEK 230,000, including one year of support and updates.
Database: Access
Agent: The agent is started from the network volume, or locally (requires manual copying of resulting file)

Webcensus

Supplier: Tally Systems
Price/250 clients: SEK 33,750
Price/2500 clients: SEK 337,500 for one year's use.
Database: Non-local database at the supplier.
Agent: Agent downloaded directly from the Internet (link in e-mail or on intranet), or started from network volume.

HANDLING/GUI 30% x 4 = 1.2

Good. Tidy, elegant and attractive. If you are running Active Directory, you need only point at the computers you want to inventory when you run Data Collection, and the program does the rest.

RICHNESS OF DETAIL 30% x 4 = 1.2

Good. Third place when it came to identifying installed applications on our guinea pig computer. Offers good hardware inventory that should be able to meet most needs.

FILTERING/QUERIES 20% x 3 = 0.6

Passing. Even though you don't have to write SQL code directly, EDR is the most difficult of the test products to create filters in. There are many cryptic table and column names to keep track of. The saving grace is the predefined reports, which are editable.

INSTALLATION/FLEXIBILITY 20% x 3 = 0.6

Passing. Installed only on the server in normal cases (Active Directory and network-connected clients). It is possible to inventory machines outside of the domain, but it quickly gets a bit cumbersome. A multi-tier solution that can handle large domains.

3,6

HANDLING/GUI 30% x 4 = 1.2

Good. Not quite as elegant, but easy to grasp. Stands alone in terms of function that matches inventory results against the number of licenses purchased.

RICHNESS OF DETAIL 30% x 3 = 0.9

Passing. A notch below the top products in richness of detail in the software inventory. Hardware inventory not especially detailed.

FILTERING/QUERIES 20% x 4 = 0.8

Good. A dialogue box is all that is needed. Nice that the list boxes are populated by data from the database. If you want to list computers that contain a given network card, the alternatives found in the database are listed.

INSTALLATION/FLEXIBILITY 20% x 3 = 0.6

Passing. Very simple to get underway with. The client is distributed appropriately via network volume with the help of login script. However, there are not many alternatives to this.

3,5

HANDLING/GUI 30% x 3 = 0.9

Passing. For this test we just missed the update to 2.0, which was a shame. Amore polished and easy to use interface would not have been amiss. Ability to generate reports directly to PDF format is nice.

RICHNESS OF DETAIL 30% x 4 = 1.2

Good. PC-Duo performed splendidly when it came to hardware inventory. Comprehensive and well presented. The software inventory received a passing grade. Nice to be able to add objects other than computers manually.

FILTERING/QUERIES 20% x 3 = 0.6

Passing. Using SQL Wizard, you create queries that generate a desired SQL code. Lack of information about which units are being used in the underlying tables can, however, create problems with this.

INSTALLATION/FLEXIBILITY 20% x 3 = 0.6

Passing. Installation and distribution can occur in a number of ways. Different databases can be selected to house inventory data. Help in editing login script for agent distribution.

3,3

HANDLING/GUI 30% x 3 = 0.9

Passing. Just like running Access. In other words, not too elegant, but fairly easy to use.

RICHNESS OF DETAIL 30% x 2 = 0.6

Poor. A mere 13 applications were identified on our test computer. The hardware inventory was somewhat better, but not at the top.

FILTERING/QUERIES 20% x 3 = 0.6

Passing. Using Easy Builder, you can create your own queries, but it still feels like a rather blunt tool.

INSTALLATION/FLEXIBILITY 20% x 4 = 0.8

Good. Good wizard for configuring the agent, which can then be distributed in selectable fashion. Extra points for the ability to inventory Mac and Linux computers.

2,9

HANDLING/GUI 30% x 3 = 0.9

Passing. Webcensus offers neither unpleasant surprises nor any major benefits.

RICHNESS OF DETAIL 30% x 3 = 0.9

Passing. Webcensus is able to list a great deal, but it is not at the top in terms of either hardware or software.

FILTERING/QUERIES 20% x 2 = 0.4

Poor. Very limited options in terms of creating custom filters to pose queries to the database. Decent offering of predefined reports.

INSTALLATION/FLEXIBILITY 20% x 3 = 0.6

Passing. You are definitely locked into having your data at Tally Systems, but on the other hand you can access them from any computer with Internet. Furthermore, the agent can be distributed in a number of ways.

2,8

agent) we find the server, where all the data are collected in a database. The choice of database varies among the various suppliers, and may provide some indication as to the scopes of the inventories for which their products are intended.

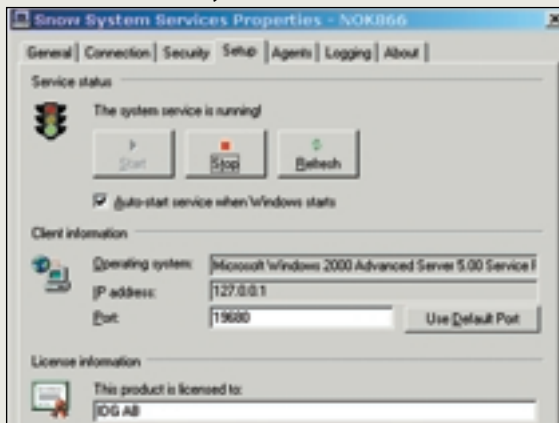
Vidamic Netlog and Inventory are content to save data in an Access file on the server's

hard drive. Because each inventory does not generate massive amounts of data, you can get by with this approach for a fairly long time, but things can get a bit stickier if you're talking about tens of thousands of computers.

Snow and PC-Duo also use the Access format in their standard installations, but they offer the

advantage of being able to switch over to communicating with a more powerful database manager via ODBC. Microsoft's SQL-Server and databases from Oracle and Sybase will thus work well. The same holds for Aelita EDR, the difference being that EDR's standard installation uses MSDE (Microsoft Data Engine), ➔

Snow Inventory 2.07



Good: Extremely flexible with respect to both client and server. Tidy and attractive interface and very detailed inventories, with good data categorization.

Poor: The filter functions could have been made even better.

N & K's opinion: Without a doubt, the best product in this test.

← **EASY TO USE** Snow Inventory installs itself on the server as a service which is configured via a number of tabs. Both simple and easy to understand.

⇒ which is a slimmed down SQL-Server. MSDE naturally comes with the installation disk.

It is not really relevant to talk about Webcensus in this section, since all the data are stored at Tally Systems. We have not been informed as to what database manager they use there.

User-friendliness and flexibility

A good user interface is not only pleasant to look at, it also helps the user find the correct path through a logical setup.

At the top of the heap, with an interface that is both flexible and easy to use, we find Snow Inventory, all parts of which have been designed in exemplary fashion. The only criticism we can make is that it sometimes requires a bit of thought to create filters, for instance if you want to create a filter that lists all your computers that contain network cards from a given manufacturer.

This actually worked better in Vidamic Netlog, which offers options from the database when you are setting up your filter criteria. Vidamic Netlog has an interface that is otherwise simple and efficient; it looks like a graduation project from the Visual Basic school. It is also the program with the fewest refinements, and we felt the lack of, e.g. the ability to export detailed data in any good way. However, one plus is that you can manually create objects, such as printers, in the database.

This is also true of PC-Duo, which has an "asset database" in which selectable objects can be entered. We found PC-Duo to be a bit muddled otherwise. A large portion of the main screen is taken up by predefined reports that are spread out in somewhat helter-skelter fashion. However, the situation can be improved with a bit of configuring. If you want to create custom filters, you can either type in SQL statements directly, or use a wizard that is, unfortunately, hard to get along with. A shame, because the ability to make your own selections from the database is one of the most

important functions in an inventory program. On the other hand, the ability to generate reports directly in PDF format is a plus.

User-friendly as an Access hack?

The filtering section is set up in similar fashion in Inventory, where you can choose between typing SQL statements or using a wizard. Unfortunately, the wizard did not work very well here either, although a large number of predefined filters are available. Overall, Inventory was the trickiest program when it came to administration and the user interface. The only bright spot was the wizard for configuring the various agents (Win, Mac and Linux), but otherwise it felt like we were running an Access hack from 1995.

Webcensus from Tally Systems received a passing grade with its web-based interface. It is uncomplicated and easy to understand, with five clearly named main tabs. The biggest disadvantage is that you have very limited options in terms of addressing queries to the database. If you want to combine criteria into a filter such as one for finding all those computers with a bit of vacant hard disk space available that have a given application installed, you will have a hard time. The predefined reports cover only basic needs.

Aelita EDR has many predefined reports that can also be modified. Naturally many of them concern issues that are not relevant here, but EDR looks good even if we consider just its inventory section. Unfortunately, it is fairly complicated to modify selections in the report or, even worse, to create your own. You run into cryptic table and column names from the database. Some of this can be forgiven, as EDR is perhaps the nicest looking program in the test.

How much do they find?

All of the products tested are able to perform a fairly comprehensive hardware inventory of processors, memory, local hard drives and plug-in cards, i.e. enough to cover most needs.

The detail differences are not sufficient to enable us to name any winners or losers with respect to the hardware section

The biggest differences appear when the programs are used to inventory installed software. In order to compare the richness of detail in the software inventories, we picked one of the test lab's computers for detailed study. It was allowed to represent a typical office computer with the most common applications for word processing, e-mail, etc. installed, along with a few other goodies. Imagine our surprise when the inventories varied between 13 and 171 programs found. The amount of information about each program also varied dramatically in the reports. Snow Inventory generated a highly comprehensive report in terms of both the number of programs found and the amount of detail provided about each one.

The report listed the supplier, version number and search path for each and every one of the 171 programs. A bit excessive perhaps, but the situation is saved in that the programs are neatly sorted into different categories.

For example, Snow checks shortcuts on the desktop and assigns those programs that are found by this path to their own separate category. From there it was a real step down to Vidamic Netlog and Aelita EDR, each of which found fifty applications.

Dropping down by another 35 we get to PC-Duo and Webcensus. PC-Duo also cheated a little and reported the client for Terminal Services more than once. Inventory came in dead last, reporting only 13 programs. However, the selection was quite sensible, which saved the situation somewhat.

Finally, on the subject of software inventory, we gave bonus points to Vidamic Netlog, which includes a simple function for measuring how many licenses you have purchased for a given application and comparing that to the inventory results.

Overall impressions

When this test was in the planning stages, we were convinced that we would be facing a highly homogenous product group in which all the tools would be able to do roughly the same things. That certainly was not the case. Perhaps most striking was that the number of applications found varied by more than factor of ten. Other important features were of course the ability to run an inventory efficiently and without needing too much intervention, and assurance that all the computers that were to be included had in fact been accessed. An inventory is not worth much if it is not accurate, complete and current.

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