

On Test: baramundi Management Suite 8.1

# Management Solution with Powerful Innovations

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*baramundi has just released version 8.1 of its Management Suite which has a significant number of new features compared to its predecessor. IAIT took a close look at the new features in a benchmark test.*

The baramundi Management Suite is a management solution for Windows networks that can save administrators a lot of work. The product can take inventories, distribute software, install operating systems over the network, perform patch management, disaster recovery, personal backup and even manage Citrix farms. A number of additional features have been added to the new version, including for example a totally revised software inventory, expanded assets, full support for Windows Server 2008 and Windows Server 2008 R2, enhanced UAC support (User Account Control), and Application Usage Tracking (AUT), which detects which software is running on which computers and when, thereby giving administrators a tool with which to optimize their license use. Data protection is always ensured in the AUT. For our test we installed baramundi Management Suite on a server running on Windows Server 2008 R2 and used it to manage different client systems on the network, which were running variously on Windows Vista, Windows 7, Windows Server 2008 and Windows Server 2008 R2 (if available both in 32- and 64-bit versions). In practice it is necessary to install the Management Suite on the server and then roll out the baramundi agents to the systems to be maintained. In the test we concentrated exclusively on the previously mentioned

new features in the software, and anyone interested in the full test report, which examines the whole suite feature by feature, will find a corresponding article in German under “Unsere Tests” in our blog under [www.iait.eu](http://www.iait.eu). The article casts light on all the features in baramundi Management Suite 8.0.

## Installation

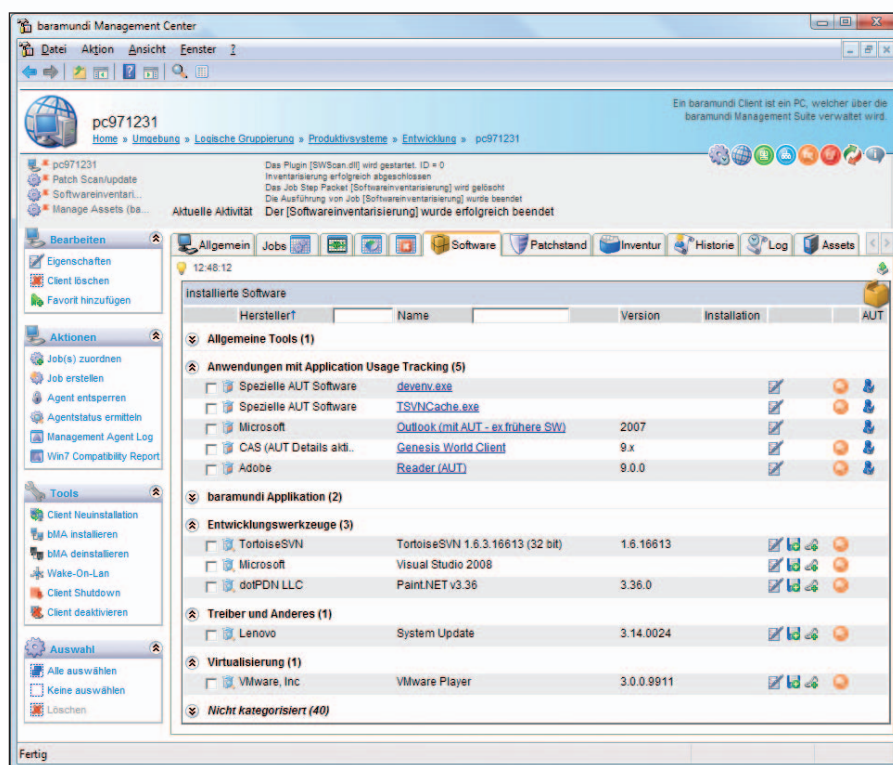
After placing the installation DVD for baramundi Management Suite 8.1 in the DVD drive of our Windows Server 2008 R2 test system (which was running with 2 GB RAM, 180 GB free hard disk capacity and a dual core CPU with 2.4 GHz processor), we ran the setup routine and were greeted by a welcome screen which gives administrators a range of background information and then asks you whether you want the wizard to install SQL Server 2008 Express as the database and Crystal Reports Runtime. During the test we noticed that the RTM version of SQL Server 2008 Express (version number 10.00.1600.22) which baramundi supplies on the installation DVD was not certified for use on Windows Server 2008 R2. This operating system requires at least SQL Server Express 2008 with Service Pack 1 (version number 10.00.2531.0). For this reason we recommend that users of Windows Server 2008

R2 cancel the setup process at this point, download an up-to-date version of SQL Server 2008 Express from the Microsoft website, install this manually and then run the setup again. This may be time-consuming but it does give you a system that runs without compatibility error messages. Once we had installed SQL Server 2008 Express with Service Pack 1, we imported Crystal Reports Runtime with the aid of the baramundi Setup Wizard and then installed the full version of Management Suite 8.1. As soon as the setup has finished, you are asked if you want to run the Database Manager, which helps IT staff to create a database for the management solution. In the test we selected the “Create new database” command, linked up with our SQL Server 2008 Express, which was running on the same computer, indicated the name of the database and the paths to the database and log directories and then entered our company name and license. We then defined the Internet connection (direct or via proxy), and our domain name and specified the user account to be used for the baramundi administration and installations. After that the database wizard wanted to know a global password to unlock desktop systems that had been locked using the keyboard and mouse feature and asked whether it should enable automatic installations and automatic updates. The next points of the initial con-

figuration concerned the configuration of the management agent (whether or not it should appear as an icon on the client's taskbar and similar stuff), the activation of AUT, the creation of download jobs for patch files and device databases, the activation of patch management, and the creation of the DIP structure. The latter – DIP stands for “Distributed Installation Point” – contains all the software packages needed for managing the clients within the company, i.e. the setup files for operating systems, patch files and installation routines for applications. At the end of the configuration the database wizard prompts the user to define settings for database maintenance jobs (to shorten the log, reduce the size of the database, etc.) and wants to know if it should activate ICMP probing (which checks the availability of clients using the ping command) and the PXE and TFTP servers integrated in the suite. Once the administrators have provided all the required information and the database has been set up by the wizard, the Management Suite is ready to run on the network. The whole procedure is not as complicated as it may appear, as the options preset by baramundi mostly correspond to what you would need in a normal environment.

## Distributing the agent components

The suite supports several methods of rolling the agent out onto the systems to be managed: For example, it allows you to search for all systems in the network and install the client component automatically on the systems it finds. Alternatively, the IT staff can log on to the baramundi Management Center and use the “Environment / Logical Group / Create Client” command to integrate individual clients by name. After right-clicking on the new client entry you just created, you will find the “Install and start” command under “Client Agent”. When you select this job, the suite rolls out the agent component on the chosen computer. This worked perfectly in the test.



After a software inventory job the installed software is visible on the client

## Software Inventory

The first new feature we used in this test was the revised software inventory. As of version 8.1 of baramundi Management Suite, taking an inventory of installed programs runs largely automatically and IT managers are no longer obliged to specify the inventory rules manually. Previously, you had to set up recognition of installation policies, which for example used the presence of a particular file in a particular directory to establish whether a program was installed or not. The new software inventory program now searches the registry of managed systems, uses the entries there to establish which programs are installed and then generates the rules required to detect the software by itself. This worked very well in the test and there were no unpleasant surprises. The “old” concept of manual rule creation is still available to users, which means you can still include programs in the inventory for which the method of detecting them via the registry does not work. In addition to the points already

mentioned, baramundi has expanded the analysis options. They include for example software categories and an option to export to Excel. This has significantly improved the overview of recorded installations. All you need to do to run a software inventory is right-click on the entry of the client concerned, create a new job and then work through the questions asked by the wizard that starts. The method of creating a new job is always the same, regardless of whether it is a software installation, an inventory, or anything else. The job wizard starts by asking for a name for the job and then wants to know what type of job it should be. As types the suite offers “Active (server contacts clients)”, “Active with WakeOnLAN”, “Passive (server waits for client to contact)” and “Active on online, clients”. You can then specify a validity period for the job and define the type of job to be performed, in our case this was “Perform inventory”. In the next step we chose to use the software inventory template supplied by baramundi which - as already mentioned - searches the client registry and

creates its own rules. As soon as this step was completed, we were able to start the job. We encountered no problems with this during the test. Afterwards, the automatically created detection rules can be found under “Inventory / software detection rules”. In practice, we weren’t just impressed by the simple inventory-taking, but also by the advanced analysis options with their freely definable software categories.

## Assets

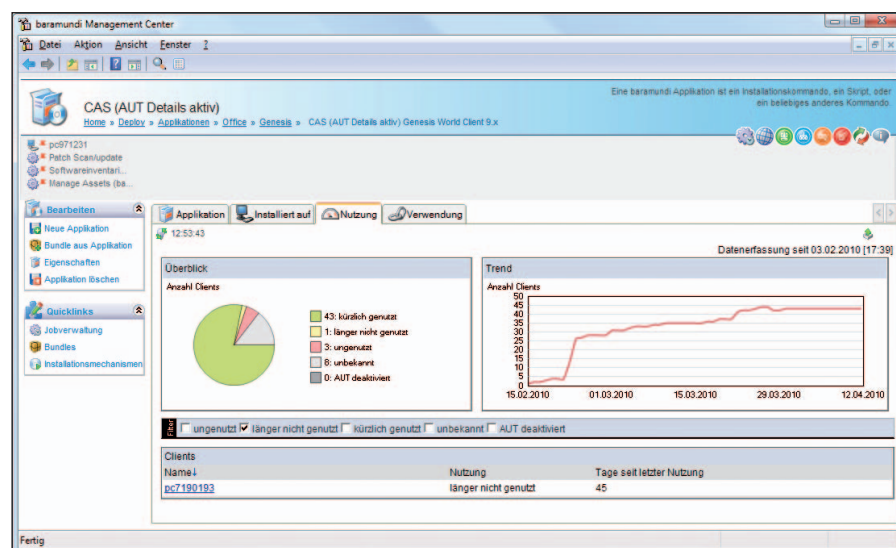
The expanded assets now allow you to use non-functional objects as active items. Among other things, this means you can sort the systems by information such as “House 2”, or “3rd floor”. You can define assets in baramundi Management Suite under “Administration / Asset Types”. Here the developer has already predefined a number of entries, including LCD projectors, digital cameras and suchlike (in order to include these devices within the management solution too), but it will be no problem for IT managers to create their own entries relating to the circumstances of their own organization. When defining an asset, you can not only add icons to the new entry, to make it clearly identifiable on the user interface, but also parameters such as purchase date,

costs, and so on. Particularly interesting in this regard is that not only can you create new asset types, but any number of variables as well. IT managers can assign existing assets to systems and groups at runtime and there is even an option to move them using drag and drop. With the enhanced asset feature baramundi is giving administrators a very powerful tool with which they can present their network in a much clearer fashion than before, as all assets are visible and expandable at all times in an overview. The expanded view shows the systems and groups associated with the assets.

## Application Usage Tracking

AUT – which requires a separate license – generates statistics about software use within the company. It allows administrators to see exactly when which programs are being used and where. They can then use this information to create usage trends or optimize the use of their available licenses and thus save on costs. Data protection plays a particularly important role in connection with AUT, as systems that monitor software usage can easily find themselves in breach of a company’s data protection rules. -baramundi gets round this problem by recording periods of time, but not actual ti-

mes. This allows the IT manager to see that an application has been used on a particular computer, but not from when to when and how often. The analyses always refer to the interval between the first and last time the software was used on a system. In this way, no conclusions can be drawn about the behavior of individual users. baramundi’s AUT is therefore suitable for measuring the exact usage of licensed software but not for monitoring the behavior of company employees. At runtime the solution distinguishes between several different levels of use: “Unknown” means that the level of use of a software application cannot be determined. A program receives this grading for the first five days following installation or if it has not been used for 30 days. The “Recently used” status is assigned to a program if it has been used within the last 30 days and “Not recently used” means that the last time the software was used was more than 30 days but less than 90 days ago. The “Unused” status only applies if the software has not been used for more than 90 days, or if the solution has still not been run five or more days after it was installed. In practice the AUT works so that after the feature is enabled the client logs on to the server, whereupon the latter sends it a list of the applications to be checked. The client can then see minute by minute whether one of the listed applications is in the process of being used. The system saves all the data collected in this way in encrypted form. To enable AUT on all new clients, the responsible IT professionals select the option on the “Application Usage Tracking” tab in the baramundi Management Console under “Administration / Inventory / Properties”. Application usage tracking then runs on all new computers entered in the system. The AUT can be disabled for certain computers if necessary (for example for Notebooks that are normally used outside the office). This is done via the client entry and the command “Edit / Properties / AUT”. The software packages to be monitored are defined in the software



AUT provides administrators with information on how much individual applications are used, here the Genesis World Client



entry under “Deploy / Applications” and there via “Properties / AUT”. The user data determined at runtime is then available to administrators in the client entries under “Software” and at software distribution under “Applications / {software-name} / usage” (here also shown with a graphical overview). An overall analysis of all the software monitored in the network can be found under “Inventory / Application Usage”. All AUT data can be deleted at any time using the “Reset acquired data” button in the application properties. There were no problems with using AUT at runtime and the system behaved as expected.

## Other improvements

Apart from the features already mentioned and numerous bug fixes, version 8.1 of baramundi Management Suite introduces a number of other improvements. For example, the database performance has been improved by the adoption of a powerful SQL instruction set. This modification has the result that the Management Suite now no longer works with Microsoft SQL Server 2000, although it continues to work with SQL Server 2005 and 2008. And to improve the management product’s behavior on the network, the developer has implemented bandwidth profiles. These can be found under “Administration / Bandwidth management” and make for better control of network utilization during synchronization processes. What’s more, you can now define minimum bandwidths for job runs, which prevents the system from holding

users up with slow connections. In addition, you can now distribute 64-bit operating systems (with the exception of Windows Server 2008 R2) on the network using a 32-bit Windows PE. All you need to do is tell the system the x86 counterpart of the setup file, the 32-bit Boot.wim and the path to the 64-bit operating system. Using a 32-bit Windows PE to distribute 64-bit operating systems can make sense for example if you want to start the clients via a third-party TFTP server (e.g. in NAS boxes) that only supports a boot image. In fact, this procedure simplifies the maintenance of boot images. Other improvements that come with version 8.1 of the software include the option to define individual timeouts for download jobs (which can be important especially in combination with antivirus solutions and proxies) and improvements to the user interface. For example, if an administrator assigns a job to a client to which it has already been allocated, the system now asks whether this job is to be run again. Also, the new software provides a tab in the application objects that provides an overview of where each application is installed. Apart from these, other points worth mentioning are that if name resolution is working when changes are made to the network IP address of clients, Management Suite detects them automatically and logs them on to the server. The Boot Media Wizard now also supports Windows 7 AIK and it no longer matters if users add spaces before or after the key when entering or copying product keys, as the system now removes them automatically.

## Conclusion

baramundi has produced a very good product in the new version 8.1 of its Management Suite. In the test we were impressed by both the improvements to the user interface and the new features and enhancements. All the new features have been seamlessly and intuitively integrated in the management system’s relatively clear and easily learnable user concept, which is based on the idea that the configuration of all jobs – regardless of their individual task – should be structured identically. The software inventory now runs with far less complexity than previously and the AUT – which is very easy to use – will be of great benefit to many administrators. A positive reference should also be made of the expanded assets, as they add considerably to the clarity of arrangement of entries. And when working with clients on which UAC was enabled, there were no problems at all throughout the whole test. This point should be stressed very positively, as it means that software packages can be rolled out on to newer Windows systems with baramundi Management Suite without having to disable user account control on the clients first. This worked perfectly in the test. In this regard, minor errors such as including an SQL Server 2008 Express version on the installation medium that is not compatible with Windows Server 2008 R2, is not really significant. The developer is now aware of this problem and has included it on the roadmap for baramundi Management Suite 8.2, which is due to be released shortly.

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