**A Feature-Based Analysis & Comparison of IT Automation Tools:**

**Comparing Kasey to Altiris IT Management**

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Altiris IT Management Suite 7.0

1. Altiris

**Overview:** Altiris IT Management Suite 7.0 has six major products that can be used:

IT Management Suite 7.0: This product is very useful for organizations by making them more organized and efficient. It is able to manage, secure and support all IT assets from one central location. Some of the key features of this product are that it has a Web-Based console, automates patch management, automates application configuration, policy management, software manager, and integrated hardware and software inventory.

Client Management Suite: This is the heart of the Altiris software, the client base agent that is installed on the Windows, Mac or Linux machines to monitor and implement tasks. It can gather hardware information, software information, deploy operating system configurations and all software that needs to be installed. It allows the administrator to make reports about everything that is happening with the machines. This also is used for many audit reports. It can be beneficial in many ways because the reports allow the administrator to see weak spots in security or to determine which hardware is needed and what needs to be upgraded.

Server Management Suite: This is the agent that is installed on the servers that enables administrators to manage and troubleshoot systems from anywhere. To name a few features that are enabled with this product are software and hardware inventory with web-based reporting, automated patch management, web based management console, policy based software management and role-and-scope based security.

ServiceDesk 7.0 Suite: This is a built in system that gives clients a single point of contact to assist them with daily problems. It automatically assigns tickets to the proper technicians without having to go through every technician manually to see if they are there for the job. This system goes through data of information from programs such as Microsoft Active Directory. This is a type of service that would increase production as to everything is not handled manually. It also provides a large database of common problems were clients can find solutions to the everyday problems. If the answer is not on the database they can also produce service tickets from this console as well.

Asset Management Solution: This product helps to manage and track all the software licenses within the network like finances and even physical data. It basically manages the software in the computer to insure everything is up to date with licenses which helps avoid penalties in the future.

Workflow: This product helps to optimize efficiency by enforcing policies and automating many daily tasks. It helps to accelerate the delivery of scripts without knowing complicated coding. It provides reports and a dashboard, to view status of deploy processes.

Wise Package Studio: This product helps to create installation packages to deploy software faster. It provides the ability to push self install software that does not require the end user to push or enter any information. This allows for fast and seamless deployment of software.

**Background:**

Altiris is a company that provides management software to enable organizations to manage the security, web services, and security. Altiris was started on 1998 by Jan Newman and Kevin Turpin when they were working for Keylabs. On April 6, 2007 Altiris was sold to Symantec Corporation. The company had many highlights throughout its years. To name a few, they are a company with 20,000 customers (organizations), with 3 million servers and 60 million PC's and laptops, they are gold certified partners with Microsoft, they have also partnered with Oracles, Dell, IBM, Cisco, VMware and Fujitsu.

**Functional Coverage:**

**Management Server:**

• .NET Framework 3.5

• Internet Explorer® 7

• SQL Server® 2005

• Windows 2003 Server 32-bit version

• Windows Automated Installation Kit (AIK) for Windows

**Altiris Agent Minimum Requirements:**

• Windows XP SP2 or later x64/x86

• Windows 2000 Workstation SP4 and rollups

• Windows Vista® SP1 (all additions)

• Windows Server 2003, 2008

**Supported UNIX/Linux Platforms:**

• Red Hat® Enterprise Linux 3, 3 (x86\_64), 4, 4 (x86\_64), 5, 5 (x86\_64)

• SUSE® Linux Enterprise Desktop 10, 10 (x86\_64)

**Mac agent**

• Mac OS X 10.3.9 (PPC), 10.4.x (Universal binary), 10.5.x (Universal binary)

• Mac OS X Server 10.3.9 (PPC), 10.4.x (Universal binary), 10.5.x (Universal binary)

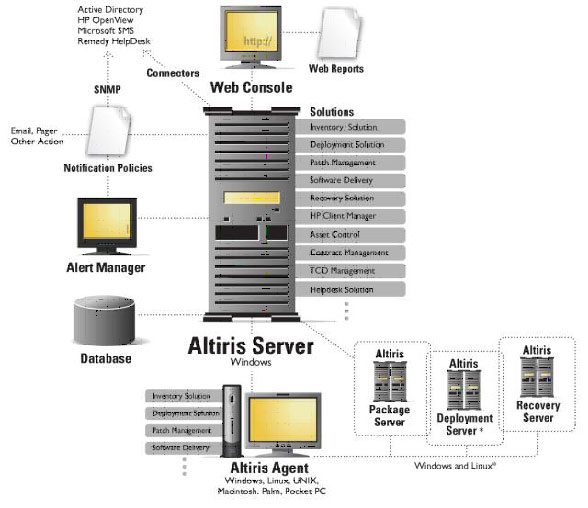
**Grouping Management Devices:**

Easily put Altiris allows for easily grouping of any current devices that are transferred into the Altiris software. These devices can be grouped by their default names or it can easily just create its own names for the devices.

**1.1 Architecture**

Altiris architecture is made up with web based consoles and agents that that give client/server communication with HTTP. These agents are pushed to different devices that are discovered and their agents are having memory footprints so their memory can grow drastically when needed and whenever new software is installed.

As seen below this is an architectural diagram of how Altiris works. It shows exactly how the web console, database, Altiris server, and Agent are all connected to the PC and operate within it. Using solutions like the software delivery, Patch Management and Asset Control. An administrator can manage and serve any computer with an agent installed. This process allows for a more flexible and independent ways to service any computer in the network and lower the cost of having staff directly in all sites to perform many of the daily tasks.



**1.2 Auditing and Asset management**

Altiris gives a web based console which goes through the system security. Some of the functions that can be done are auditing, scheduling tasks and reports. It auto updates antivirus and vulnerabilities, configuring audit options through connectivity, auditing the PC. It allows viewing the auditing results through the web. Auditing is accomplished by capturing detailed information about your software and hardware to know if system details or if security upgrades are needed. Although the one thing that it cannot do and it is not offered by Altiris are auditing solutions. The asset manager now also allows you to do things such as installing, uninstalling, manage data and asking users to confirm ownership of programs. In short the asset manager is a program that allows administrators to manage physical and virtual computers.

**1.3 Remote Control**

Altiris has a built in remote control software. That allows administrator do different things. It is able to do file transfers, image or re-image computers, allocate and install software, see computer specs and acquiring control of a LAN system, and troubleshoot problems without having a technician be present and provided a faster service.

**1.4 Automation**

Multiple things can be automated to make the workflow as smooth as possible for a business. The different things that can be automated, Altiris offers software packaging and delivery, asset and software management, patch management, change control, backup and automation for the work share.

**1.5 Monitoring**

Altiris has a built in monitoring solution that monitors activities and event using different ports. Monitoring ensures servers and clients are kept healthy. The only thing it can't do is fix the actual problem but whenever something critical happens it will report it with what kind of error details it has so the administrator can fix the problem quicker. It now also lets you check the PC’s health which leads to an increase of the computers up time.

**1.6 Patch Management**

A build in patch management is available for Altiris and is capable of scanning computers for security weaknesses and automatically downloads and updates with security patches. It also creates a copy of the state of machine before the patch is applied and if something goes wrong the machine can re-image and roll back the patch. Patch management requires administrator rights or a group that the administrator gives permission to do schedule patches. After patches are applied as needed, then data is collected from the system. The data collected is Information Repository, Comprehensive Inventory, Software Repository, Software Update Analysis, Simplified Distribution Tasks, and Recovery Solution Integration.

**1.7 Backup and Disaster Recovery**

Altiris offers an add-on for backup and disaster recovery. The backup software is based on the award winning Symantec Ghost which it has been used by administrators for many years. This allows for Administrators complete windows desktops or laptops within minutes once the back-up is already done and stored. It even has a function to automate physical to virtual environments conversions for system recovery as soon as possible. There are many different ways it can back up a system using this function and it can schedule weekly, daily, monthly backups. It is able to just backup some specific files that are important to the client. On top of that you can even define recovery point on your network or even local drive in the client machine. It provides many different backups such as full system backups, incremental backups, and file backups.

**1.8 Endpoint Security**

An End-Point security add-on is also offered by Altiris the add-on for this feature uses the Symantec Endpoint Protection. This endpoint system automatically adjusts settings and permissions for users depending on the network and environment they are using. The kinds of things that are included with this add-on are things like antivirus, antispyware, firewall, intrusion prevention, malware protection and device and application control. Basically this security also does is optimize system performance and combines Symantec antivirus with advanced prevention to provide the best protection possible for the users. Even though it does not give you detailed logs on viruses and intruders, a report of your system and security status can be taken and this system is supported for Windows, Linux, and UNIX.

**1.9 User State Management**

User State Management is software that is provided by Altiris and is used for maintaining a network of computers. This software automates deploying; managing and the troubleshooting that are needed in the network of computers that you have set up. Different things that can be managed within the network are remote control, sharing, patch distribution, software distribution, performance monitoring. It cannot actually remove viruses but it can get detailed reports from the security and login failure reports. Along with security reports it gives system performances for computers in your network, so if something is wrong with one of your computers you will know.

**1.10 Help Desk**

This feature is provided by Altiris ServiceDesk, which allows for more availability within a business and reduces cost by being able to provide faster service. Some of its feature is being to track IT resources and create contacts, reports and manage incidents that have been ticketed for technicians. A few resources provided from help desk are knowledge based, e-mail support, satisfaction surveys, handling of multiple reports, bulletin board and being able to solve incidents fast.

**1.11 Reporting**

Altiris different suite solutions include a built in reporting tools which they can be view on the web console or they can email to different locations, the reports can also be customized. Creating customized reports allow gathering specific information, helping administrator to manage the network better. Making reports is an easy to do process since scheduling can be automated and can just run pre-defined reports if you choose to. On top of that if you already have reports you have used in the past you can import them as well as export them.

**1.12 System**

The Altiris solution provides and default configuration upon installing it and starting up your network, it then can be customized the users likings and the operations the user needs done. From the central agent certain things can be disabled on the machines in the network. For example, you can restrict programs from being installed. You can also distribute accounts within the network and only allow certain individuals a level of access within the network by being an Administrator or just a normal user.

**1.13 Usability**

Altiris since it is owned by Symantec is a product that if you are familiar with Symantec products should be easy to use and grasp. Otherwise it is a product that is not as easily learned and requires a bit of a learning curve. This is why Altiris does provide tutorial to navigate through the user-friendly interface. Training courses are available on for companies that wish to send their administrators to be trained directly from Symantec.

**1.14 Reliability**

As mentioned Altiris is owned by Symantec which has proven to have reliable and good quality products to purchase. Tools like the auditing, reporting, and compatibility with many systems make it a reliable source for IT automation within a large network.

**1.15 Performance**

The Altiris system is a stable and reliable and has minimal crashes. Even if there would be errors within the software from the cause of an abnormal network shutdown, there are back up and even protection solutions that help against loss of data that is provided by Altiris.

**1.16 Supportability**

Altiris support the most popular OS’s in the market today starting from Windows 95 or later, many UNIX and Linux platforms, and Mac X. When purchasing this product two different support packages are available. First is the basic package which includes Monday through Friday support and is all included. With the second package called Essential Support and it’s a support for 24 hours and seven days a week.

**2. Comparison and Discussion**

**2.1 Evaluating and Discussing Altiris**

Altiris is on one of the leading automation products in the field of IT automation right now. After its inclusion to Symantec, this product has become one of the most use products in the IT field. The biggest problem is that it is far too expensive and also has many add-ons that are required to fully take advantage of these product capabilities. For example there is no backup included service included it must be purchase separately (Backup Exec System Recovery 2010) and is also missing an antivirus application which must be purchased separately too. Kaseya on the other hand offers many of the same benefits and backup and antivirus solutions are integrated in to the program features.

|  |  |  |
| --- | --- | --- |
| 1 | Architecture  **Rating: 3** | The overall architecture of Altiris is a 3 because it is well robust but with many hardware and software needed to implemented, it becomes expensive. Therefore, this IT solution is mainly intended to be use on large scale. |
| 2 | Audit & Asset Mgt **Rating: 4** | The Asset Management Suit is a very full service that includes the gathering of information about the software and hardware in your system. It provides software installation and uninstall directly from the console. We give a 4 because it very good at acquiring all the information about the computers connected to it and also provided a compatibility issues in case of migrating to new software like windows 7. |
| 3 | Remote Control **Rating: 4** | Remote control for Altiris has been one of its greater assets because it supports many different OS systems given it a greater number of end users that can be assisted without having a tech be present to resolve everyday issues. |
| 4 | Automation  **Rating: 2** | As a tool to automation Altiris falls a bit behind it has a list of the most common uses of automation like patch management and software imaging restoration but it lacks customize your own automation like Kaseya is able to do. |
| 5 | Monitoring **Rating: 2** | Altiris provides monitoring services throw the Client Management and Server Management suites. These products provide information about the systems state and total health of the hardware. But it lacks many futures like creating tickets or alerts to really maintain the service up and running all the time. |
| 6 | Patch Mgt **Rating: 4** | Patch management is one of the things Altiris does best. It provides a listing of needed patches and automatically brings the machines up to date. Further it helps on rollbacks in the case of incompatibility. |
| 7 | Backup & Disaster Recovery **Rating: 1** | Altiris on it IT Management system does not provide a backup and recovery solution, but it can be purchased through an add-on called Backup Exec System Recovery. For that we give a 1 because you must purchase extra software to have this extremely important function. |
| 8 | Endpoint Security **Rating: 1** | Altiris does not provide a security endpoint solution. Sad because Symantec offers one of the leading Antivirus software in the market now, but it offers it also as an add-on software which must be purchased separately and integrated to Altiris Suite. It is called Endpoint Protection |
| 9 | User State Mgt **Rating: 3** | This future is supported via Server and Client Management Suites. These suites provide much information about the state of the computers and servers in the network. It provides a single point to configure and deploy updates, software and policies. |
| 10 | HelpDesk **Rating: 4** | The ServiceDesk of Altiris it provided the assistant that is needed on the daily basis. It provides end users with a large database of information where they can search for the most common solutions to common errors. It also, provides a central point of ticketing for the users that cannot find a solution to their problem. |
| 11 | Reporting **Rating: 3** | Altiris provides many tools that offer lot information on the network. The Client and Server suites gather constant information from their agents and provide reports on the overall health of the systems. From the information gathered, deployment and prevented measures can be scheduled. But these reports lack the deepness that Kaseya offers to manipulate the data and create reports that can be used to present to customers. They are too technical. |
| 12 | System **Rating: 1** | Altiris provides policies manipulation at a unit level but it does not have a centralized console to do many of the futures in the Kaseya System module. |
| 13 | Usability **Rating: 3** | This suit it provides many of the useful tools an IT manger needs to conduct audits, configure, and support many nodes in the system but it lacks many other functions to provide a truly full automation system, without adding many other add-ons, |
| 14 | Reliability **Rating: 3** | From our tests and research we found that once everything is in place is a very reliable product that it does exactly what it stated to do in the product information, and provides a central console to administer the whole network. |
| 15 | Performance **Rating: 2** | It performs well from many customers in the forums the system tends to slow down and at times is hard to diagnose what the problem is. |
| 16 | Supportability **Rating: 5** | This one of the selling points of Altiris it supports many of the most used OS, from Windows, Mac, and Unix. Making this program very versatile. |

**2.2 Rating Results Explanation/Discussion:**

*Individual Solution Comparison Rating System Table*

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | ***Kaseya*** | **Altiris** |
| 1 | Architecture | 5 | 3 |
| 2 | Audit & Asset Mgt | 4 | 4 |
| 3 | Remote Control | 5 | 4 |
| 4 | Automation | 5 | 2 |
| 5 | Monitoring | 4 | 2 |
| 6 | Patch Mgt | 5 | 4 |
| 7 | Backup & Disaster Recovery | 3 | 2 |
| 8 | Endpoint Security | 3 | 2 |
| 9 | User State Mgt | 4 | 3 |
| 10 | HelpDesk | 3 | 4 |
| 11 | Reporting | 5 | 3 |
| 12 | System | 5 | 1 |
| 13 | Usability | 5 | 3 |
| 14 | Reliability | 5 | 3 |
| 15 | Performance | 5 | 2 |
| 16 | Supportability | 3 | 5 |
|  | **Total** | **69** | **47** |

In conclusion, The Altiris IT Management Suite 7.0 from Symantec is well rounded software that offers many solutions to the some of the daily problems or tasks an IT manager is involved with the daily basis. It offers a centralized web console where reports, monitoring, and servicing can be performed without having to be physically present at the location of units being serviced. But it’s missing many other important aspects of a truly automated system. For example, backups and security, which these are important parts of the daily health of a network. These important modules are offered as add-ons to the Altiris suite, which makes it a more expensive software to use. Unlike Kaseya Enterprise that includes these modules, the company must pay per node but that is expected on all security software, but the user does not have to purchase a separate software to implement it.

Kaseya in our conclusion is a far better implementation for automation. It covers many of the necessary tools needed to accomplish a successful automation and drastically reducing the price to maintain, monitor, and secure a network. It provides reporting tools and to us the most important aspect is that customizations of many of the futures of Kaseya, from its agents manipulation to scripting to get a specific result to accomplishing a task not supported by Kaseya.

**3. Glossary**

OS – Operation System

PC – Personal Computer

Client – End User

Node – End user computer

HTTP – Hypertext Transfer Protocol

**4. References**

<http://www.altiris.com/Services/Education2/InstructorLed/AllCourses/CMS-D_A700.aspx>

<http://www.symantec.com/connect/products/altiris-deployment>

<http://www.symantec.com/business/theme.jsp?themeid=altiris>

<http://eval.symantec.com/mktginfo/enterprise/fact_sheets/b-it_mgmt_suite_DS-21017394-1.en-us.pdf>

<http://www.symantec.com/business/products/components.jsp?pcid=pcat_infrastruct_op&pvid=it_management_suite_1>

<http://www.symantec.com/connect/search-connect?filters=type%3Ablog&newsearch=1>

<http://en.wikipedia.org/wiki/Altiris>.

<http://whitepapers.techrepublic.com.com/abstract.aspx?docid=952789>

<http://www.zones.com/site/statics/static_page.html?name=partner/symantec_altiris_cms&partner_id=-8959&zone=zbs>