Have you noticed the recent commercials about going to the “cloud?” They make it sound so simple, but I often wonder if people understand what these commercials are selling.

The basic concept is simple. For business uses, your software applications (and data) are hosted on a central server, so you can access them no matter where you are. We all use tools like Amazon, eBay, Facebook, Craigslist, WebEx, Orbitz, and more. These are one form of cloud technology. The sites and your personal information are available no matter where you are, as long as you have a Web browser. Hence, clouds are everywhere and viewable from anywhere in the world. You don’t have to worry about how it works—you just need it to be available.

The cloud extends beyond public services that can be used either for free or pay as you go. Businesses use cloud technology for payroll, accounting, customer service, Web conferencing, and more. In this world, the traditional Software as a Service (SaaS) model or Application Software Specialist (ASP) provide tools from anywhere in the world, from almost any mobile device that supports a browser. These are business-to-business clouds that could be hosted by an outsourcing vendor. Or, the application provider may have their own data center where businesses around the world can access these services.

Another form of the cloud might be within your own corporation, where your IT group provides access to business information and computing technology from anywhere in the world. Your end users can be at a hotel, in an airplane, or at a customer site. They still have access to create or view invoices, create customer quotes, or service customers. The difference is that your company hosts the cloud for its own team. You may even have a combination of business-to-business clouds and your own private cloud.

What does this mean to the world of systems management and monitoring? I have one saying when it comes to computer systems and systems management: “If it’s a mission-critical application, you need system management and automation software.” Is cloud computing technology mission-critical? You bet it is! Cloud computing users want reliable and highly available technology. Who doesn’t want to receive a paycheck or use online banking?

How do providers achieve high availability? Part of it is the hardware: It’s disaster proof, power-redundant, disk-redundant, and so on. Providers also monitor the applications, the access points, and perform the routine maintenance that needs to happen. All mission-critical applications have behind-the-scenes processes or scripts that must run.

**The Cloud Doesn’t Run Itself**

Automation and systems management software must exist to keep cloud technology available. Behind the scenes of any great movie is the crew that builds the props and creates the special effects.
In order to make cloud computing highly available and easy to use, there has to be an infrastructure in the background.

Does the cloud need enterprise scheduling? Yes, at the very least the cloud servers are going to need backups and processes for normal systems administration tasks. For example, you might want to run processes on a background server after a customer uploads a file. Or, you might want to monitor critical services and provide rules to execute if a service ends.

The cloud is supported by a server farm. Each server runs an operating system that needs monitoring and the ability to maintain its high level of availability. In the traditional computing world, this was done with scheduling, consolidation, backup, report management, and performance management tools. These tools are still needed in today’s world, because the expectation is that the cloud is always available.

**Management, Security, and Availability**

Is it easier to manage the cloud with tools that are built to run in a cloud environment? Yes—tools that can support Web-based access combined with a database server that can reside anywhere are more easily adapted to this infrastructure. And, the rules you enter in the database react to the demands of the server and its processes.

Security and regulations are a bigger issue for cloud servers because it potentially hosts customers that are competitors or are concerned about regulations that require periodic IT audits. Enterprise scheduling software must secure access to the rules by customer, by application, or by roles to ease the burden on IT to maintain security for new customers.

Historical information must be preserved about automation rule changes and actions taken by these rules. For instance, when a new weekly process is put into production for a background process, the system administrator that created the rule needs to be logged in for the process to pass a typical IT audit. The process of running the task and the history associated with the process should be preserved for at least a month. For critical business processes, a year of historical information is required.

Availability is critical for managing servers in the cloud. Built-in Service Level Agreements (SLAs) and notification are key to the success of the IT group managing these services. An automated notification process with built-in escalation is expected. As you build rules for monitoring the health of your servers, and for processes that maintain the environment, you need to check for processes that start late, ran too long, or didn’t finish on time. Notifying experts using e-mail, SNMP, and text messaging is crucial to success. Establishing acceptable SLAs is a good idea before you build your rules for automation. Remember: Mission-critical applications need automation because you cannot afford to sit around and wait for problems—you must be proactive.

Cloud servers should be able to react to files arriving, and processes ending or starting. In a perfect world, scripts should react to these events. For instance, when a daemon ends on a server, a process could automatically run on another that launches a script to start a recovery process. Obviously all this can be done with scripting languages, but does your team have the time to do this and make them audit capable?
Skybot Scheduler is Ready for the Cloud
Skybot Scheduler™ is an enterprise scheduler that was built with the cloud in mind. It can be accessed using a Web browser from anywhere in the world. It runs as an HTTP server on an appliance or as a standalone application in your network. It offers role-based security that you can build by customer or by application. Best of all, it provides tools to automate the process of controlling your cloud’s background processes, such as disk cleanups, file exchanges, process monitoring, backups, cross-server dependencies, and more. And, if you use scripts to manage your servers, Skybot Scheduler can run them for you—automatically.

Remember, your cloud is mission-critical, so don’t settle for trying to write scripts for everything you need to do. You need automated, centralized control and automatic notification. Skybot Scheduler is the ideal solution for your cloud computing needs.

Visit [www.skybotsoftware.com](http://www.skybotsoftware.com) or call 1.877.506.4786 for more information or a FREE 30-day trial.