ACTION news

Issue 2010/5 Action Software GmbH February 2010

Controlling your z/OS Outsourcer – Sed quis custodiet ipsos custodes?

z/OS Outsourcing Issues addressed by eventACTION

eventACTION and ussACTION are comprehensive event tracking and control products that can help you pro-actively manage and audit your z/OS environment with real time capture of any change, reference, or execution to any system level data. Due to the manner in which the controls are implemented system datasets can be protected against unauthorised and undocumented changes. In fact once a dataset is placed under eventACTION controls, it is no longer possible to change this dataset or any of its members unless the relevant change request exists and has been authorised. The reporting tools provide a complete and accurate picture of all changes made to the structure of the system, both for MVS and UNIX System Services changes.

What is your Outsourcer doing with your system and data?

Once you have signed your outsourcing agreement, defined the SLAs (Service Level Agreements) and handed over your systems and personnel to the outsourcer, you no longer have any control or insight to what is being done on what used to be your systems. Just relying on the SLAs in no way protects your data or even the platforms servicing your applications, batch processes etc. The fact that you might receive compensation for a system or application outage as a result of the stipulations in the SLA, does not offset the damage done to your organisation through loss of customers or corporate image.

It is all too easy to relax and say that the outsourcer is responsible whatever happens. This is in many instances not the case. Certain laws like SOX (Sarbanes Oxley) stipulate that the owner of the data – in this case the outsourcer's client – is responsible for that data.

Let us examine a few possibilities:

1. Someone working for the outsourcer decides to steal and sell your company data. With no insight as to what is being done on your systems, you have no control over your data. A program could easily be written to take your data and send it to a competitor. This program could be introduced to the system containing your data, be executed and then deleted and you would be none the wiser. When the data becomes public, you have to prove where the data came from. Proving that the outsourcer or someone on their staff was responsible will prove to be almost impossible.
2. Your SLA stipulates that compensation is due only when the outage lasts more than 30 minutes. However, you keep experiencing 10 or 20 minute outages which impact not only your internal staff but your customers as well. Once the costs in manpower wasted, extra resources and customer dissatisfaction are added together, the losses can be considerable.
3. A problem crops up in one of your Batch Suites, the outsourcer blames you and you blame the outsourcer. The burden of proof rests with you but you have no means to ascertain exactly what went wrong. You have relied on the outsourcer doing his job properly, but have handed over total control of the systems without retaining a watching brief. In most cases the outsourcer will win due to lack of proof.

What does this mean for your organisation? It means that you handed over the systems without any way of controlling what is being done, in your name, on these systems. In other words you handed them a blank cheque without any recourse to controlling what they do with this authority. Would you do this privately? – The answer is clear – No!

Controlling your Outsourcer with eventACTION?

As eventACTION tracks and records changes made to datasets etc. and works pro-actively in real-time it has the ability not only to record but to block any potential changes. How does this help you to control your Outsourcer?

1. Once the important and critical datasets/member and directories/files (for USS) have been defined to eventACTION any changes will be tracked either in the form of a statistic record showing which element was change and by whom, or a backup record which also shows the changed data in addition to the statistical information. This will result in a complete audit trail allowing you to determine at a later time whether the system was manipulated or not. Added to this, locating the cause of a problem can be achieved very quickly with the SCAN function that lists all the changes made in a specific area over a set period. The outages that used to last 20 minutes or longer can now be rectified in less than 5 minutes.
2. Clearly you will also now be in a position to insist that any changes that are made to critical or important datasets/member be placed under the real-time pro-active controls of eventACTION. This means that there will no longer be any undocumented or unauthorised changes being made to these datasets. This in itself should reduce the number of outages and problems significantly.
3. Now with all the tracking information and the controls in place to prevent unauthorised and undocumented changes, it will be considerably easier to determine the cause of the problem and to prove who was responsible.
4. With the complete audit trail you will have also fulfilled the SOX requirements for doing everything to provide and implement a stable platform for your computing services and have done all that is reasonably possible to protect your systems and data.
5. Finally with the Reference Tracking functions you can determine which programs are being run, possibly identifying unauthorised programs running in your LPARs, or allowing you to tidy up libraries containing JCL, Parameters, Programs, Source, CLISTs, REXX EXECs etc. that are no longer in use.

Potential Savings through eventACTION.

Reduced Outages: With the implementation of the Change Controls no unknown or undocumented changes can be made to the datasets that are critical to the well being of the system, products, applications or batch programs. As the changes are all known, documented and have been controlled by the Approvers, errors leading to potential outages are avoided or at least greatly reduced. Unlike electronic paper driven Change Management systems that cannot prevent unauthorised and undocumented changes eventACTION assures that all changes are recorded and backups are taken where required. Through real time controls and proper checking of changes by the Approvers, outages and problems can be reduced to an absolute minimum. Each outage has the potential, of costing an organisation millions of Euro per hour, of alienating its customers and finally of damaging the corporate image.

Faster Problem Resolution: Because eventACTION tracks and optionally records all changes in the system, this information is immediately available if and when a problem occurs. Using the SCAN function the potential cause of the problem can be quickly identified and through the stored backups immediately be reversed out to the previous working version. Whereas before just the process of locating the source of a problem could have taken hours or even days with many people working on resolving the issue, now the identification and repair of the problem can be handled by one person in minutes. Though the man hours saved do not actively represent a saving to the organisation, unless of course the headcount is reduced, the saved man hours can be put to good use on other projects.

Manipulation: The dangers of manipulation and subsequent destruction of systems or parts of systems are mostly perpetrated by insiders. As eventACTION tracks all these changes, the risk of manipulation is greatly reduced as the perpetrator must assume that the traces left behind can and will be identified thus resulting in his or her identification. Manipulative attacks can be many times more serious that a system outage as this could well lead not only to the loss of the system but to the backups as well. In end effect the system would need to be re-built from scratch. The monetary losses here are incalculable and could easily lead to failure and bankruptcy of the entire organisation.

eventACTION includes the following:

Change Tracker automatically and transparently tracks and records all changes to defined data sets down to a member level, regardless of what program was used to make the changes.

Change Manager is used to control changes, according to criteria specified by you; ensures that any changes are logged / documented in a change request, and optionally, approved.

Unlike other change management products, eventACTION does not require the use of specific tools to make changes. It works transparently regardless of the tools used, so that all changes made are tracked, providing a comprehensive picture.

Command Manager allows an installation to track and/or control operator commands; provides capabilities similar to Change Tracker / Manager for operator commands. Since an operator command can implement a change, this is an important control point.

Reference Tracker allows an installation to track all references to defined data sets and PDS members; and can be used for library cleanup, program usage measurement and product execution control.

ussACTION provides the ***Change Tracker***, ***Change Manager*** and ***Reference Tracker*** in the same form as eventACTION for z/OS UNIX System Services.

With its numerous other features (such as a unique side-by-side compare utility, automatic batch job scheduling, extensive reporting functions, and flexible backup/recovery options) eventACTION is a self-contained and fully integrated management solution to provide dynamic change tracking, control, and distribution for single or multiple site MVS systems.

Summary:

At the end of the day eventACTION provides:

- System controls to assist in z/OS compliance
- Complete / secure audit trail
- Basis for software asset management
- Assure Software providers that their products only run on licensed systems
- Powerful compare facility
- Reporting for all data thru online, batch, email, scheduled
- Investigate 'incidents' real-time (changes, program usage, operations)
- Repository for z/OS system data
- Interfaces to your current processes & procedures

If you want more information about eventACTION please contact:

Action Software GmbH

Alte Steinhauserstr. 1m CH-6330 Cham, Switzerland

Tel.: +41 41 748 6266
Fax: +41 41 748 6267
E-Mail: Marketing(at)actionsoftware.ch