

Asset Guardian® SOLUTIONS LIMITED

CASE STUDY

Automatic DCS Backups Process Solutions for Leading Oil and Gas Operator

BACKGROUND

A leading Oil and Gas Operator with a large installation in the North Sea had a requirement to automate part of their back-up taking process. Prior to this, secure backups taken from the software and configurations on the platform were only being done manually.

Their existing Asset Guardian solution consisted of an onshore Leader server and an offshore Follower server. Files backed up offshore were safely copied and stored onshore. The DCS required regular backups of system software and configuration data, and it was decided that it would have a new automated process applied to it.

As the software was already being backed up to Asset Guardian, it seemed logical that it would be the solution used to implement the automatic back-up process.



SOLUTION

A simple script set up on the DCS was modified to push files from the DCS server to the Asset Guardian server zone. All uploaded files were sent to the other server via the "AG Sync" process.

The automation of the backup process was done as a set of customisations on behalf of the client. Customisations would now be compatible with future upgrades.

The Automatic Back-up customisation was designed to the client's requirements and was implemented and tested as part of a standardised software development lifecycle. It was then installed on both Asset Guardian servers.

The Automatic Back-up Process was configured once, then left to run and was designed to work for multiple locations within the main upload folder.

The process could be configured to suit the operating situation. Configuration items included the secure back-up folder location, the number of backups to keep Asset Guardian before deleting older ones, expected frequency (days) of available backups from the DCS, and the name of the Asset Guardian server that would pick up the back-up.







THE RESULT



With the software updated and configured as required, the automatic back-up feature now performed the task it was designed to do.



At the time specified by the administrator, the process checks all relevant software records for new updates each day.



The process of uploading, checking in and annotating software revisions is automatic. A complete audit trail of automatic uploads is available, and can be inspected at any time.



The Leader or Follower server can be the initial place for upload with the Asset Guardian server sync to pass the files to other AG servers.



The automatic Back-up Process can report errors which are sent to specified email addresses for any issues encountered.



Processes are automated safely reducing cyber risk and the need for disaster recovery, whilst alleviating the load off personnel.

Secure repository for software

Automatic Back-up process

Intelligent Error Reporting

In compliance with IEC 62443