



TAC I/A Series SMART™

Automated Station Monitoring and Reporting Features

I/A Series SMART includes six utilities designed to help monitor and maintain running stations:

- The *Data Collection Utility* – queries and copies data from the Cloudscape™ database to any local database.
- The *Station Status Report Utility* – polls any number of Enterprise Server or UNC stations to confirm and report on their health and status, or lack thereof.
- The *Backup and Transport Utility* – automates the backup of stations into any supported format, sending them to a file server, FTP site or e-mail address.
- The *Report Generator Utility* – generates Excel reports based on collected data.
- The *Task Scheduler Utility* – automates any of the other utilities to run at specified times
- The *Batch File Utility* – runs two or more tasks sequentially as a single event

When combined together, these utilities can create powerful data gathering and reporting systems. Consider this example:

- The *Task Scheduler Utility* runs the *Backup Utility* at midnight to backup a stand-alone UNC into an XML file.
- Next, the *Data Collection Utility* runs to collect the latest records from various logs and downloads them to a local database.
- Then, the *Report Generator Utility* runs to generate a report of trends, errors, alarms or other important information into an Excel file.
- Finally, the *Transport Utility* e-mails the report to service technicians and customers, where it will be waiting for them to view in the morning to confirm the health and status of the station and to show trending data and resource usages. It also uploads the station backup file to a separate FTP server used to store archives.

All of these actions can occur on any machine connected to the internet. It can be on the Enterprise Server itself, a different machine connected to the Enterprise Server by a LAN, or on a workstation somewhere completely off-site.

The Data Collection Utility

The *Data Collection Utility* is designed to essentially backup and mirror the Enterprise Server's archival Cloudscape data on a regular, automated basis, storing it in any compliant database, including SQL Server and Microsoft Access, and thus making it available for use with any other application.

Alternatively or additionally, the data can be read directly from the log data stored in an XML version of the station backup, allowing identical functionality when using stand-alone UNC's. You can use the *Backup and Transport Utility* and the *Task Scheduler Utility* to automatically get the latest backup before you run the *Data Collection Utility*. For Enterprise Servers, you can capture records from both the XML and Cloudscape and they will automatically be merged into a single table for seamless querying regardless of which records came from which source.

The *Data Collection Utility* can be configured to keep or purge older records based on time, data size, or number of records. Since the data is collected on any machine connected to the internet, it would be possible to store data for years without impacting the actual Enterprise Server.

The Report Generator Utility

Once the data has been collected, it can be used by any application that can read data from a database. The *Data Reporting Utility* is a relatively simple, but very flexible and easy to use reporting engine that generates reports in Excel based on customizable templates.

Its major features include:

- The ability to generate data using any SQL query, including Joins from multiple tables, as well as sums, counts and averages.
- Customizable header and footer sections.
- Calculated columns using any Excel function, including VBA macros.
- Use of all formatting features, including graphic images.
- Aggregate columns for sub-totals, totals and averages.

The Backup and Transport Utility

The *Backup and Transport Utility* allows you to automate the backing up of an Enterprise Server or a stand-alone UNC to any of the file formats (DB, SNS or XML) in a variety of ways:

- If run on the Enterprise Server itself, the Utility can issue a command directly to WorkPlace Pro to backup the station.
- If run on a separate workstation, the Utility can query the Enterprise Server or UNC for the backup and store it on a local hard drive.
- The backup file can be e-mailed (if small enough) or uploaded to an FTP site.

The System Backup Utility also contain features to help manage the backup files perpetually, such as automatically deleting older backups to keep a rolling backup for a fixed number of days, as well as keeping a weekly or monthly backup indefinitely.

The Task Scheduler Utility

These utilities are designed to work well as automated and cascaded tasks run on a regular basis, such as nightly. The latest versions of Windows include the Windows Task Scheduler, which can launch any program or file at specified times and frequencies. The WorkPlace Pro Utilities *Task Scheduler Utility* interfaces wit the Windows Task Scheduler to help automate and maintain tasks based on the other utilities.

System Requirements

- Windows 2000, XP or Vista
- Microsoft Excel 2002, 2003 or 2007 required for most reporting features
- Connection to the internet required for most station-accessing features

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