

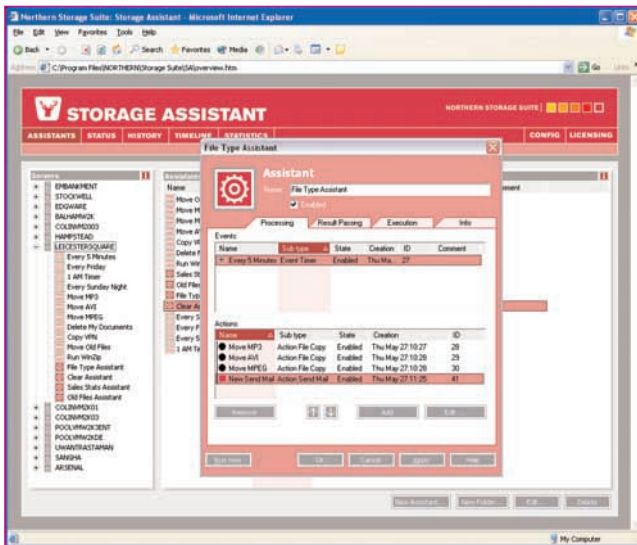
NORTHERN STORAGE ASSISTANT

SOFTWARE PRODUCT DESCRIPTION
VERSION: 2005 [APRIL 2005]

Your to-do list is growing, tasks are left unattended, your already over-stretched team is being pulled in several different directions...meanwhile, storage points are filling up and systems are getting bogged down.

Even if you could add staff – a considerable “if” given tightening budgets – there is a better solution, one that’s on the job around-the-clock...and will never ask for as much as a coffee break.

Now you can delegate storage management activities such as flushing unwanted file types, locating and archiving unused data, ensuring process sequences are maintained. Northern Storage Assistant offers you all of the benefits of expanding your IT staff – at a fraction of the cost.



CREATING AN ASSISTANT

A storage Assistant consists of the answers to two questions: what events do you wish to monitor and what actions should be triggered when these events occur.

- What do you wish to monitor? Use date, timer, file, Internet or system related events to trigger your desired actions.
- What action do you wish to take? Manage files, execute programs or send notifications when your event parameters are met.
- Connect multiple events with multiple actions to create advanced and specific Assistants.

MONITORING FOR EVENTS

- Calendar Event: use dates, date ranges and days of the week to trigger actions. Configure your event to be true every Monday out of office hours, but every Monday all day during national holidays.

- Timer Event: trigger actions to run at certain time intervals, regardless of the date or day of the week. Configure your event to be true every hour or between tomorrow at 10am and tomorrow at 11 am.
- File Watcher: use changes in file or directory properties as triggers for actions. Watch for incoming files on your ftp server or changes in the security descriptor of a critical file.
- Internet Watcher: monitor for specific strings or simply changes in an http page and trigger actions accordingly. Configure Assistants at multiple sites to watch the corporate website and react when specific changes are made.
- System Watcher: use system changes to trigger actions. Monitor for a server start-up and send a popup notification.

TAKING ACTION

- File Delete: permanently remove unwanted files from your storage resources. Define your unwanted files using extension, modified date, size, etc. Trigger the removal of music files from your entire network.
- File Copy: duplicate files that meet your specified parameters. Regularly duplicate all sales records to the International Sales Manager's computer.
- File Move: archive files that meet your parameters. Streamline the content of your critical file servers by archiving all files that have not been accessed during the last six months.
- Directory Replicate: maintain a mirrored copy of directories on multiple servers. Specialized teams working on components of a larger project can have their changes automatically replicated into a central project file structure.

- **Execute Program:** run any program when your event arguments are met. Trigger your 'new user' script when a new child directory appears under c:\users.
- **FTP/HTTP Actions:** upload, download, run scripts via ftp or http protocols. Maintain up to the minute production figures on a remote web server.
- **Notification Actions:** send smtp or popup notifications, variables can be included to make messages more precise. Receive a popup when an Assistant has run or when a file exceeding 10MB has been saved to your webserver.

MANAGING ASSISTANTS

- **Design View:** the workspace where you engineer and manage your Assistants. In a familiar Windows environment, build, link and combine your building-blocks into a full-grown IT staffer.
- **Status View:** the real-time status of Assistant activities. With updates every half second you are in full control over your system at any given moment.
- **History View:** a history of activities for the chosen time period. Detail-rich descriptions of every event, action or Assistant's historical performance.
- **Timeline View:** a graphical display of your configured events, actions and Assistants over time. A timeline that provides you with a complete picture of timing, interaction and queuing of activities.
- **Statistics View:** a statistical summary of activities over time. Aggregated data of your Assistant's activities offers a quick overview of their performance.

DEPTH OF CONTROL

- An Assistant can include a single event, or a group of interdependent events. These events are linked using Boolean Logic (AND, OR, NOT).
- An interdependent group of actions can also be configured to achieve a more exact result. A system of fault-tolerance allows you to fine tune the level of success dependency through the series of actions.
- Maintain a count of events or actions to serve as triggers for new actions or tune the fault tolerance within a group of actions.
- Connect the components of an Assistant more closely by allowing results to be passed between them.
- Control the number of event and action repetitions and delay between repetitions. Prevent a prolonged true event from triggering an action multiple times.
- Support for VPN, RAS and RRAS allows Assistants to function across non-permanent connections.

ENTERPRISE ARCHITECTURE

Northern Storage Assistant offers full support for advanced storage devices.

- Cluster aware, accurate handling of virtual server fail-overs and moves.
- NAS support, fully-functional on all NAS devices using the CIFS standard.

