Mac 1E Agent scripting reference

Creating script files

The NightWatchman Mac client scripts are AppleScript files that require no additional functionality over and above that provided by each supported application's AppleScript interface. Script files should be created in the NightWatchman Scripts directory which resides in its Application Support folder. By default, this is:

```
/Library/Application Support/1E/NightWatchman/Scripts
```

Naming files

To get your NightWatchman Mac client scripts to run on a NightWatchman scheduled event, you must name the scripts according to the application they support. The default script provided with NightWatchman for Macs support the saving of open text files. The name of this script is `TextEdit.scpt`.

The base part of the name matches the application name `TextEdit` exactly and is called by NightWatchman if this application is open when a scheduled event occurs. You must name your files in the same way for each application you want to support. For example, if you have an application called ACMEGraph, create a script called `ACMEGraph.scpt` in the Scripts folder.

Other script files

NightWatchman for Macs comes with the following script files:

Script file	Description
`AppleScript Library.scpt`	Located in the NightWatchman folder and provides some basic utility functions for the other NightWatchman scripts. It is a useful utility for naming and placing files and need not be modified by the user.
`PreRun.scpt`	Runs before any of the other scripts and is located in the Scripts directory.
`RunAlways.scpt`	Runs after the other scripts have run.
`RunOnResume.scpt`	Runs when the system is resuming from a low-power state.
`TextEdit.scpt`	Saves data in the TextEdit application during a NightWatchmanscheduled event. This example script file has code that detects the OS. It will not run when OS X Lion is running.

Controlling scheduled events using the PreRun script

`PreRun.scpt` is run before the NightWatchman countdown dialog is displayed during a scheduled event and can be used to check for specific conditions or run specific actions before allowing the scheduled event to continue. To allow the scheduled event to continue, the script should return `true`. To stop the scheduled event the script should return `false`.

Controlling scheduled events using the RunAlways script

RunAlways.scpt is run after all the other NightWatchman scripts and can be used to check for specific conditions or run specific actions before allowing the scheduled event to proceed. This script is run as the last step before a user is actually logged out. To allow the scheduled event to continue the script should return `true`. To stop the scheduled event the script should return `false`.

Resuming from a low power state and the RunOnResume script

`RunOnResume.scpt` is run when the system resumes from a low-power state, depending on the status of the `runonresume` option. The success or failure of the script has no effect on the resumption of the computer. The `RunOnResume` script can be used to refresh network connections for running applications.

Creating a backup using the AppleScript library script

The `AppleScript Library.scpt` file contains a number of helpful utility functions. The three main functions which are used to save a NightWatchman backup file are:

Function	Description
`GetExtensionOfPosixFile (posixFilePath)`	Returns the file extension of the file at the specified `posix-formatted` path.
`GetTemporaryBackupFilePath()`	Returns the path to a temporary file to which the unsaved document should be saved.
`FindAndStoreTemporaryBackup File(originalDocumentName, originalPosixPath)`	Locates the temporary file and stores it as a NightWatchman backup file, using the original document name and `posix-formatted` path. If the unsaved file has never been saved, then empty strings should be supplied for `originalDocumentName` and `originalPosixPath`.

To use the `AppleScript Library.scpt` file in your script files, add the following code to each script:

```
set applicationSupportPath to ( path to  application support as  string )
set libraryPath to  alias  (applicationSupportPath & "1E:NightWatchman:AppleScript Library.scpt") as
string
set library to  load script  ( alias  libraryPath)
```

Looking at the TextEdit script

The following listing shows the contents of the `TextEdit.scpt` file. The first three lines load the `AppleScript Library.scpt` file. The remainder of the script uses the `TextEdit` application's AppleScript interface to iterate through the open documents and to get the required information on them.

For each unsaved document, the script saves it to a temporary file, using the path supplied by `GetTemporaryBackupFilePath`, then stores the temporary file as a NightWatchman backup file, using `FindAndStoreTemporaryBackupFile`.

```
set applicationSupportPath to (path to application support as string)
set libraryPath to alias (applicationSupportPath & "1E:NightWatchman:AppleScript Library.scpt") as string
set library to load script (alias libraryPath)
tell application "TextEdit"
    set documentList to documents
    repeat with aDocument in documentList
        if modified of aDocument then
            set documentName to name of aDocument
            set originalPosixPath to ""
            set originalExtension to ""
            if (exists path of aDocument) then
                set originalPosixPath to path of aDocument
                set originalExtension to GetExtensionOfPosixFile(originalPosixPath) of library
            end if
            set temporaryFilePath to GetTemporaryBackupFilePath() of library
            if (originalExtension â‰  "") then
                -- there is an original extension, so append it to the temporary file
                -- path, to ensure TextEdit saves the document in the same format
                set temporaryFilePath to temporaryFilePath & "." & originalExtension
            else
                -- there is no original extension, so append ".rtf", which forces
                -- the document to be saved in rich text format
                -- otherwise, TextEdit 1.5 (10.5.8) will ignore the current format
                -- and save in plain text
                set temporaryFilePath to temporaryFilePath & ".rtf"
            end if
            close aDocument saving in temporaryFilePath
            FindAndStoreTemporaryBackupFile(documentName, originalPosixPath) of library
            else
                close aDocument
        end if
    end repeat
    quit
end tell
```