Logon Scripting

Logon Scripting is an advanced feature that allows the system administrator unmatched control over the user sessions. Associated with each User Login is a directory that will execute batch files upon connection[1][27]. Logon Scripting provides automatic execution of the batch file upon the login of the user. Logon scripts are often used to map drives, establish network connections, change directories, set environment variables, run TSR's and launch applications. When an application is launched via a logon script the User is automatically deposited into the application upon successful logon.

One of two optional batch files can be executed. One is named `k_start.bat` and the other is `c_start.bat`. Each batch file provides a unique behavior upon completion of the batch file.

- `k_start.bat` - This file runs upon connection and after its completion the user may get the system prompt.

- `c_start.bat` - This file runs upon connection and after its completion the session terminates. *This can be used to restrict the user to a certain application.* Even if the user executes a `control-c` or something similar this will not allow access other than what is specified in the batch file on the Windows computer.

Logon Scripts can be defined on a User, Global, or IP address basis. If a logon has IP Address based Logon scripts defined then they are executed. Otherwise the GSW Universal Terminal Sever determines if a User ID based logon script exists. If so then it is executed. Otherwise if a Global Logon scripts exists then it is executed.

USER Logon Scripts

A different Logon script can be set up for each User Id. This allows Users that to have individually defined batch files to accommodate different requirements of Users. The batch files are **created** and set up by the system administrator for each user in the system. They must be in the directory

"InstallationPath\scripts\UserLoginID\k_start.bat" or

"InstallationPath\scripts\UserLoginID\c_start.bat"

Of course *InstallationPath* and *UserLoginID* are replaced with the actual values.

If both `k_start.bat` and `c_start.bat` exist then only `c_start.bat` is executed. You may call `k_start.bat` from `c_start.bat`. If the UserLogonID script folder does not exist, then the GSW UTS will determine if a Global Logon script exists.

The system administrator must ensure that the directory permissions for the above files and directories are correct. Remember the user and the SYSTEM must be able to read the batch file. They are executed in the security context of the user.

EXAMPLE - LOGON SCRIPTING: AUTOMATIC EXECUTION OF A PROGRAM UPON CONNECTION

Here is an example script to allow automatic execution of a Physician's Office Application "medical.exe" upon connection for the user login id (nurse). The Physicians office application is in the directory c:\medical.

Step 1. Create directory

```
c:\gs_uts\scripts\nurse
```

Step 2. Create batch file `k_start.bat`

Step 3. Add line to k_start.bat

```
c:\medical\medical.exe
```

Step 4. Save file and exit.

Now when the User login id "nurse" connects to the Windows system via SSH2/Telnet the application medical.exe will automatically be started. When the user exits the medical package, the Windows Command line prompt is displayed allowing other activity to occur.

EXAMPLE - LOGON SCRIPTING: USER RESTRICTED TO EXECUTE ONLY A SPECIFIC PROGRAM.

Here is an example script that will allow the User login id (bill) only to execute the amortization program amortize.exe. The amortization program resided in the directory d:\amor

Step 1. Create directory

```
c:\gs_uts\scripts\bill
```

Step 2. Create batch file c_start.bat

Step 3. Add line to `c_start.bat`

```
        d:\amor\amortize.exe
```

Step 4. Save file and exit.

Now when the User Login ID "bill" connects to the Windows system via SSH2/Telnet the application amortize.exe will automatically be executed. When the user exits the amortization package, the SSH2/Telnet session will terminate.

Global Logon Scripts

There are situations where the system administrator may want to have the same logon script executed by all the users upon connection. Instead of **creating** a logon script for each and every user, a single logon script can be **created** that will be executed by all users upon connection. The Global Logon script operates in the same manner as a normal logon script except for the location of the script files. The system administrator may put the `k_start.bat` or `c_start.bat` file in the subdirectory SCRIPTS (under the install directory). The server looks first for `k_start.bat` or `c_start.bat` in user's subdirectory and will not use the global script if it can find user's script.

EXAMPLE - GLOBAL LOGON SCRIPTING: AUTOMATIC EXECUTION OF A PROGRAM UPON CONNECTION BY ALL USERS

Here is an example script to allow automatic execution of a Physician's Office Application "medical.exe" upon connection for *ALL* users that do not have a `c_start.bat` or `k_start.bat` in their logon script directory. The Physicians office application is in the directory `c:\medical`.

Step 1. Create batch file `k_start.bat` in the SCRIPTS directory (under the install directory).

Step 2. Add line to `k_start.bat`

```
        c:\medical\medical.exe
```

Step 3. Save file and exit.

Now when any user (unless they have their own login script in their logon script directory) connects to the Windows system via SSH2/Telnet the application medical.exe will automatically be started. When the user exits the medical package, the Windows command line prompt is displayed allowing other activity to occur.

IP Address Based Logon Scripts

The capability to define different logon scripts based on the IP Address of the client logging on is another advanced feature pioneered by GSW. System Administrators may have specific mapping requirements or specific applications that must be launched depending on the location of the User that is logging on. In many cases it is easier to identify the location by IP addresses rather than User IDs. Another case may be where a User is routinely working in different locations with specific logon script requirements for each

location. Another could be where different devices access different applications, regardless of the user connected. There are many other cases where IP Address based logon scripting can be used.

Associating the Logon Script to use with the IP Address is configured using the `gs_ip_rt.txt file`. IP Addresses can be specified as individual IP address or IP address ranges. Additionally wildcards can be used. For each entry in the `gs_ip_rt.txt` file two fields are specified: The IP Address (or range) and the name of the login script to use. A file `gs_ip_rt.txt` is installed when the GSW UTS is installed. It contains examples that are commented out to help you get started.

Notice the file in the GSW UTS installation directory:

gs_ip_rt.txt

The file must reside in the Georgia SoftWorks Windows Universal Terminal Server installation directory.

NOTE: The System account <u>must</u> have permission to read the `gs_ip_rt.txt` file.

The file `gs_ip_rt.txt` is used for configuration of the association of IP Addresses and Logon Scripts.

The rules are simple for setting up the `gs_ip_rt.txt` file.

- It is a text file
- The # character is the comment character
- Each entry **must** start in the first column.
- Each entry consists of the IP Address (or IP Address Range) and the associated logon script filename. The logon script file must be located in the GSW UTS scripts folder.
- The IP Address and the Logon Script are separated by a single space.

IP Address Syntax. Use the industry standard 4 part syntax: format `nnn.nnn.nnn.nnn` when specifying the IP Address.

Example: `10.1.1.1`

An example entry in the `gs_ip_rt.txt` file would look like:

10.1.1.1 k_logon70.bat

The above entry would instruct the system that when a user connects from the IP address `10.1.1.1` the logon script `k_logon70.bat` should be used.

IP Address Range Syntax: An IP address range is specified as two IP addresses separated by the dash character `'-'`. No spaces are allowed. Below are two examples.

      Example A: `10.1.1.1-10.1.10.210`

      Example B: `192.68.22.10-192.68.22.99`

      An example IP Address range entry in the `gs_ip_rt.txt` file would look like:

      `192.68.22.10-192.68.22.99 k_buildingN.bat`

The above entry would instruct the GSW UTS that when user connects from any IP address that falls in the range from `192.68.22.10` to `192.68.22.99` the logon script `k_buildingN.bat` should be used.

IP Address Wild Cards: An IP address wild card is specified with the `'*'` character. Wild cards can be used in place of one or more of the four parts of the IP Address.

      Example A: `10.0.0.*`

      Example B: `192.*.*.5`

Wild Cards can be used in IP Address Ranges too.

Logon Script Filename: The logon script filename associated with the IP address can be any name that you choose however it must start with either a `k_` or a `c_`. The 'k_' and 'c_' correspond to the analogous behavior as the `k_start.bat` and `c_start.bat`

EXAMPLE – IP BASED LOGON SCRIPTING

The ACME Company has a New York location and a Mexico location. The New York location has a north building that has a receiving dock, a manufacturing floor and a shipping dock. Each area uses different applications to update a common database. The Receiving dock uses fork lifts with vehicle mounted RF devices. The application used by the receiving dock is a custom developed application. The ACME manufacturing floor workers use hand held RF devices, mostly basic scanner guns. The Quality Assurance Engineers on the manufacturing floor use Pocket PC 2003 devices to enter comments and other information. The Quality Assurance Engineers use a different application than the manufacturing floor workers. The New York Shipping dock workers use hand held RF devices, again mostly basic scanner guns. Like before they have yet another custom application. The shipping dock workers and the

manufacturing floor workers are multi-talented and can perform either duty. The ACME Mexico location in Seaside ships partially assembled components to the New York locations.

All the locations are connected to a single server running the 100 session copy of the GSW UTS. The system administrator needs to launch a different application for each group described above.

This is can be accomplished using GSW UTS Logon Scripting based on IP Addresses. We can start editing the `gs_ip_rt.txt` file, but first let's make a chart of the locations, the IP addresses and the logon scripts.

The chart on the next page contains the information needed to set up the IP Based Logon scripting.

Location Name	IP Address or Range		Logon Script
ACME New York North Building Receiving Dock	164.10.15.1 164.10.15.211 164.10.15.212 164.10.15.213 164.10.15.214 164.10.15.215 164.10.15.216 164.10.15.217 164.10.15.218 164.10.15.219	164.10.15.220 164.10.15.221 164.10.15.222 164.10.15.223 164.10.15.224 164.10.15.253 164.10.15.226 164.10.15.254 164.10.15.228 164.10.15.229 164.10.15.255	c_nynrcv.bat
ACME New York North Building Manufacturing Floor Guns	164.10.16.1 164.10.16.10 164.10.16.11 164.10.16.12	164.10.16.23 164.10.16.23 164.10.16.24 164.10.16.25	c_nynman.bat
ACME New York North Building Manufacturing Floor Quality Assurance Guns	164.10.16.50 164.10.16.60 164.10.16.70 164.10.16.80	164.10.16.90 164.10.16.100	c_nynqua.bat
ACME New York North Building shipping Guns	164.14.12.210 164.14.102.211 164.14.245.212 164.14.246.213 164.14.247.214	164.14.15.220 165.14.19.1 165.14.150.222 165.14.151.223 165.14.178.224	c_nynsh.bat
ACME Mexico Seaside Plant shipping Guns	242.10.150.5 242.10.160.5 242.10.170.5 242.10.180.5 242.10.190.5	242.10.191.5 242.10.192.5 242.10.192.5 242.10.194.5	c_mexpl.bat

Table 40 - IP Based Logon Scripting Information Table

This is how to set up the `gs_ip_rt.txt` file to associate IP Addresses and Logon Scripts.

Edit the file `gs_ip_rt.txt` and add the following lines.

```
#ACME North Building Receiving Dock
164.10.15.1 c_nynrcv.bat
164.10.15.211-164.10.15.255 c_nynrcv.bat
#
#ACME North Building Manufacturing Floor
164.10.16.1-164.10.16.25 c_nynman.bat
#
#ACME North Building Manufacturing Floor Quality Assurance
164.10.16.50-164.10.16.100 c_nynqua.bat
#
#ACME North Building Manufacturing Floor Shipping
164.14.*.* c_nynshi.bat
#
#ACME Seaside Plant Shipping Guns
242.10.*.5 c_mexpl.bat
```

Each time a User Logs on, the GSW Universal Terminal Server identifies the IP address of the User and executes the associated logon script.

A sample `gs_ip_rt.txt` file with examples is installed with the software. It can be easily modified and used for your purposes. This is a copy of the file.

```
# Georgia SoftWorks UTS IP-based selection of logon scripts
# Copyright (C) 2004 Georgia SoftWorks
# All Rights Reserved
#
#
# This file allows you to map client IP addresses to logon scripts.
# The order of fields is as follows:
#
#       IP address OR IP address range OR IP address with wildcards
#       k_logon_script_name OR c_logon_script_name
#
# The 'k_' and 'c_' correspond to behavior analogous to k_start.bat and
# c_start.bat respectively.
#
# Each entry must start in the first column.
#
# For example, the following entry below
# (the comment '#' character must be removed to activate the entry)
#
#63.80.112.70 k_logon70.bat
#
# instructs the system that when a user connects from the IP address
# 63.80.112.70 he should use the logon script k_logon70.bat
#
#
```

```
# IP address ranges
#
# An IP address range is specified as two IP addresses separated by
# the dash character '-'.
#
# Examples of IP address ranges
#
# 10.1.1.1-10.1.10.210
# 192.68.22.10-192.68.22.99
#
#
# IP address with wildcards
#
# An IP address with wildcards is specified by using the star character
# '*' instead of a number as one of four segments of an IP address
#
# Examples of IP addresses with wildcards
#
# 10.*.*.*
# 192.*.*.22
#
# Note:
# For security reasons this file's permissions should be set to allow only
#
# SYSTEM - read access
#
# No other accounts should be allowed to access this file.
```