

Self Healing

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DART 42 - Password Lockout Resolution

DART 42 detects and automatically resolves password lockout situations on systems running Microsoft Windows NT4, 2000, or XP operating system, and **Courion's Password Courier Direct** application.

DART 68 - User Has Changed System Date and Time

DART 68 detect and reports a user-produced change of system date and/or time. It takes no corrective action automatically because it does not presume that the change in system date and/or time was unintentional.

However, if the user interface feature is enabled when a user changes the system date and/or time, a dialog box will pop up listing the original and new time and date, and asking:

"Did you mean to change the time?"

Seeking a **Yes/No** response.

If the user interface is not enabled, DART 68 will detect the date/time change but will not take any action to reset it.

DART 68 also compares the time zone of the system on which it was triggered with that of the other systems on the local network where the ReSOFT client is active reporting any discrepancy and listing each system with its time zone.

DART 68 detects date/time changes of more than five hours. Any date/time change of five hours or less will be ignored.

Please note that DART 68 is triggered when a user accesses the calendar on his/her system by double-clicking on the time display at the lower right-hand corner of the system's desktop. When this happens DART 68 will report any date and/or time discrepancy, as discussed above, and time zone differences among systems on the local network.

This means that even if the user does not change the time or date on his/her system, if there are differences in time zones among systems on the local network, DART 68 will report these differences as long as they persist.

DART 87 - Difference between System and Time Server Clock Exceeds Configured Threshold since Last Checked Twelve Hours Ago

DART 87 detects and reports the difference between a System's clock and an Internet time server's clock when it exceeds 15 minutes during the 12 hours since it was last executed.

In order to determine whether a system's clock is slow, DART 87 retrieves atomic time in one of two ways:

- Using HCP from the system where the ReSOFT log server is located (this is the default option)
- Accessing a certified time server on the Internet. It uses port 37 to access the following time servers to adjust a system's clock:
 - time.nist.gov
 - time-a.nist.gov
 - time-nw.nist.gov
 - ntp2.usno.navy.mil

In case of failure to reach the first time server on the list above, it will attempt to reach the others in sequential order (i.e. 2nd, 3rd, etc., etc.)

If none of the time servers is available, the synchronization operation will be attempted again the next time DART 87 is scheduled to run. You can modify the list of time servers used by DART 87, adding or deleting time servers. The number of minutes used by DART 87 to determine whether a system's clock is slow or not, is a configurable parameter.

If the time reported by a system's clock is slower than the atomic time retrieved by DART 87 by a number of minutes greater than or equal to the value of the Minimum difference (minutes) to report parameter, DART 87 will reset the system's clock to match the atomic time.

DART 176 - Service Restart

On systems running Microsoft Windows NT4, 2000, or XP operating system, DART 176 monitors services listed in the **Services** list on its configuration page, and re-starts them automatically if they stop running.

DART 176 can run on demand or on a recurring schedule.

DART 191 - TCP/IP Connectivity Problem Management

DART 191 detects, diagnoses, and manages the resolution of TCP/IP connectivity problems. Failure points covered by DART 191 include:

- Local connectivity
- Internet access gateway
- DNS server
- Target service port - DART 191 covers ALL TCP/IP ports / services

DART 191 uses the ReSOFT network driver to detect and diagnose TCP/IP connectivity problems on all ports, at a low level before they are detected by application software.

If the port of the service that failed is included in the User Interface enabled on failure of these ports list, DART 191 will inform the end-user about the problem with three dialog boxes:

- One dialog box that informs the user that a connectivity problem occurred
- A second dialog box that tells the end-user which problem occurred, and offers to notify him/her when the service is available again, and
- If the end-user clicked on the "OK" button in the second dialog box, a third dialog box that will notify the user that the failed service is back online.
- If the service that failed is not back online at the time of the last notification message, DART 191 will display a special message with instructions to the user on what he/she should do next that you specify when configuring DART 191.

You can configure DART 191 to exclude selected IP addresses and domains from user notification while still logging failure to access them. This function can be a powerful tool for identifying IP addresses and domains that may be accessed by a program that was installed without the end-user's knowledge (e.g. spyware, or other intrusion program).

DART 216 - Print Queue Problem Resolution

Overview

The print queue problem resolution DART monitors print queues on systems that have an attached printer, or send jobs to be printed on a network printer. When the DART is enabled, it logs a system's printer configuration every time the ReSOFT client is restarted.

The DART performs two main tasks:

- Monitor print queues, detect all jobs being printed, and report their status
- Detect print jobs that are stuck in the process of being printed, stop the print queue, remove them, and re-start the print queue enabling other print jobs, if any, to be printed. Problem resolution is triggered when the maximum time that a job can be in the process of being printed, as set by IT personnel, is exceeded.

Automated print queue problem resolution

When the **Automated print queue problem resolution enabled** option is enabled, DART 216 will perform problem resolution whenever a job has been in the process of being printed for an amount of time equal, or in excess of the amount of time you specify in the **How long should the DART wait for a job to be in process before running automated problem resolution? (enter time in minutes)** parameter.

Problem resolution takes place in three phases. Depending on the severity of the problem, the DART's actions escalate as follows:

- Level I - The DART detects the problems and uses spooler functionality to attempt to remove the job that's causing the problem from the queue while preserving the other jobs in the queue. The problem resolution steps carried out are:
 - Shut down of print spooler
 - Re-start of print spooler
- Level II - If Level I resolution does not resolve the problem, the DART performs the print job removal action directly, while still leaving untouched the other jobs in the queue. The problem resolution steps carried out are:
 - Shut down of print spooler
 - Deletion of job that has been in the process being printed for a time in excess of the number of minutes you specified in how long should the DART wait for a job to be in process before running automated problem resolution? (enter time in minutes)
 - Re-start of print spooler
- Level III - If the problem keeps recurring on the same queue, the DART restarts the system where the problem occurs (the problem may be caused by the print driver and restarting a system resolves most print driver related problems). Because this action, unlike the others, is very intrusive, level III problem resolution has to be

explicitly enabled by IT personnel. If it is enabled, before restarting the system, and the Third level problem resolution user interface enabled option is enabled, the DART will display a dialog box explaining to the user the reason for having to restart the system and asking the end-user to authorize system re-start via a yes/no dialog box. If the user clicks on the no button or ignores the dialog box, the DART will not restart the system. If the printing problem occurs again soon after, the DART will once again ask the user for permission to restart the system. If the Third level problem resolution user interface enabled option is not enabled, DART 216 will perform third level problem resolution directly.

To learn more about HandsFree Networks and our solution, visit www.handSFreenetworks.com, send us an e-mail or call



HandsFree Networks Inc
1021 Main Campus Drive, Suite 300
Raleigh, NC 27606 (US)

HandsFree Networks Pvt. Ltd.,
4th Floor, Concorde Block, UB City,
Vittal Mallya Road, Bangalore-560001 (INDIA)

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