

# Overview, Tutorial DeskView Client BIOS Management

"BIOS Management" in this context covers the procedures and software to:

Update/Change mainboard BIOS (Flash firmware, Intel Me) (with or without settings) on identical systems (same model or mainboard) Change individual BIOS settings (e.g. activate "Password On Boot")

Read all available settings into a file

Distribute settings over a range of systems

Distribute BIOS Settings over a range of non-identical systems (different models or mainboards)



### Preface

This document gives a short overview of the two command line executables BiosSet.exe and DskFlash.exe. Both are part of the Lifecycle Management software product "DeskView Client" including more tools and WMI classes to manage Fujitsu Client Computing Devices. Further information on the complete product, including the detailed manual, can be found online. See the Additional Information chapter.

Updating the BIOS and making changes to the BIOS Setup should be handled with care and system knowledge. Both tools request administrative privileges to execute. Making careless changes in the BIOS setup or flashing a BIOS image together with improper settings poses a certain risk to compromise the system and prevent booting of the current OS installation.

You can use both tools to align BIOS settings over a great number of systems. Using DskFlash.exe, although the BIOS Image and archived settings are always bound to a specific platform aka mainboard, can be timesaving if a BIOS update is needed anyway. BIOS settings can be rolled out over a broader range of platforms with BIOSSet.exe and a settings archive xml file, even if their individual BIOS Setup screens (pressing "F2" during boot, enter BIOS Setup) might differ due to chipset and system differences and evolutions.

Both tools aim to support Fujitsu Client Computing Devices (Desktop/Workstation/Mobile) that were available in the last 5 years. To handle older systems it might be necessary to use an older version of the toolset available from the support download site.

### **Download and Installation**

You can install DskFlash.exe and Biosset.exe permanently as part of DeskView Client, using the msi package.

Another option is to use the "instant" package. This package includes both tools exclusively and runs an install / uninstall procedure with one call. This might be preferred if WMI and other features of DeskView Client are not needed. The instant package can be used on Windows PE for pre-installation usage too.

Administrators can choose to distribute the tools via their companywide management toolset or offer it on a common network share. Installation and execution will need administrative privileges.

# Common procedures and command line switches

With DeskView Client, tools are installed under the % ProgramFiles(x86)% Fujitsu\DeskView directory per default. Msi Setup creates a %DESKVIEW% environment variable, which can be used even if another installation path has been chosen manually. To run an executable, you can open a cmd window as administrator and call the tool with e.g:

%DESKVIEW%\DeskSettings\BiosSet.exe /?
%DESKVIEW%\DeskFlash\DskFlash.exe /?

# Show help, options and syntax: /?

Calling a command line tool with the parameter /? shows help and syntax. You can pipe it into a text file to have a document easier to read as inside the cmd window.

BiosSet.exe /? > BiosSet\_Help.txt
DskFlash.exe /? > DskFlash Help.txt

### Show Errorlevels: /E

Produce a list of Errorlevels and explanation.

These are the returncodes of the executables, which could be tested inside batches or scrips as %ERRORLEVEL%

# Updating BIOS firmware, settings and more with DskFlash.exe

BIOS Management (Archive & Update) offers you a variety of tasks to perform on your computer:

- updating a BIOS
- displaying information about a BIOS Update file
- archiving and updating BIOS settings
- updating a BIOS together with an archived set of settings
- displaying the status of the last BIOS or Settings Update

# **DskFlash.exe Examples:**

DSKFLASH /UPD /WD=C:\UPDATE /O=BIOS.BUP /ARB	A BIOS file named BIOS.bup for the update is located in the local directory C:\UPDATE. The system may initiate a reboot if required.
DSKFLASH /UPD /WD=\\SERVER\SHARE /ARB	DeskFlash will search for a suitable update file in a folder on the shared network drive \\Server\Share.
DSKFLASH /ARC /WD=\\SERVER\SHARE /O=ARCHIV_#name#_#system#.nvux	The archive file is located on the shared network drive \Server\Share. The computer name and the mainboard will be used automatically in the file names.
DSKFLASH /NVU /WD=\\SERVER\SHARE /O=ARCHIV.nvux /ARB	The settings from the archive.nvux file that is located on the shared network drive \(\bigver\Share\) are applied.
DSKFLASH /UPD /WD=\\SERVER\SHARE /O=combined.BUP /OV /ARB	Archive the BIOS as previously described and use DSKFLASH /MAKE to create a combined.bup from the nvux file and the original Fujitsu BIOS file.  During an update, the BIOS is updated according to the original BIOS file and the settings from the nvux archive file are applied.
DSKFLASH /MAKE /O=combined.bup /CINP=archive.nvux /BINP=original_bios.bup	The archived BIOS settings of the nvux file are combined with the original Fujitsu BIOS file.  The combined BUP file can then be used to update the BIOS at the same time as the settings.

# Change BIOS settings, passwords and more with BiosSet.exe

BIOS Management (Settings) offers you the option to change BIOS Setup settings in Windows for local computers, and to retrieve information about the current values of settings. You can set BIOS setup, user and hard disk passwords. If a setup password is set, it has to be passed to any commands, which would change a setting. Some settings require that a setup password is installed, for example the setting "Boot from removable Media". BiosSet does offer several settings, which are aligned over a broad range of systems and generations even if there are differences inside the "F2" BIOS Setup, due to chipset evolutions and other system changes. For example, the feature to boot from network evolved and the switch BiosSet /RB will control several settings at once to ensure a common behaviour.

Due to the evolution in systems, you cannot modify all items of the BIOS setup with a named command line switch. To get access to all system specific settings you can leverage the so-called /EXPERT mode.

# BiosSet Examples:

BiosSet.exe /newpwd=Setuppassword	Set a new BIOS Setup password, if there was none before.
BiosSet.exe /BFR=OFF /pwd=Setuppassword	Disallow "Boot from removable media"
BiosSet.exe /EXPERT /AR=Settings_Archive.xml	Retrieve all specific settings with additional textual information, addressable with BiosSet.exe on this particular system. The file can be read / edited and reapplied to this and other systems.
BiosSet.exe /EXPERT /UPD=Settings_Archive.xml /pwd= Setuppassword	Try to apply all the settings from the archive to the system. If the explicit system does miss some setting, all the rest is applied.
BiosSet.exe /FW	Query the current state of the setting "Flash Write" on command line
powershell.exe get-ciminstance -Namespace root/abg1v2/dv_BIOS -ClassName cabg_biospassword	Query WMI to retrieve the state of all available BIOS Passwords (Setup, User, Hard Disks)

For detailed information review the chapter "BIOS Management (Settings)" inside the DeskView Client User Manual.

# Additional Information:

Detailed information

http://ts.fujitsu.com/Manageability
Manageability Solutions , DeskView Downloads, DeskView Client User Manual:
https://www.fujitsu.com/fts/solutions/business-technology/manageability/downloads/index.html
Client Computing Devices Support:
https://support.ts.fujitsu.com/Index.asp?lng=&OICOpen=ClientComputing



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