CA Desktop Migration Manager

Reference Guide

Release 12.8

CA Technologies Product References

This documentation set references to the following CA products:

- CA Advantage® Data Transport® (CA Data Transport)
- CA Asset Intelligence
- CA Asset Portfolio Management (CA APM)
- CA Common Services™
- CA Desktop Migration Manager (CA DMM)
- CA Embedded Entitlements Manager (CA EEM)
- CA Network and Systems Management (CA NSM)
- CA Patch Manager
- CA Process Automation
- CA Business Intelligence
- CA Service Desk Manager
- CA WorldView™
- CleverPath™ Reporter

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Chapter 1: CA DMM Technical Reference

This guide shows you how to use the advanced features of CA DMM, such as the command line interface to automate migrations and ease the migration process for you.

Installation Path

By default, CA DMM is installed in C:\Program Files\CA\Desktop Migration Manager. Throughout the documentation, this is called the installation path.

Chapter 2: Command Line Interface

The CA DMM command line interface lets you automate nearly all aspects of a migration using templates, command lines, batch processes, and Windows shortcuts. You can even integrate an automated migration into a wrapper application so that migration can take place as part of a larger process.

Using the command line, you can perform operating system functions, like moving, copying, and printing files, by entering commands after a prompt. For example, the following command copies the file memo.doc from the Windows folder on the C drive into the document folder on the A drive:

```
C:\WINDOWS> copy memo.doc a:\document
```

You can customize command lines using a variety of switches. For example, in CA DMM the switch /A is the Apply switch.

How You Can Execute the Commands

You can execute a command in the following ways:

- Open the command line that runs DesktopDNA.exe, whether executed from an external program, from a shortcut, or from the Start menu's Run command.
- You can copy the CA DMM shortcut on the desktop that was created when CA DMM was installed, then customize and rename it to create specialized shortcuts. You specify the command line in the Target field after the executable path for CA DMM.
- Open the Run window from the Start menu and enter the command in the Open field.
- The DNAOptions.xml file or replacement file. See DMM Options File (see page 51).
- A batch file (a plain text file with the extension .bat) that contains one or more commands.

Command Line Syntax

The syntax for running a command line is:

```
"installation path\DesktopDNA.exe" /switch [text]
```

Command Line Rules

These general rules apply to CA DMM command lines. See Command Line Switches (see page 15) for additional rules for individual switches:

- If a path contains any spaces, as the path of DesktopDNA.exe does when it is installed in the default directory, you must enclose the path.
- Command line switches are not case-sensitive, with the exception of the disable commands (see page 35).
- You cannot specify a DNA file and an options file on a single command line. If you want to use the command line in the options file, we recommend the only items you put on the shortcut command line are the location of the DesktopDNA.exe and path and file name of the options file to use:

  `"installation path\DesktopDNA.exe" /O "C:\Process\DDNAOptions.xml"`

  Place the remainder of the command line in the command line option in the options file.
- Entering the whole switch name works the same as entering its letter designation. (For example, /Apply is the same as /A)
- You can substitute a hyphen (-) for the forward slash (/) preceding a switch.
- Each command line must be valid in its own right. Some examples:
  - You cannot specify the /M (migrate) command line switch on the applications command line and then specify the /D (create a DNA file) command line switch (/D DNAFile.dna), in an options file.
  - A /M command on its own is not valid.
  - A"/D DNAFile.dna" command on its own is not valid.
  - You cannot specify a template file in the options file if the template has DMM options saved with a command line. The template's command line conflicts with the options file's command line that originally specified the template.

- Command line switches requiring a file name parameter must include the file name. File names can specify an absolute path, a UNC path, a path relative to the current folder, or no path at all.

  Absolute path example:

  ```
  C:\MyDNAFiles\MyDNAFile.dna
  ```

  UNC path example:

  ```
  \\Server\Volume\MyDNAFiles\MyDNAFile.dna
  ```

  Relative path example:

  ```
  MyDNAFile.dna
  ```

- File names without paths are assumed to be located in the following default folders. The following table shows default save locations for files:

File	Folder
DNA File	Current user's "My Documents"
Templates	Current user's "My Documents"
Log Files	Where DesktopDNA.exe is installed, or if you cannot create files there, in "My Documents"
Settings File	Where DesktopDNA.exe is installed, or if you cannot create files there, in "My Documents"

- Variable substitutions must be surrounded by the percent sign character (%). Variables can be used in file paths and file names. CA DMM replaces the variable substitution with a corresponding value. Variables are case-insensitive strings and can be the system's environment variables, such as WINDIR, or special CA DMM variables as shown in the following example:

  ```
  /D "%WINDIR%\DNA Files\%DNA_MACHINE_NAME%\%DNA_USER_NAME%.dna"
  ```

  Log file names can be set in the template to contain environment variables; thus making differentiation between migrations easier. You can do this in the XML options file or in a template that is saved with DMM Options.

  For the complete list of variables, see Variables (see page 14).

Variables

CA DMM supports the following variables that you can use in commands or when specifying paths in the user interface:

%DNA_MACHINE_NAME%

Specifies the name of the computer, as defined under System Properties, Network Identification.

%DNA_PLATFORM_NAME%

Specifies the version of Windows installed on the current computer. It can be one of the following:

- Windows 2000
- Windows XP
- Windows Vista
- Windows 7

%DNA_USER_NAME%

Specifies the name of the currently logged in user.

%DNA_COMPANY_NAME%

Specifies the registered company.

%DNA_DATE%

Specifies the current date in the form August27_2003.

%DNA_TIME%

Specifies the current time in the form 1655 (hhmm).

%DNA_Profile_Name%

Specifies the profile name of the migrating users.

%DNA_Profile_Path%

Specifies the profile path of the migrating users.

%DNA_User_Domain%

Specifies the domain name of the migrating users.

%DNA_Desktop%

Specifies the full path to the migrating users desktop.

%DNA_My_Documents%

Specifies the full path to the migrating users My Documents directory.

Command Line Switches

The following list describes the command line switches, their syntax, and their rules for use:

/A[PPLY] <path and file name of the DNA File>

Defines the path and file name of the DNA file to be applied. The path and file name can include environment or DMM variables.

Required Switches: None.

Cannot Use with: /C or /D

/C[ONNECT] <computer name or IP address>

Connects the destination system to the source system for a real-time migration. Use the name or IP address of the source system to which you want to connect. /C can be used with the /S switch.

Required Switches: /T

Cannot Use with: /W, /A, or /D

/D[iskTo]D[isk] [OS Name][(OS Drive)] [Drive Map]

Specifies the operating system and drive map information for disk-to-disk migration.

OS Name

Represents the operating system installed on the slave disk. Supported OS Name constants are WIN7, WINVI, WINXP, WIN2K, or WIN2000.

OS Drive

Represents the mapped operating system drive of the slave disk when it (slave disk) is connected to the host computer. This mapped drive includes the same operating system that the user has passed as OS Name and intends to migrate. OS Drive must be used with supported OS Name constants

Drive Map

Represents the drive mapping information and is defined as "Host machine Drive":"Source machine Drive"; for example, P:C. You can also use a comma (,) to specify multiple drive maps; for example, P:C,Q:D,R:E.

Required Switches: /D (or /SE), /T

Cannot Use with: /A, /C, or /W

Examples

```
DesktopDNA /T C:\MyTemplate.dtf /D C:\MyDNA.dna /DD /M /X

DesktopDNA /T C:\MyTemplate.dtf /D C:\MyDNA.dna /DD WINXP /M /X

DesktopDNA /T C:\MyTemplate.dtf /D C:\MyDNA.dna /DD WINXP(P) /M /X

DesktopDNA /T C:\MyTemplate.dtf /D C:\MyDNA.dna /DD WINXP(P) P:C,Q:D,R:E /M /X
```

```
DesktopDNA /T C:\MyTemplate.dtf /D C:\MyDNA.dna /DD WINXP P:C,Q:D,R:E /M /X
```

/D[NA] <path and file name of the DNA file>

Defines the path and file name of the DNA file you want to create. The path and file name can include environment or DMM variables.

Optional Switches: None.

Required Switches: /T

Cannot Use with: /C, /R, or /W

/Disable <UI Element Name>

You can supply multiple /Disable commands. See Customizing the Wizard from the Command Line. (see page 35)

Required Switches: None.

Cannot Use with: None.

/En[crypt]

Encrypts the data stored in a DNA file (or Self-Extracting file) for the current deferred migration or the data transferred over the network during the current real-time migration.

Note: [Password] supplied with /s will be used to encrypt the DNA file (or Self-Extracting file) during a deferred migration. [Password] is not mandatory for a real-time migration. For FIPS-compliant encryption, use the /FO switch along with /FK for specifying the encryption key path.

Required Switches: /D, /W, or /C

Cannot Use with: /A

Note: Current migration takes union of the data protection level set in the options file and the command line arguments (/s and /en) supplied.

/I[gnore]F[ips]M[ode]

Ignores the FIPS mode of CA ITCM. If you have installed CA DMM to operate in FIPS-preferred mode, the FIPS mode of CA ITCM decides the FIPS mode of CA DMM. For example, if the FIPS mode of CA ITCM is FIPS-only, CA DMM will also operate in FIPS-only mode even if you have selected FIPS-preferred mode during CA DMM installation. Use this switch to ignore the FIPS mode of CA ITCM and operate CA DMM in FIPS-preferred mode. If you have installed CA DMM to operate in FIPS-only mode, it always operates in FIPS-only mode.

Cannot use with: /FO

/F[ips]O[nly]

Encrypts all the data using FIPS-compliant cryptography.

Required Switches: /EN

Optional Switches: /D, /W, /C

Cannot Use with: /S

/F[ips]K[ey] <key path>

Specifies the path where you want to store encryption key used for FIPS-compliant encryption.

Required Switches: /FO

Cannot use with: /S

/H[ELP] or /?

Displays the help text for the command line switches.

Optional Switches: None.

Required Switches: None.

Cannot Use with: None.

/L[AUNCH] <UI Element Name>

Defines the initial page for CA DMM to display when launched. See Customizing the Wizard from the Command Line. (see page 35)

Required Switches: None.

Cannot Use with: None.

/M[IGRATE]

Automatically starts the migration.

Required Switches: /C and /T, or /A, or /D and /T

Cannot Use with: /Q

/NoUser <Source> [<Modifier> <value>]*

Excludes users from the migration. Use the following modifiers:

Before <date>

After <date>

Orphan <true | false>.

(<date> is the localized short-form of date.)

Note: The user command line arguments have precedence over all other forms of user selection. You can use them multiple times on the same command line.

Required Switches: /C, /A, or /D. Also, /NoUser must appear with at least one /User argument.

Cannot Use with: None.

/O[PTIONS] <path and name of the DMM Options File to use>

Path and file name to the DMM Options file you want to use for the migration. The file path and name can contain environmental or DMM variables.

Required Switches: None.

Cannot Use with: None.

/Q[UIET]

Runs CA DMM in a quiet mode (no windows displayed) and automatically starts the migration, like the /M parameter.

Required Switches: /X, /R, or /UX

Cannot Use with: /M or /W

/R[EBOOT]

Restarts the system when the migration is complete.

Required Switches: /M or /Q

Cannot Use with: /D, /SE, /X, or /UX

/R[EVISION]D[ATE] "<localized short date format> [localized time format including AM/PM if specified]"

Restores a specific revision of a DNA file.

Required Switches: /M

Cannot Use with: /C, /D, /SE, /W

/S <password> or /PASSWORD <password>

Defines the password protection for the DNA or Self-Extracting file. A password must contain between five to twenty characters.

Note: When /S is used to create a backup of a DNA file, you can specify that you want to password-protect your DNA file by clicking Set Password on the Define Task page of the DMM Always Current Scheduler wizard. Then when the Windows Scheduler runs the task, the password is encrypted and your data is secure.

Required Switches: /D, /A, /C or /W

Cannot Use with: Must not be used if the password is supplied with /C or /W.

/SE <path and file name to create a self-extracting DNA file>

Defines the path and file name of the self-extracting DNA file you will create. The path and file name can include environment or DMM variables.

Required Switches: /T

Cannot Use with: /A, /C, /R, or /W

/T[EMPLATE] <path and file name of the DMM Template file to use>

Defines the path and file name of the template file to use for the migration. The path and file name can include environment or DMM variables.

Note: Multiple /T arguments can be used. The last template in the command line takes precedence if any discrepancies occur.

Required Switches: /C, /D, /A, or /SE

Cannot Use with: /W

/USER <source>[:<Destination>] [<Modifier> <value>]*

Selects and/or redirects users for migration. Use the following modifiers:

Before<date>

After<date>

Orphan <true | false>

<date> is the localized short-form of the date.)

The domain or active directory and the user name can contain wildcards and environment or DMM variables. The user command line, if passed overrides any user selections in the DMM Template Editor or the DMM user interface. /USER can appear multiple times on the same command line. For more details see User Command Line Details (see page 22).

<source>

Allows partial wildcards, for example: "x*y?\username)

<destination>

Allows full wildcards only, for example: "domain*)

Required Switches: /A, /C, or /D

Cannot Use with: <destination> is not valid with /D.

/UNDO <path and file name of the undo file>

Defines the path and file name of the undo file to use. The path and file name can include environment or DMM variables.

Required Switches: None.

Cannot Use with: None.

/UX

Defines an unconditional exit of CA DMM even if an error occurs.

Required Switches: /A, /M, or /Q

Cannot Use with: /X, /R, /W

/W[AIT]

Automatically starts as a source for a real-time migration and waits for the destination system to connect. If /S was used, the password for connecting the systems must be provided. (The password is optional.)

Required Switches: None.

Cannot Use with: /M, /D, /A, /V, /C, /UX, or /Q

/X or /EXIT

Exits CA DMM when the migration is complete unless an error occurs.

Required Switches: /M or /Q

Cannot Use with: /R, or /UX

Command Line Examples

The following command line launches CA DMM as a source computer and waits for any destination computer to connect (no password is specified or required to connect):

```
DesktopDNA.exe /W
```

The following command line launches CA DMM as a destination computer and connects to the source computer at the IP address specified:

```
DesktopDNA.exe /C 192.168.1.1
```

The following command line automatically creates a DNA file with the user's login name in a directory that is the name of the computer using the template ca.dtf:

```
DesktopDNA.exe /D F:\%DNA_Machine_Name%\%DNA_User_Name%.dna /T ca.dtf /M /X
```

The following command line automatically applies a DNA file named ca.dna in the current directory using the template ca.dtf:

```
DesktopDNA.exe /A ca.dna /T c:\templates\ca.dtf /M /X
```

The following command line launches CA DMM, performs a disk-to-disk migration, and creates a DNA or an SE file in the specified path:

```
DesktopDNA.exe /T C:\MyTemplate.dtf /D (or /SE) C:\MyDNA.dna /DD WINXP(P) P:C,Q:D,R:E
/M /X
```

Disaster Recovery Scenario

CA DMM can be used to save downtime in case of a disaster. The disaster recovery scenario that follows assumes that a server has been designated on the network for backup purposes:

1. Each employee should create a template that contains the system and application settings, files and folder selections.
2. Create a shortcut to reside on the desktop of each employee named Backup.

   For example:

   ```
   "serverpath\DesktopDNA.exe" /T "serverpath/%DNA_User_Name%.dtf" /D
   "serverpath\%DNA_User_Name%.dna" /V %DNA_User_Name%.log /M /X
   ```

   This shortcut saves the selected settings and data to a server (serverpath), in a DNA file with the user's name (%DNA_User_Name%.dtf) using a user-specific template from the same server (serverpath\%DNA_User_Name%.dtf) created by the employee to the designated server.

   Employees should be instructed to double-click the shortcut periodically at the end of the business day to save their settings and data. Alternatively, the DMM Scheduler can be used to perform this operation for the user.
3. Following a computer or network disaster; repair, cleanse and reformat each affected computer hard drive.
4. Restore the operating system and network environments.
5. Deploy software to the computer.
6. Create a shortcut and place it on each of the restored computers.

   For Example:

   ```
   "serverpath\DesktopDNA.exe" /A "serverpath\%DNA_User_Name%.dna" /M /R
   ```

   This shortcut applies the DNA file that was previously saved, restores the employee's settings and data, and restarts after it is completed.

Exceeding Command Line Length

The standard command line length is 255 characters. To circumvent this restriction, you can include command lines in the DMM Options file. The command line is concatenated together with the command used to start the program.

You must ensure, however, that the command line and the entry in the options file are valid in their own right. This means you must have all the command line switches required with each individual switch in the right place.

For example, you cannot split up /D and /T with command used on the command line, when the program is executed, and other in the command line option in the Options file. They must be on the command line together or in the options file together.

User Command Line Details

CA DMM supports a user command line that lets you select users for migration in addition to the DMM Template Editor and the CA DMM user interface.

You must be logged in as an administrator to pass a user command line.

Note: /S (password) cannot be used with user command line arguments.

The user command line overrides any manual selection of users in the user interface or DMM templates containing user selections, to avoid conflicts.

Note: If you pass a user command line, and in addition, select users in the user interface or load a template with user selections, the manual and template user selections are ignored. The user command line arguments always take precedence.

The syntax for a local user is as follows:

```
/user <user name>
```

The syntax for a domain user is as follows:

```
/user <domain name or Active Directory container>\<user name>
```

The last element in a user command line switch is always assumed to be the user name.

The user command line supports both wildcards (see page 25) and variables.

Security Migration

If the Migrate group memberships (see page 78) option is set to True in the DMM Options file, the appropriate group memberships migrate with the users. The Migrate group memberships option is set to True by default.

If the Store and Apply NTFS security (see page 78) options are set to True in the DMM Options file, the appropriate file and folder security migrate with the users. The Store and Apply NTFS security options are set to False by default.

The migration of group and NTFS security is associated with the users selected for migration whether the user is selected in the DMM user interface, through a Template file, or from the user command line.

User Command Line Functionality

The following functionality is supported by the user command line:

- Wildcards (see page 25)
- Local Users (see page 27)
- Special Users (see page 27)
- Domain or Active Directory Users (see page 28)
- Orphan Users (see page 30)
- Excluding Users (see page 31)
- Date Ranges (see page 32)
- User Redirection (see page 33)

Use the following syntax to include or exclude all users (local, domain, Active Directory, or orphan) in a migration.

User Type	Include	Exclude	Details / Example
Local	/user ?*	/nouser ?*	To migrate all users except local accounts use the following syntax: /user* /nouser ?*

User Type	Include	Exclude	Details / Example
Domain	/user ?**	/nouser ?**	The include syntax in this example migrates all users except orphan users. The exclude syntax in this example excludes all users except orphan users. See the orphan user row for details on including or excluding orphan users.
Active Directory	/user ?*** **Note:** the middle * defines either the organizational unit or container any level deep.	/nouser ?***	To include all AD users, except orphan users, use the following syntax: /user ?*** The previous example migrates all Active Directory users, except orphan users and any Active Directory user whose name is also the name of an organizational unit. If you want to exclude the migration of any orphan users in an Active Directory enter: /user * /nouser ?*** /user ?*** orphan false To exclude AD users, and include all other users, use the following syntax /user * /nouser ?*** Orphan AD accounts may remain selected because they look similar to domain accounts.
All users	/user *	/nouser *	To include all users on the system, (orphan, special users (see note), domain, and Active Directory users), use the following syntax: /user *

User Type	Include	Exclude	Details / Example
Orphan	Local: /user ?* orphan true Domain: /user?** orphan true Active Directory: /user ?*** orphan true	Local: /user ?* orphan false Domain: /user ?** orphan false Active Directory: /user ?*** orphan false	These examples exclude all orphan users

Note: Special users are those profiles that are created by the operating system, such as Administrator or Default User.

Wildcards

Use wildcards to identify the domain or Active Directory container and the user name that should be migrated.

Destination wildcards differ from source wildcards. Source wildcards can contain other characters (for example, "I*n?\m*am?r"), but destination wildcards can only replace entire names (for example, "x\y:domain1*" , or "x\y:*\John").

The following list contains examples of wildcard usage:

*** (asterisk)**

Used to match any string of characters (or no characters) in the position of the asterisk. The following are examples of its use:

/user *

Selects all users on the system including local, Active Directory, and NT domain. This is equivalent to /user */*

/user la*

Selects all local or local special users on the system that matched La such as Laura, Lauren, Laural, Lawrence, Laurie, and so on.

/user **

Selects all users on the system including local, Active Directory, and NT domain. This is equivalent to /user * .

/user Domain1*

Selects all users on the system belonging to Domain 1.

/user ?*\Michael

Selects the user Michael belonging to any and all NT domains on the system.

/user ?*\%DNA_User_Name

Selects the user that is logged on in any and all NT domains on the system.

/user ?***

Selects all Active Directory users, except orphan users. The middle * defines either the organizational unit or container any level deep.

? (question mark)

Used to match a single character in the position of the question mark. It can be used with asterisks. Only use the question mark character to specify users from the source machine. You cannot use it to specify redirection of the users on the destination.

/user ?*\M?ch*

Selects all users that match the defined wildcards. This selects both Michael and Michelle belonging to any NT domain.

user Domain1\M?ch*

Selects all users belonging to Domain1 matching the defined wildcards. This selects both Michael and Michelle if they both belong to Domain2.

Local Users

You must specify local users on the user command line by listing only the user name (no domain specified). All user command lines that contain only one parameter are assumed to be local or special users on both the source and the destination.

Wildcards and variables are supported for the local user specification.

The syntax to migrate a local user is as follows:

```
/user <user name>
```

Example 1: Migrate Michael

The following command migrates the local user, Michael:

```
/user Michael
```

Example 2: Migrate Any Local User Name that Begins with M

The following command migrates any local user whose name begins with M:

```
/user M*
```

Example 3: Migrate Any Local User Name and Begins with M and Contains ch

The following command migrates any local user whose name begins with M and contains ch, such as Michael, Michelle, and so on:

```
/user M?ch*
```

Example 4: Migrate the Currently Logged on User

The following command uses a variable to migrate the currently logged on user:

```
/user %user_name%
```

Special Users

Special users are profiles created by the operating system, such as Administrator or Default User.

You must specify local special on the user command line using only the user name. All user command lines containing only a single argument will be assumed to be a local or special user.

To specify a special user that belongs to a domain, specify the user name and the domain or Active Directory on the user command line.

Wildcards and variables are supported for the user specification.

Multiple Users

You can specify multiple users using the /user command line entered multiple times. Entering each user with a /user command simplifies the ability to redirect those users on the destination machine.

The syntax to migrate multiple users is as follows:

```
/user <domain name>\<user name> /user <domain name>\<user name>
```

Domain Users

You can specify domain users on the command line by listing the domain name before the user name. Wildcards and variables are supported to specify users and domains.

Although you can use wildcards, placing an asterisk in the first position of a user command line has a special meaning to select all users (wild card user) regardless of their NT domain status. To select only users in the NT domain (and not migration local or special users), place a question mark (?) in front of the asterisk (*) as in the examples that follow.

The syntax to migrate domain users is as follows:

```
/user <domain name>\<user name>
```

Example 1: Migrate User Michael Who Belongs to Domain 1

The following command migrates the Domain1 user, Michael:

```
/user Domain1\Michael
```

Example 2: Migrate Any Domain User Whose Name Begins with M

The following command migrates all users whose names begin with M in any domain:

```
/user ?*\M*
```

Example 3: Migrate Any Domain User Whose Name Begins with M and Contains ch

The following command migrates all users whose names begin with M and contain ch in any NT domain, such as Michael, Michelle, and so on:

```
/user ?*\M?ch*
```

Example 4: Migrate Any Domain1 Users on the Machine

The following command migrates any user in Domain1 on the machine:

```
/user Domain1\*
```

Example 5: Migrate the Currently Logged on User

The following command migrates the currently logged on user in any NT domain:

```
/user ?*\%User_Name%
```

Example 6: Migrate the Currently Logged on User in Domain1

The following command migrates the currently logged on user in Domain1:

```
/user Domain1\%User_Name%
```

Active Directory Users

You can specify Active Directory users on the command line by listing the active directory name before the user name.

Wildcards and variables are supported to specify users and active directory containers.

Although you can use wildcards, placing an asterisk in the first position of a user command line has a special meaning to select all users (wild card user) regardless of their Active Directory status. To select only users in an Active Directory (and not migration local or special users), place a question mark (?) in front of the asterisk (*) as in the examples that follow.

The syntax to migrate domain users is as follows:

/user <active directory>[(\<container>)|(\<organizational unit>)+]\<user name>

Rules for containers and organizational units:

- Users can be in containers or organizational units
- Organizational units cannot be in a container
- Organizational units can be in other organizational units

Example 1: Migrate Active Directory User in a Container

The following command migrates user Michael Smith that belongs to:

Active Directory: PM.ca.com

Container: Users

User: Michael.Smith

```
/user PM.ca.com\Users\Michael.Smith
```

Example 2: Migrate a User with Two Organizational Units

The following example migrates user Michael Smith that belongs to:

Active Directory: engineering.ca.com

Organizational Unit: Enterprise

Organizational Unit: Engineer

```
/user engineering.ca.com\Enterprise\Engineer\Michael.Smith
```

Example 3: Migrate any Active Directory User with Two Organizational Units

The following example migrates any users on the system that belongs to:

Active Directory: Any Active Directory

Organizational Unit: Any organizational unit

Organizational Unit: Any organizational unit

```
/user ?*\*\*
```

Orphan Users

You can specify orphan users using the /user command line by entering orphan true or orphan false.

The syntax to migrate orphan users is as follows:

```
/user <user name> orphan true
```

```
/user <user name> orphan false
```

Example 1: Migrate a Local User Who Is Not an Orphan

The following example migrates the local user Michael that is not an orphan account:

```
/user Michael orphan false
```

Example 2: Migrate Any Domain User Whose Name Begins with M and Is an Orphan

The following command migrates any domain user whose name begins with M and is an orphan account:

```
/user ?*\M* orphan true
```

Example 3: Migrate Any Domain User Whose Name Begins with and Contains ch That Is Not and Orphan

The following command migrates any user whose name begins with M and contains ch that is in any domain and is not an orphan account:

```
/user ?*\M?ch* orphan false
```

Excluding Users

You can exclude users from a migration on the command line. Use this argument with a /user parameter.

The syntax to exclude a user from a migration is as follows:

```
/nouser *\<user name>
```

```
/user <domain name>\<user name> /nouser <domain name>\<user name>
```

Example 1: Exclude a Domain User from a Migration

The following example excludes the user Michael in domain D5 from the migration:

```
/nouser D5\Michael
```

Example 2: Migrate a User in Any Domain Except D5

The following command migrates all users named Michael in all domains, except the user named Michael in domain D5:

```
/user ?*\Michael /nouser D5\Michael
```

Example 3: Do Not Migrate Any Domain User Whose Name Begins with M

The following command excludes all users whose names begin with M in any domain:

```
/nouser ?*\M*
```

Date Ranges

You can use before and after dates to specify the migration of users. This command line switch migrates user profiles that were modified before or after the specified date. You can use the before and after arguments independently or together to create a date range with the /user or /nouser arguments.

Note: The dates specified must follow the short date format for the current local. In English, this defaults to m/d/yyyy (12/5/2002 or 1/14/2003). The date settings are configured in Windows 2000 by the Regional Options in the control panel. It is assumed the time is local midnight of the day defined.

The syntax to specify a date range for a migration is as follows:

```
/user <domain name>\<user name> after 12/5/2003

/user <domain name>\<user name> before 1/15/2004

/user <domain name>\<user name> after 12/5/2003 and before 1/15/2004
```

Example 1: Migrate a User in Any Domain Created After 12/5/2003

The following command migrates the user Michael in any domain if the profile was created after 12/5/2003:

```
/user ?*\Michael after 12/5/2003
```

Example 2: Migrate a User in Any Domain Created Before 1/15/2004

The following command migrates the user Michael in any domain if the profile was created before 1/15/2004:

```
/user ?*\Michael before 1/15/2004
```

Example 3: Migrate Any User in a Date Range

The following command migrates any user in any domain if the user profile was accessed between 12/2/2003 and 1/15/2004:

```
/user ?*/* after 12/5/2003 before 1/15/2004
```

User Redirection

When using the command line to redirect users, the **redirection argument can only be used** when the **DNA file is applied.** If you enter redirection arguments on the command line when you are creating a DNA file, you receive an invalid command line message. (Use only with the /A. Do not use with /D.)

To avoid conflicts, the user command line overrides any manual selection of users in the CA DMM user interface or DMM templates containing user selections.

Note: If you pass a user command line, and in addition select users in the user interface or load a template with user selections, the manual and template user selections will be ignored. The user command line arguments always take precedence. In this situation, a message is written to the Event log and the Debug log.

The last element in any source or destination user command line is considered the user name.

The following syntax migrates a user from one domain to another:

```
/user <domain name>\<user name>:<domain name>\<user name>
```

The following syntax migrates a user from a domain to an Active Directory:

```
/user <domain name>\user name>:<active directory>.<container>.<organizational
unit>\<user name>
```

The following syntax migrates a user from one Active Directory to Another:

```
/user <active directory>.<container>.<organizational unit>\<user name>:
<active directory>.<container>.<organizational unit>\<user name>
```

Example 1: Migrate a User From One Domain to Another

The following example migrates user Michael in Domain1 to user Michael in Domain5:

```
/user Domain1\Michael:Domain5\Michael
```

Example 2: Migrate a User From One Active Directory to Another and Change the User Name

The following command migrate user Jane in Domain1 to the Active Directory Admin.ca.com in the User container with the name Jane.Married:

```
/user Domain1\Jane:Admin.ca.com\Users\Jane.Married
```

Example 3: Migrate a User From One Active Directory Container to a New Active Directory Container and Change the User Name

The following command migrates user Jane.Maiden from the Active Directory PM.ca.com in the User container to the Active Directory PM.ca.com, in the Admin container with the user name Jane.Married:

```
/user PM.ca.com\Users\Jane.Maiden:PM.ca.com\Admin\Jane.Married
```

Example 4: Redirect Domain User to Local User

The following command redirects domain users to local users. You must use the machine name environment variable:

```
/user *\*:%DNA_MACHINE_NAME%\*
```

Chapter 3: Customizing the Wizard from the Command Line

You can customize the CA DMM wizard by specifying, in the command line, the sheets and pages to display for a given user. You do this by creating a command line in the DMM Options file, a shortcut, or a batch file. This feature increases migration security and streamlines the migration process for the end user. User interface elements can be disabled to create a more secure and possibly less confusing migration process for some end users.

Disable User Interface Elements

The /DISABLE command line option lets you disable parts of the user interface. You can specify multiple /DISABLE options in a command line. Be careful not to disable pages in which input is required to perform the migration. For example, if you expect a user to select a DNA file when applying a migration, you cannot disable the DNA file selection page.

If a sheet is disabled, all the pages in the sheet are disabled and the tab is removed. Disabling all pages in a sheet disables the sheet as well.

The user interface elements that can be used as a starting page or that can be disabled are shown in the File Types (see page 90). Elements that end with Sheet represent a tab in the CA DMM user interface. Elements that end in Page are pages within the sheets. Pages ending with WelcomePage are not displayed if welcome pages are disabled.

Note: The user interface elements must be entered in the /disable commands using the documented capitalization. Disabled menu items do not disable related pages in the user interface conversely.

Example:

The following command line disables the following items:

- Start sheet
- Systems setting page
- Application and applications settings page
- Search filters dialog
- Destination sheet
- User options page

```
/disable StartSheet /disable SystemSettingsPage /disable ApplicationsSettingsPage
/disable SearchFilters /disable DestinationSheet /disable UserOptionsPage
```

Specify the CA DMM Starting Page

The /LAUNCH command line option lets you specify the page which first appears when CA DMM is launched. Be careful not to skip pages in which input is required to perform the migration.

Start Tab Disable Commands

The following table contains all the disable commands for pages and functionality in the Start tab:

Page	Command	Description
Start Tab	StartSheet	Start tab and all pages are removed from the user interface.
Welcome to CA DMM	StartSheetWelcomePage	Star tab welcome page.
Select a DMM Task	DNAServicePage	Removes page letting you select to create or open a DNA file, or be the source or destination for a real-time migration.
Select a DMM Task –Open button	DNAServicePage::Open	Disables the Open button.
Select a DMM Task – Create button	DNAServicePage::Create	Disables the Create button.

Page	Command	Description
Select a DMM Task – Source button	DNAServicePage::Source	Disables the Source button.
Select a DMM Task – Destination button	DNAServicePage::Destination	Disables the Destination button.
Open a Template File	TemplateFileListPage	Removes page letting you select a DMM template from a list of templates.
Open a DNA File	DNAFileListPage	Removes page letting you select a DNA file to open from a list of DNA files.
DNA File Options	EditBoxFilePage	When you have opened a DNA file, the page letting you choose to edit the DNA file or go directly to the Destinations tab is disabled.
DNA File Options – Destination button	EditBoxFilePage::Destination	Disables the Destination button.
DNA File Options – Edit button	EditBoxFilePage::Edit	Disables the Edit button.
Enter a Password	ServerPasswordPage	Removes page letting you set a password to protect the source system from unauthorized access during a real-time migration and encrypts the data exchange during a real-time migration.
Standard Network Status	ServerConnectionPage	Removes page displaying the connection status on the source machine during a real-time migration.
Connect to Source System on Standard Network	ClientConnectionPage	Removes page letting you connect to the found PC, search for other PCs or enter an IP address and enable the encryption mode on the destination machine during a real-time migration.

Page	Command	Description
Search for Source System	MachineBrowserPage	Removes page letting you select from a list of found source systems or enter an IP address on the destination machine during a real-time migration.

Settings Tab Disable Commands

The following table contains all the disable commands for pages and functionality in the Settings tab:

Page	Command	Description
Settings Tab	SettingsSheet	Settings tab and all pages are removed from the user interface.
Select Settings	SettingsSheetWelcomePage	Removes Settings tab information/welcome page.
Select User(s) for Migration (current or multiple users)	UserOptionsPage	Removes page letting you select the current user or multiple users for migration.
Select User(s) for Migration	UserSettingsPage	Removes page letting you select multiple users from a list of users on the machine from the user interface page.
Select System Settings	UserSettingsPage	Removes page letting you select system settings to migrate.
Select Applications and Settings	ApplicationsSettingsPage	Removes page letting you select applications and application settings to migrate.
Select Files and Folders	FileSelectionPage	Removes page letting you select files and folders to migrate.
Select Search Filters	FilterSelectionPage	Removes the page letting you define filters for migration.

Filter Pages Commands

The following table contains all the disable commands for Filter pages:

Page	Command	Description
Settings tab Select Search Filters	FilterSelectionPage	Disables the Select Filters page.
Destination tab Filter Destinations	FilterDestinationPage	Disables the Destination Filters page.

Destination Tab Disable Commands

The following table contains all the disable commands for pages and functionality in the Destination tab:

Page	Command	Description
Destination Tab	DestinationSheet	Removes the Destination tab and all pages from the user interface.
DNA Destination	DestinationSheetWelcomePage	Removes the destination tab information/welcome page.
Save a DNA File	DestinationSheetBoxFileBrowsePage	Removes the page letting you enter a path and file name, title and descriptions when creating a DNA file.
Save a DNA File – Advanced Button	DestinationSheetBoxFileBrowsePage ::Advanced	Disables the Advanced button on the Save a DNA File page. This button provides access to change options such as self-extracting options, media spanning, data protection options, and password protecting a DNA file.

Page	Command	Description
Destination Options	LocationLevelPage	Removes the page letting you select a basic destination (no redirection) or an advanced destination path through the user interface.
Destination Options –Basic button	LocationLevelPage::Basic	Disables the Basic button on the Destination Options page when applying a DNA file to a destination machine.
Destination Options – Advanced Button	LocationLevelPage::Advanced	Disables the Advanced button on the Destination Options page when applying a DNA file to the destination machine.
Select Migration Destination	SimpleLocationOptionsPage	Removes the page letting you redirect the location of an application or associated documents when doing advanced destinations.
User Destinations	UserDestinationsPage	Removes the page letting you redirect the location of a user when doing advanced destinations.
Application Destinations	AppLocationOptionsPage	Removes the page letting you redirect the location of an application or associated documents when doing advanced destinations.
File and Folder Destinations	FileLocationOptionsPage	Removes the page letting you redirect the locations of files, folders, and filters when doing advanced destinations.

Page	Command	Description
Filter Destinations	FilterDestinationPage	Removes the page letting you redirect filters when doing advanced destinations.

Migrate Tab Disable Commands

The following table contains all the disable commands for pages and functionality in the Migrate tab:

Page	Command	Description
Migrate Tab	TransferSheet	Migrate tab and all pages are removed from the user interface.
Migrate DNA	TransferSheetWelcomePage	Removes the Migrate tab information / Welcome page.
Waiting to Migrate and/or Migrating the System	TransferStatusPage	Removes the page letting you start or monitor the status of a migration.
Waiting to Migrate – Start button	TransferStatusPage::Start	The Start button is disabled.
Migrating the System – Stop button	TransferStatusPage::Stop	The Stop button is disabled after the migration starts.
Migration is Complete – File Summary button	TransferStatuspage::FileInfo	The File Summary button is disabled after a DNA file has been created.

Log Tab Disable Commands

The following table contains all the disable commands for pages and functionality in the Logs tab:

Page	Command	Description
Logs Tab	LogsSheet	Logs tab and all pages are removed from the user interface.

Page	Command	Description
Migration Logs	LogsSheetWelcomePage	Removes the Logs tab information / welcome page.
Session Log and Undo	UndoPage	Removes the page letting you view what was migrated and undo selected portions or all of the migration.
Session Log and Undo – Undo button	UndoPage::Undo	Disables the Undo button.
Session Log and Undo – Load Undo	UndoPage::LoadUndo	Disables the Load Undo button. This button lets you open a previously created undo log.
Migration Event Log	EventPage	Removes the page displaying the Event Log with the list of all migration messages.
Migration is Complete	CongratulationsPage	Removes the page displaying the complete message and lets you start a new migration.
Migration is Complete – New Migration button	NewMigration	Removes the New Migration button from the Migration is Complete page.

Menu and Other Disable Commands

The following table contains all the disable commands for menus and other miscellaneous functionality:

Menus	Page	Command	Description
File	File, New Migration	NewMigration	Removes the New Migration item from the File menu.
	File, Open, Template	LoadTemplate	Removes the Open Template item from the File menu.
	File, Open, DNA File	OpenDNAFile	Removes the Open DNA File item from the File menu.
	File, Save, Template	SaveTemplate	Removes the Save Template item from the File menu.

Menus	Page	Command	Description
Windows	Windows, Search Filter	SearchFilters	Removes the Search Filters item from the Windows menu.
Options	Options, Settings	KhanSheet::OptionsSettings	Removes the Settings item from the Options menu.
	Options, Logs	OptionsDialog::Logs	Removes the Logs item from the Options menu.
Others	**Page**	**Command**	**Description**
		RestartRequiredDialog	The Restart Required dialog does not display when the migration is complete.
		CommandLineHelp	Removes the command line help dialog if the user requests it on the command line by entering a /? Parameter, or if an error is detected in the command line.

Chapter 4: Rescheduling a Backup Using the Command Line

This chapter describes using a command line to schedule a backup.

Command Line Syntax

This command is automatically issued by DMM Always Current Scheduler. Before a scheduled task runs, DMM Always Current Scheduler displays a dialog so that you can choose to reschedule the backup or cancel it. If you choose to reschedule, the command executes, DMM Always Current Scheduler opens, and you can choose an alternate time to run the task.

The syntax for running a command line is:

```
"installation path\DNAScheduler.exe" /reschedule "[.dmx file path]"
```

where

/reschedule

Opens DMM Always Current Scheduler so that you can reschedule a task to another time.

Chapter 5: CA DMM Return Codes

CA DMM provides error return codes to communicate the migration results to outside programs. CA DMM returns the following operation completion status codes as its termination code.

Code	Description
1	Operation finished successfully, no restart required.
2	Operation finished successfully, restart required.
3	Successfully uninstalled registry entries
-1	Invalid or missing command line option(s).
-2	Initialization failure (cannot initialize required DLLs, and so on.)
-3	Operation failed (migration aborted).
-4	CA DMM exited with no migration attempted (for example, migration canceled by user before migrating.)
-5	The template file specified on the command line is not valid or cannot be opened.
-6	Reserved. Call Technical Support if you experience this error.
-7	Missing DMM Options file specified on the command line. The DMM Options file is specified with the /O command.
-8	Invalid DMM Options file specified on the command line. The DMM Option file is specified with the /O command.
-9	No valid user profiles selected for migration.
-10	Failed to enable multiuser migration due to lack of privileges or operating system setup.
-11	Invalid revision date given on the command line
-12	Failed to store/apply DNA file due to failed checksum (DNA file is corrupt).
-13	Bad Drive Map given in the command line.
-14	The requested operation is not supported.

Chapter 6: DMM Director Return Codes

CA DMM provides error return codes to communicate migration results to outside programs. DMM director returns the following operation completion status codes as its termination code.

Code	Description
-100	Invalid command.
-101	Initialization failed.
-102	Invalid DMM Migration file (.dmx).
-103	No Template file specified or available.
-104	Template failure.
-105	CA DMM unavailable.
-106	Invalid option specified.
-107	LIB installer unavailable.
-108	LIB installer error.
-109	DCOM95 error.
-110	Missing command.
-111	CA DMM installer unavailable.
-112	CA DMM install error.
-113	CA DMM error.
-114	DDNAOtions.dox file error.
-115	IEInstall option unavailable.
-116	Error installing IE.

Chapter 7: CA DMM Options

CA DMM has a number of options that control its behavior. You can set these options in one of two places:

- In the Options menu
- In the DMM Options File (DDNAOptions.xml is the default.)

This section describes all these options in detail.

General Options

The General Options table lists the general options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Command line	What command line should be used to run CA DMM?	You can enter a command line to run CA DMM. See Command Line Interface (see page 11) for details.	Valid CA DMM Command line. See Command Line Switches (see page 15) for details.	Do not use if you are using DMM Director. DMM Director automatically creates the command line.
Compression Usage	How do you want the DNA file compressed?	Determines what compression level is used when creating a DNA file.	0 = None 1 = Quickest 2 = Smallest Defaults to Quickest.	None.

Name	Explanation	Comment	Valid Values	Dependency
Don't warn of disabled compression	Do you want the user warned if compression is disabled?	If true, a message appears before creating a DNA file warning the user that compression is turned off.	1 = True 0 = False Defaults to True	Compression option must be set to False.
Don't warn of missing scripts directory	Do you want the user notified if the scripts directory is missing?	If true, a warning dialog box will display if the scripts directory is missing.	1 = True 0 = False Defaults to True	None.
Default DNA file name	What file name structure should be used to identify DNA files to display in the Select a DNA File list when the check box 'Show only files matching default file name' is selected?	Only DNA files matching the defined naming structure are displayed in the Select a DNA File list when the check box 'Show only files matching the default file name' is selected.	Valid path and file name. Environment and DMM variables are supported in the path and file names. Defaults to ...\Documents and Settings\My Documents\%DNA_machine_name %%DNA_date%_%DNA_time%.dna	None.
Path for DNA files	What directory should be searched for DNA files to display to the user in the Select a DNA File page?	Only files located in this path are displayed in the Select a DNA File list. The Path for DNA files option cannot contain an http server location.	Valid path. Multiple paths can be listed when separated by a semi-colon ';'. Environment and DMM variables are supported in the path and file names	None.

Name	Explanation	Comment	Valid Values	Dependency
Default template file name	What file name structure should be used to identify Template files to display in the Select a Template File page?	Only Template files matching the defined naming structure are displayed in the Select a Template File list when the check box 'Show only files matching default name' is selected.	Valid path and file name. Environment and DMM variables are supported in the path and file names. Defaults to ...\My Documents\MyDNATemplate	None.
Path for template files	What directory should be searched for Template files to display to the user in the Select a Template File page?	Only the files located in this path are displayed in the Select a Template File list.	Valid path and file name. Multiple paths can be listed when separated by a semi-colon ';'. Environment and DMM variables are supported in the path and file names.	None.
Disable welcome pages	Do you want to disable the welcome pages?	If true, the welcome pages for each tab do not display to the user.	1 = True 0 = False Defaults to False	None
Map network drives	Do you want to allow mapped network drives to be migrated?	If true, mapped network drives can be migrated from the source to the destination workstation.	1 = True (Map) 2 = False (Do not map) Defaults to True	None
Migrate special folder sub-folders	When a special folder (such as, My Documents) is selected for migration, do you want to migrate all the subfolders?	If true, all subfolders are migrated.	1 = True 0 = False Defaults to True	None.

Name	Explanation	Comment	Valid Values	Dependency
Reset special folder default locations	When a special folder is redirected on the destination, do you want it re-registered as the default location?	If true, the new location of the special folder becomes the default location.	1 = True 0 = False Defaults to False	None.
Show Special folder on the Select Files and Folders page	Do you want users to be able to select special folders (for example, My documents) on the file and folder page?	If False, the My documents folder is hidden on the Select files and folders page. If set to Personal, the My Documents selection will show.	Personal False Defaults to Personal (show My documents)	None.
Migration Overwrite	When do you want to overwrite duplicate files when applying a DNA file?	When applying files to the destination machine, this option determines when to overwrite duplicate files.	0 = Never 1 = Newer 2 = Always Defaults to: 1, Newer.	
Revision Overwrite	When do you want to overwrite duplicate files when applying a revision of a DNA file?	When applying files to the destination machine, this option determines when to overwrite duplicate files.	0 = Never 1 = Newer 2 = Always Defaults to: 2, Always.	None.
Preserve directory structure	Do you want to preserve the original path to the migrated files?	If true, when files migrated with a filter stored, the original path to the file is saved.	1 = True 0 = False Defaults to True	None.

Name	Explanation	Comment	Valid Values	Dependency
Scripts directory	What is the path to the scripts directory?	Defines the directory where CA DMM scripts are located. The path entered must contain subdirectories named Application Scripts and System Scripts.	Valid path and file name. Defaults to the *installation path*	None.
Show applications	Do you want the user to be able to select applications to be migrated?	If true, users can select applications for migration on the Select Applications and Application Settings page.	1 = True 2 = False Defaults to False	None.
Don't show hidden files	Do you want the user to be able to select hidden files to be migrated?	If true, users cannot select hidden files for migration.	1 = True 0 = False Defaults to True	None.
Don't show system files	Do you want the user to be able to select system files to be migrated?	If true, users cannot select system files for migration.	1 = True 0 = False Defaults to True	None.
Show network drives	Do you want users to be able to redirect files to network drives?	If true, users can redirect files and folders to network drive locations on the destination.	1 = True 0 = False Defaults to true	None.

Name	Explanation	Comment	Valid Values	Dependency
Don’t notify of script error	If a script error is encountered, do you want an error message to display?	If true, no message displays when a script error is encountered. This option can be useful if you are testing custom scripts.	1 = True 0 = False Defaults to True	None.
Disk To Disk Migration	Do you want to do disk-to-disk migration?	If it is true, then disk-to-disk migration is enabled, and you can perform disk-to-disk migration. Disk-to-disk migration is applicable only for the deferred migration mode. Make sure that the slave disk is attached before doing disk-to-disk migration.	1 = True 0 = False Defaults to False	None.

Advanced Options

The Advanced Options table lists the advanced options that can be set for CA DMM. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Critical file list	What files do you want identified as critical files?	Defines the list of files that you want identified as critical files.	Defaults to: io.sys|boot.ini|msdos.sys|autoexec.bat|codify.sys	None.

Name	Explanation	Comment	Valid Values	Dependency
Don't warn if critical file or folder is selected	Do you want the user warned if a critical file is selected for migration?	If true, a warning message will not be displayed to the user if a file critical to the operating system is selected for migration.	1 = True 0 = False Defaults to False	None.
Don't migrate broken desktop shortcuts	Do you want to exclude migrating any broken desktop shortcuts?	If true, any shortcuts on the users' desktop that cannot be resolved during the migration are not migrated.	1 = True 0 = False Defaults to False	None.
Don't migrate broken quick launch shortcuts	Do you want to exclude migrating any broken quick launch shortcuts?	If true, any shortcuts in the quick launch that cannot be resolved during the migration will not be migrated.	1 = True 0 = False Defaults to False	None.
Don't migrate broken start menu shortcuts	Do you want to exclude migrating any broken start menu shortcuts?	If true, any shortcuts in the start menu that cannot be resolved during startup are not migrated.	1 = True 0 = False Defaults to False	None.
Don't migrate broken startup shortcuts	Do you want to migrate any broken startup shortcuts?	If true, any shortcuts in the startup that cannot be resolved are not migrated.	1 = True 0 = False Defaults to False	None.
Don't migrate any broken shortcuts	Do you want to exclude migrating any broken shortcuts?	If true, any shortcuts that cannot be resolved during the migration are not migrated.	1 = True 0 = False Defaults to False	None.
Move broken desktop shortcuts into a folder	Do you want to move broken shortcuts on your desktop to a folder?	If true, any shortcuts that cannot be resolved during migration are moved into a Broken Shortcuts directory on the desktop.	1 = True 0 = False Defaults to True	None.
File IO buffer size (bytes)	What should the size of the buffer be when working with DNA files?	Larger IO buffer values may increase performance and memory usage.	Defaults to 1048576	None.

Name	Explanation	Comment	Valid Values	Dependency
Free disk space margin (Kb)	How much free disk space will you require to create your DNA file?	Defines the disk space margin necessary to create a DNA file. The DNA file size plus this margin will not be exceeded when creating a DNA file.	Defaults to 64 KB	None.
Free removable-disk space margin (Kb)	How much free removable disk space is required to store your DNA file?	Defines the disk space margin required to create a DNA file on removable media. The DNA file plus the margin is not exceeded when creating the DNA file. The margin is automatically set to 1 KB if the specified margin leaves less than the minimum required spanning size.	Defaults to 1 KB.	None.
Path for Name and Location filters	What is the path to look for specific files or folders to create a Name and Location filter?	This option contains the path to look for specific files and folders when using a Name and Location filter.	Blank	None.
File names for Name and Location Filters	What are the names of the files or folders to create a Name and Location filter?	This option contains the names of files or folders that will be migrated when a Name and Location filter is created.	Blank	None.
Maximum FAT32 file size (MB)	What is the maximum FAT32 file size allowed?	Defines the maximum DNA file size that can be created on FAT32 systems.	Defaults to 4096 MB	None.
Maximum NTFS file size (Mb)	What is the maximum NTFS file size allowed?	Defines the maximum DNA files size that can be created on NTFS systems.	Defaults to 0 (no limit)	None.
Maximum FAT file size (MB)	What is the maximum FAT file size allowed?	Defines the maximum DNA file size that can be created on a FAT file system.	Defaults to 2048	None.

Name	Explanation	Comment	Valid Values	Dependency
Maximum registry value size (KB)	What is the maximum registry value size allowed?	Defines the maximum registry value size that can be created.	Defaults to 64 (KB)	None.
Maximum mapped file size (Kb)	What is the maximum file size for mapped files?	This option only limits the mapping of files exceeding the maximum value. Files exceeding the maximum file size are migrated to the destination machine but not mapped. When large files are mapped, it can affect performance and memory use.	Defaults to 10 KB.	None.
Maximum VSS Timeout (ms)	What is the maximum time in milliseconds after which VSS must time-out?	This option is used to configure the time-out limit for VSS in milliseconds.	Defaults to 120,000 ms	None.
Uncompressible file list	What types of files should not be compressed during the creation of a DNA file.	The uncompressible file list contains file extensions that should not be compressed when creating a DNA file.	File names separated by a pipe '|'. Defaults to: Z|ZIP|RAR|ARJ|ACE|LZH|LHA|CAB|SEA|SIT|GIF|PFB|MP3|MPG|RM|LEX|PNG|PST|*_|	This option is only valid if Compression is turned on.
Path for registry exclusion list	What is the path to the registry exclusion list file?	The registry exclusion list file contains a list of registry items to be excluded from a migration.	Valid path and file name. Defaults to CA DMM reg exclude.dnax.	This option should not be changed unless you have modified the location of the default exclusion list.

Name	Explanation	Comment	Valid Values	Dependency
Path for non-register exclusion list	What is the path to the non-registry exclusion list file?	The non-registry exclusion list file contains a list of files not to be registered during a migration.	Valid path and file name. Defaults to CA DMM Non Register exclude.dnax	This option should not be changed unless you have modified the location of the default non-registry exclusion list file.
Path for DMM memory map	What is the path to save a DMM memory map log?	During the creation of a DNA file, certain file corruptions are detected and a Debug log is written to this location.	Valid path and file name. File name defaults to DNAMemoryMap.log	None.
Path for file exclusion list	What is the path to the exclusion list file?	The file exclusion list contains a list of files to be excluded during a migration.	Valid path and file name. File name defaults to Desktop DNA exclude.dnax	This option should not be changed unless you have modified the location of the default exclusion list file.
Path for NTFS stream exclusion list	What is the path to the NTFS stream exclusion list file?	The NTFS stream exclusion list contains a list of NTFS stream names to be excluded during a migration.	Valid path and file name. File name defaults to Desktop DNA NTFS stream exclude.dnax.	None.
Verify DNA file	Do you want to add the checksum and verify the DNA file?	If true, when a DNA file is created, a checksum is calculated and saved in the file. Upon opening a DNA file, a verification takes place ensuring the file matches the checksum.	1 = True 0 = False Defaults to False This will slow the creation and opening of a DNA file.	None.

Name	Explanation	Comment	Valid Values	Dependency
Virtual memory (Mb)	How much disk space should be available for virtual memory?	CA DMM will not run unless there is at least this much disk space (MB) available on the drive which contains the virtual memory swap file.	Defaults to 100 MB	None.
Don't warn of virtual memory	Do you want the user to be warned if virtual memory runs low during a migration?	If true, a message displays, warning the user that virtual memory space is running low.	1 = True 0 = False Defaults to True	None.
Non-fatal migration errors	What are the Win32 error numbers that if encountered should not abort a migration?	The entered list of Win32 error numbers, if encountered, will not abort a migration.	Valid Win32 error numbers Defaults to 0,2,3,5,30,32,183,206,1005	None.
Use date for script compare	Do you want an error message to display if the script dates are different between the source and destination systems?	If true, when performing a real time migration, a message displays to the user if the source and destination have scripts with different dates.	1 = True 0 = False Defaults to False	None.
Open DNA file with no items selected	Do you want to open a DNA file with none of the items selected?	If true, the DNA file is loaded with no items selected to migrate. This lets you open a template and apply only what is selected in the template (selective apply).	1 = True 0 = False Defaults to False.	Must be used on the destination machine when opening a DNA file.

Name	Explanation	Comment	Valid Values	Dependency
Detect scripts as every selected user	Do you want to detect system and application scripts based on settings for all selected users or only on the currently selected user?	If false, detection for multiuser migration finishes faster on slow systems with the potential of not detecting some user-specific settings in rare cases. Use true to guarantee that all possible settings are displayed. **Note:** Some older scripts might require multiuser detection to function properly.	1 = True 0 = False Defaults to true.	None.
Don't stop Windows Explorer	Do you want to prevent CA DMM from stopping Windows Explorer during migration?	If true, Windows Explorer will not be stopped during the migration.	1 = True 0 = False Defaults to False	None.
Don't restart Windows Explorer	CA DMM may stop Windows Explorer during migration. Do you want to prevent CA DMM from restarting Windows Explorer after the migration is complete?	If true, Windows Explorer will not be restarted after the migration has completed.	1 = True 0 = False Defaults to False	None.

64-Bit Configuration Options

The 64-bit Options table lists the 64-bit configuration options that you can set. These options are applicable only when your destination is 64-bit OS.

Name	Explanation	Comment	Valid Values	Dependency
64-bit Apply	What type of configuration you want to use?	Determines which option to use: **Default:** Includes the following scenarios: *Source: 32-bit OS and Destination: 64-bit OS* -- Applies 32-bit application settings from the source computer to 32-bit applications on the destination (64-bit OS). *Source: 64-bit OS and Destination: 64-bit OS* -- Applies 32-bit application settings from the source computer to 32-bit applications on the destination (64-bit OS). -- Applies 64-bit application settings from the source computer to 64-bit applications on the destination (64-bit OS). **64-bit Only:** Includes the following scenarios: *Source: 32-bit OS and Destination: 64-bit OS* -- Applies 32-bit application settings from the source computer to 64-bit applications on the destination (64-bit OS). *Source: 64-bit OS and Destination: 64-bit OS* -- Applies 32-bit applications settings and 64-bit application settings from the source computer to 64-bit applications on the destination (64-bit OS).	Default 64-bit Both Defaults to the *Default* option.	None.

Name	Explanation	Comment	Valid Values	Dependency
		Both: Includes the following scenarios: *Source: 32-bit OS and Destination: 64-bit OS* -- Applies 32-bit application settings from the source computer to both 32-bit applications and 64-bit applications on the destination (64-bit OS). *Source: 64-bit OS and Destination: 64-bit OS* -- Applies 32-bit application settings from the source computer to both 32-bit applications and 64-bit applications on the destination (64-bit OS). -- Applies 64-bit application settings from the source computer to 64-bit applications on the destination (64-bit OS). **Note:** Migration of 64-bit applications (source) to 32-bit applications (destination) is not supported.		

Real Time Migrations Options

The Real Time Migrations Options table lists the network options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Enable broadcasting	Do you want to broadcast IP addresses on the network when performing a real time migration?	If true, CA DMM broadcasts and searches for other machines available for migration.	1 = True 0 = False Defaults to True	Must be performing a real-time migration.
Enable IPv6 Environment for Multicasting	Do you want to use IPv6 Multicasting to find source computers within the subnet?	If true, CA DMM uses IPv6 Multicasting for IPv6 source computers, else it uses IPv4 for IPv4 source computers.	True or False. Defaults to False.	Must be performing a real-time migration.

Name	Explanation	Comment	Valid Values	Dependency
Broadcast attempt delay	How many milliseconds apart should the broadcasts be spaced?	Defines the number of milliseconds between broadcasts when looking for other broadcasting machines on the network.	Integer Defaults to 1000	Must be performing a real-time migration.
Enable IP address search	Do you want the IP address of the first workstation found broadcasting to be displayed as the source machine?	If true, the destination machine in a network migration searches for other workstations running as sources, the IP address of the first workstation found appears.	1 = True 0 = False Defaults to True	None.
Network version	What version of CA DMM do you want to be able to connect with when performing a real-time migration?	Setting this number restricts the versions of CA DMM you can see as a source machine. For example, the default value is 11000. This means you can connect to source machines that are broadcasting and have the same number in the Network Version option. We do not recommend you change this number.	Defaults to 11000	Must be performing a real-time migration.
TCP port	What port should be used?	Identifies the port to be used when performing real-time migrations.	Integer Defaults to 2763	Must be performing a real-time migration.
UDP port	What port should be used?	Identifies the port to be used when performing real-time migrations.	Integer Defaults to 2763	Must be performing a real-time migration.
Don't warn about firewall protected	Do you want the user warned about Internet Connection Firewall on Windows XP?	If true, a warning message is not displayed to the user before a real-time connection.	True or False. Defaults to True.	None.

Name	Explanation	Comment	Valid Values	Dependency
Real-time compression threshold	Files larger than the threshold will be compressed (if the compression option is enabled) prior to sending the files across the network	Use the default for most cases. If your network bandwidth is low, you may wish lower the compression threshold. If your network bandwidth is high, you may wish to raise the compression threshold	An integer value between 10240 KB (10 MB) and 1048576 KB (1 GB). Defaults to 102400 KB (100 MB)	Compression must be enabled. You can enable the Compression option from the General branch.

Log Options

The Log Options table lists the logging options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Allow modification of log options	Do you want the user to be able to modify log options?	If true, the user can modify the log options set in this options file from the CA DMM user interface.	1 = True 0 = False Defaults to True	None.

The subsections for the DMM logs section include:

- Event Logs (see page 67)
- Manifest Logs (see page 67)
- Undo Logs (see page 71)
- Password Logs (see page 72)
- Debug Logs (see page 73)
- Network Logs (see page 73)

Event Log Options

The Event Log Options table lists the logging options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Create event log	Do you want to create an event log?	If true, creates an event log.	1 = True 0 = False Defaults to true	None.
Create unique event log	Do you want to append a date-timestamp to the name of the event log?	This always creates a unique event log.	1 = True 0 = False Defaults to True	None.
Don't warn of event log overwrite	Do you want the user notified if the event log would overwrite an event log already created?	If true, a warning does not display if an event log overwrite occurs.	1 = True 0 = False Defaults to True	None.
Event log level	What level of detail do you want captured in the event log?	Defines how much detail the event log records.	0 = Error 1= Warning 2 = Information Defaults to Errors	None.
Path to save Event log	Where do you want the event log to be saved?	Defines the directory where the event log is saved.	Valid path and file name. Defaults to: My documents\Logs\%DNA_machine_name%_DNAEvent.log Environment and DMM variables are supported in the path and file names.	None.

Manifest Log Options

The Manifest log is a log file you can create when you perform a migration. It is an XML-based file that captures the detailed contents of a migration. The Manifest log lets you do the following:

- Programmatically or manually verify the contents of a DNA file as part of a quality assurance check
- Record what was migrated into the DNA file and applied from the DNA file onto the destination system

- Import the manifest into a database for reporting purposes or record keeping
- Perform data mining to determine such things as the average amount of space users need to store data (on the hard drive or on a data share), or the amount of files (types and sizes) that are contained on users' systems

Note: For deferred migrations, you can create a manifest log on both the source and destination systems. For real-time migrations, you can create a manifest log only on the destination system. The manifest log captured on the destination systems for both real-time and deferred migrations shows the source path and the destination path for settings and files.

Name	Explanation	Comment	Valid Values	Dependency
Create Manifest log	Do you want to create a manifest log?	Defines if a manifest log will be created. Deferred migrations have a manifest created on both the source and destination. Real time migrations have a manifest created only on the destination.	True or False Defaults to False	None.
Path to save manifest log	Where do you want the manifest to be saved?	Defines the directory and file name where the manifest log is saved. **Note:** During a deferred migration, if you want to save both the source and destination manifest log, you must uniquely name the logs. You can do this by adding the DMM variable for time to the file name. …\Log\\%DNA_Machine_ Name%_%DNA_Time% _DNAManifest.xml.	Valid path and file name. Defaults to …My Documents\ Logs\%DNA_Machine_ Name%_DNAManifest. xml. Environmental and DMM variables are supported in the path and file names.	Manifest Log option must be set to true.

Manifest Log Example

The following is an abbreviated example of a Manifest log of a destination machine for a deferred migration:

```
- <DNAManifest>
   - <DNAHeader>
        <User>Domain or Active Directory\User Name</User>
        <TemplateFile>Path and name of the template file</TemplateFile>
        <StartTime>Date and time the migration is started</StartTime>
       <DNAFile>Path and name of the DNA file in a deferred migration. Not captured
    for a real time migration</DNAFile>
        <StopTime>Date and time the migration is complete</StopTime>
        <TotalAmountMigrated>Total bytes migrated</TotalAmountMigrated>
     </DNAHeader>
    - <MigratedOptions>
      - <Option Name="All user profiles on source machine">
       - This section will detail, in a hierarchy, the options selected for migration
    such as which users, system settings, and applications settings were selected.
        </Option>
      </MigratedOptions>
    - <MigratedDNA>
      - This section will detail each type of DNA migrated. There are two DNA types:
    Registry Value and File. This example is for a destination machine, and shows a
    source and destination path for each DNA type. For a source migration, only the
    source path is captured.
       <DNA Type="RegistryValue">
         <SourcePath>Source path for the registry value</SourcePath>
         <DestinationPath>Path and file name for the destination</DestinationPath>
       </DNA>
      - <DNA Type="File">
          <SourcePath>Source path for the migrated file</SourcePath>
          <Size>File size</Size>
         <DestinationPath>Destination path for the migrated file</DestinationPath>
       </DNA>
     </MigratedDNA>
</DNAManifest>
```

Manifest Log Details

The following table provides details on each field captured in the Manifest log:

Section	Field	Definition
<DNAHeader>	<User>	Domain or active directory\User name of the user logged on to perform the migration. **Example:** <User>Domain 1\Michael</User>

Section	Field	Definition
	<TemplateFile>	Path and file name of the template file used during the migration. **Example:** <TemplateFile>\\Server\TemplateA.dtf</TemplateFile>
	<StartTime>	Date and time the migration was started. **Example:** <StartTime>2003-09-25T14:20:53</StartTime>
	<DNAFile>	Path and file name where the DNA file was stored. **Example:** <DNAFile>\\DataServer\DNA\MichaelsDNA.dna</DNAFile> Real-time migration: Not captured.
	<StopTime>	Date and time the migration was completed **Example:** <StopTime>2003-09-23T14:21:38</StopTime>
	<TotalAmountMigrated>	Total bytes migrated during the migration. **Example:** <TotalAmountMigrated>28749475</TotalAmountMigrated> In a deferred migration, this is the size of the DNA file created, or the amount of data applied to the destination machine. In a real time migration, this is the amount of data applied to the destination machine.
<MigratedOptions>	<Option Name=>	This section details, in hierarchical order, the options selected for migration, including the users selected, the system settings, applications, and files and folders.
<MigratedDNA>	<DNA Type="RegistryValue">	
	<SourcePath>	The source path for the registry value.

Section	Field	Definition
	<Destinationpath>	The destination path for the registry value. This can be a different location if the destination operating system is different from the source operating system. **Note:** The destination path is only captured when you apply the DNA file to the destination system. This field is not captured on the source system.
	<DNA Type ="File">	
	<SourcePath>	Source path for the migrated file.
	<Size>	Size in bytes of the migrated file.
	<DestinationPath>	The destination path for the file. **Note:** The destination path is only captured when the DNA is applied to the destination system. This field is not captured on the source system.

Undo Log Options

The Undo Log Options table lists the logging options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Create undo log	Do you want to create an undo log?	Defines if an undo log is created when a DNA file is applied to a destination machine.	1 = True 0 = False Defaults to True	None.
Allow multiple undo	Do you want to allow the user to perform multiple undos?	Allows multiple undo's to be performed.	1 = True 0 = False Defaults to False	None.
Create unique undo log	Do you want to append a date-time stamp to the name of the undo log?	If true a unique undo log is created.	1 = True 0 = False Defaults to True	None.

Name	Explanation	Comment	Valid Values	Dependency
Don't warn of undo overwrite	Do you want the user notified if the undo log would overwrite an event log already created?	If true, a warning will not display if an undo log overwrite occurs.	1 = True 0 = False Defaults to True	None.
Path to save undo log	Where do you want the undo log to be saved?	Defines the directory where the event log is saved.	Valid path and file name. Defaults to: My documents\Logs\Undo_%DNA_Date%_%DNA_Time%_Migration.exe Environment and DMM variables are supported in the path and file names.	None.

Password Log Options

The Password Log Options table lists the logging options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Path to save assigned passwords log	Where do you want to save the log file that will contain the passwords for new accounts created?	Defines the directory where the DNA Password log file is saved. The password log file is saved for every account created.	Valid path and file name. Defaults to: My documents\Logs\%DNA_machine_name%_DNAPassword.log Environment and DMM variables are supported in the path and file names.	The password log file is only saved if you have defined passwords to be assigned to newly created accounts on the destination machines.
Create password log	Do you want to create a password log?	Specifies whether a password log is created when CA DMM migrates user accounts.	1 = True 0= False Default to true.	None.

Debug Log Options

The Debug Log Options table lists the logging options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Create debug log	Do you want to create a debug log?	Defines if a debug log is created when a DNA file is applied to a destination machine.	1 = True 0 = False Defaults to False	None.
Debug log level	What level of detail do you want captured in the debug log?	Defines how much detail the network log records.	0 = Error 1 = Warning 2 = Information Defaults to Error	None.
Trace debug log	Do you want to create a debug trace log?	If true, all information will go to a debugger trace window as well as to a log file.	True or False. Defaults to False.	None.
Path to save debug log	Where do you want the debug log to be saved?	Defines the directory where the debug is saved.	Valid path and file name. Defaults to My documents\Logs\%DNA_machine_name%_DNADebug.log Environment and DMM variables are supported in the path and file names.	None.

Network Log Options

The Network Log Options table lists the logging options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Create network log	Do you want to create a network log?	Defines if a network log is created when a DNA file is applied to a destination machine.	1 = True 0 = False Defaults to False	None.

Name	Explanation	Comment	Valid Values	Dependency
Network log level	What level of detail do you want captured in the network log?	Defines how much detail the network log records.	0 = Errors 1= Warnings 2 = Information Defaults to Error	None.
Trace network log	Do you want to create a network trace log?	If true, information will be captured and go to a debugger trace window as well as be saved to a log file.	True or False. Defaults to False.	None.
Path to save network log	Where do you want the network log to be saved?	Defines the directory where the network log is saved.	Valid path and file name. Defaults to: …My documents\Logs\%DNA_machine_name%_DNANetwork.log Environment and DMM variables are supported in the path and file names.	None.

Media Options

The Media Settings Options table lists the media options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Spanning	How do you want to handle spanning during the creation of a DNA file?	Determines how CA DMM spans multiple disks, if necessary, during a migration.	0 = Let DDNA configure spanning 1 = Spanning on Defaults to Let CA DMM configure spanning	You cannot create a self-extracting DNA file if you are saving the file to an HTTP path.
Spanning size (KB)	What is the maximum size of a single spanned file?	Determines the maximum size of a DNA file (how much space do you have to create the DNA file?).	Integer Defaults to 2097152	Must have the Spanning option set to 1: Spanning On, then you can specify the maximum size of the files.

Self-Extracting Options

The Self-Extracting Options table lists the self-extracting options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Create a self-extracting file	Do you want to create a self-extracting DNA file?	If true, CA DMM creates a self-extracting DNA file that can be applied to the destination machine without needing CA DMM installed.	1 = True 2 = False Defaults to False	You cannot create a self-extracting DNA file if you are saving it to an HTTP path.
Automatic clean up after self-extracting	Do you want CA DMM to automatically clean up after applying a self-extracting DNA file?	If true, the files that the self-extractor extracts into the temp directory after completion of the migration are cleaned up by the self-extractor.	1 = True 0 = False Defaults to True	Dependent upon Create self-extracting file being true.
Include DMM Library Installer	Do you want to include the DMM library installer in the self-extracting file?	It is necessary to include the library files if you are going to apply the files to some NT-based operating systems.	1 = True 0 = False Defaults to True	Dependent upon Create self-extracting file being true.
Path to self-extracting inclusion file	Where is the self-extracting inclusion file?	This is the path and file name of the self-extracting INI file. This INI file contains directions on the CA DMM components that must be included in the self-extracting file.	Defaults to the default installation path for Desktop Migration Manager\Self Extractor Files\SelfExtractingFile List.ini	Dependent upon Create self-extracting file being true.
Path to template file	What template do you want to use to apply the self-extracting DNA file?	This can be the same template file used to create the self-extracting DNA file or a different template file. On the apply, only the destination section of the template is read.	Valid path and file name. Defaults to blank. Environment and DMM variables are supported in the path and file names.	Dependent upon Create self-extracting file being true.

Name	Explanation	Comment	Valid Values	Dependency
Path to DMM Options file	What options file do you want to use to apply the self-extracting DNA file?	Path and file name of the options file to use when the DNA file is applied.	Valid path and file name. Defaults to blank. Environment and DMM variables are supported in the path and file names.	Dependent upon Create self-extracting file being true. If you want the self-extracting DNA file to be selectively applied (not applying every file or setting in the file), you must set the Open DNA file with no items selected option (located in the Advanced options) and include the file path and name in this option.
Self-extracting command line	What command line do you want to use to apply the self-extracting DNA file?	Indicates the command line to use when applying the DNA file. An example of a command line is: /A "%ThisFile%" /M /Disable "StartSheet" /Disable "SelectSystemSettings" /Disable "ApplicationsSettingsPage"	Valid CA DMM command line. Default value: /M /A "%Thisfile%	Dependent upon Create self-extracting file being true.
Create self-extracting undo file	Do you want to create a self-extracting undo file when a DNA file is applied?	If true, a self-extracting undo file is created when a DNA file is applied to a destination workstation.	0 = False 1 = True Defaults to False	Dependent upon Create self-extracting file being true.
Self-extracting undo command line	What command line do you want to use to launch a self-extracting undo file?	Indicates the command line to use when undoing a migration.	Valid CA DMM command line. Default value: /UNDO "%ThisFile%"	Dependent upon Create self-extracting file being true.

Name	Explanation	Comment	Valid Values	Dependency
Path to self-extracting undo inclusion list	Where is the self-extracting undo inclusion file?	This is the path and file name of the self-extracting undo INI file. This INI file contains directions on the CA DMM components that need to be included in the self-extracting file.	Defaults to the default installation path for Desktop Migration Manager\Self Extractor Files\SelfExtractingUndoFile List.ini	Dependent upon Create self-extracting file being true.

Last Migration Results Options

The last Migration Results Options table lists the results options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Last Template	Path and file name of the last template used.	CA DMM automatically records the last template file used on this machine.	Valid path and file name.	This field is blank if you are using a process created with DMM Director.
Last event log	Path and file name of the last event log created.	CA DMM automatically records the last event log created on this machine.	Valid path and file name.	This field is blank if you are using a process created with DMM Director.
Last undo log	Path and file name of the last undo log created.	CA DMM automatically records the last undo log file created on this machine.	Valid path and file name.	This field is blank if you are using a process created with DMM Director.
Last DNA file	Path and file name of the last DNA file created.	CA DMM automatically records the last DNA file created on this machine.	Valid path and file name.	This field is blank if you are using a process created with DMM Director.
Last IP Address	The IP address of the last machine connected during a real-time migration.	CA DMM automatically records the IP address of the last machine connected during a real-time migration.	Valid path and file name.	This field is blank if you are using a process created with DMM Director.

Crossover Configuration Options

The Crossover Configuration Options table lists the crossover cable connection options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

You must be signed on as an administrator to use the crossover configuration feature.

Name	Explanation	Comment	Valid Values	Dependency
Enable Crossover Attempts	Defines the number of times CA DMM tries to connect directly to a source using a crossover cable.	CA DMM continues to try to connect the destination to the source using the crossover cable for the defined number of times.	Integer between 1 and 45000 Default: 500	Enable Crossover must be set.
Enable Crossover Network	Do you want users to be able to perform real-time migrations between two machines connected with a cross over cable?	Defines if the Crossover configuration menu item is enabled.	1 = True 0 = False Defaults to False	None.
Don't allow prompt for crossover	Do you want the user prompted to connect the source to the destination?	If set to true, a message box displays on the destination prompting the user to connect the two machines.	1 = True 0 = False Default = False	Enable Crossover must be set.

Security Migration Options

The Security Options table lists the group security options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Migrate group memberships	Do you want to migrate the group security when performing a multiuser migration?	If on, any group security associated with a user is also migrated.	1 = On 0 = Off Defaults to On	Must be performing a multiuser migration.
Store NTFS security information	Do you want to store NTFS security information when creating a DNA file?	Defines if file and folder security settings are stored when a DNA file is created.	1 = On 0 = Off Defaults to Off	None.

Name	Explanation	Comment	Valid Values	Dependency
Apply file and folder permissions	Do you want to apply NTFS security information for files and folders?	Defines if file and folder security settings are applied when the DNA file is applied.	0 = Never Overwrite 1 = Always overwrite 2 = Append Defaults to Never Overwrite	Must use with storing the file and folder permission option of On.
Create Local User Accounts (**Note:** Accounts will only be created in a multi-user migration and cannot be undone.)	Do you want to create local user accounts for any users referenced in the NTFS security settings for each file or directory migrated?	If true, CA DMM creates local user accounts for every unknown user account referenced in the NTFS security settings and applies ACE (access control entry). Group creation is not supported as it might create inconsistencies with group membership migration.	1 = True 0 = False Defaults to False	Must use with Apply NTFS Security Information during migration on.
Authenticate Domain User Profiles	Do you want domain user profiles to be authenticated by their domain server?	If enabled, domain user profiles selected for migration will be authenticated by their domain server. If disabled, the domain user profiles will not be authenticated. Accounts cannot be created with this option disabled. The default will disable authentication only in crossover cable migrations, where authentication is likely to cause long delays. You may also want to turn off this option to optimize performance.	Never- Never authenticates Always- Always authenticates Never in crossover cable migration- Disables authentication only when performing a migration through crossover cable. Defaults to Never in crossover cable migration.	None.

Revisions Options

The Revisions Options table lists the revision history options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Max revisions to display in Revision History on fast media	What is the maximum number of revisions to initially display in the Revision History dialog?	Fast media include local hard drives, RAM drives, and network drives.	Any positive integer. Defaults to 50.	None.
Max revisions to display in Revision History on slow media	What is the maximum number of revisions to initially display in the Revision History dialog?	Slow media include CD-ROM drives, cartridge drives, floppy drives, and Web files.	Any positive integer. Defaults to 5.	None.

User Profile Options

The User Profile Options table lists the user profile options that you can set. Boolean values are specified as either 1 (true) or 0 (false).

Name	Explanation	Comment	Valid Values	Dependency
Show orphan account profiles	Do you want users to be able to select orphan account profiles to be migrated?	If true, all user profiles are included in the list of users able to be migrated, even if the user account is not resolved.	1 = True 0 = False Defaults to True	None.
Orphan account profile handling	How should unresolved account profiles be processed during a migration?	Determines how CA DMM processes account profiles for which the user cannot be verified on the network.	1 = Temporarily unavailable 0 = Assume deleted Defaults to Assume deleted (0)	None.

Name	Explanation	Comment	Valid Values	Dependency
Use Microsoft profile naming conventions	Do you want to name the profiles according to Microsoft profile naming conventions for each platform?	When migrating user profiles, the ability to rename the user profile using Microsoft naming conventions or to use a consistent naming convention across operating systems is supported. If you do not use Microsoft naming conventions, the migrated profiles is named %username%.%domain%	1 = True 0 = False Defaults to True	None.
Create roaming user profiles	Do you want to create user profiles as roaming user profiles when migrating to Active Directory?	If true, user profiles are created as roaming user profiles.	1 = True 0 = False Defaults to false	None.
Roaming profile path	Do you want to identify a path to store roaming user profiles?	Defines the base folder path that is used to set the Profile Path user property when creating a roaming user profile in Active Directory. The actual roaming profile path depends on the user name.	Defaults to existing shared paths. An empty path specifies that any create profiles will not set the Profile Path user property.	Must set Create roaming user on.

Name	Explanation	Comment	Valid Values	Dependency
Use existing profiles to resolve user destinations	Do you want to use the account profile information present on disk to resolve user tree destination paths?	Determines whether user destination will use network information and attempt to create missing accounts or restrict itself to using existing profile information only. Redirecting accounts to existing profiles can be used during crossover cable migrations or whenever network resolution is impossible. Destination paths will match against all available existing profiles and will match the first profile with the same user path. Allows for wildcard matching of domain or user name, but not Active Directory organizational units unless the network is accessible. Domain name is not normally resolvable for account profiles without network access, so a wildcard domain match may be required. If only a user name is provided, then only local user account profiles will be used to resolve the destination path.	True or False. Defaults to False	None.

Data Protection Options

The Data Protection Options table lists the level of protection for your data and provides you the option to encrypt the DNA/Self-Extracting file and the data exchanged in a real-time migration. Encryption is done using the AES (Advanced Encryption Standard) 192 encryption algorithm.

Name	Explanation	Comment	Valid Values	Dependency
Data Protection Level for Deferred Migration	How do you want the DNA file to be protected?	States the level of protection to use when storing user data to a DNA file.	None Quickest Safe Safest Defaults to *None*	For the Quickest and Safe options, you must provide a password either in the UI or in the command line. For the Safest option, you must provide an encryption key either in the UI (FIPS Key Path field) or in the command line.
FIPS Key Path	This FIPS key is used to encrypt the data while creating the DNA file.	Provides the path of the key used to encrypt the data in the safest mode of encryption.	Valid file path	Safest mode of encryption must be selected.
Enable Encryption Key Recovery	Do you want to recover the key used for encryption, if lost?	CA DMM stores the encrypted key in the DNA file to recover the key on request.	True or False Defaults to False	Needs a public key for the encryption of the password.
Public Key Path	This public key is used to encrypt the password while creating the DNA file.	Corresponding private key must be available for recovery.	Valid file path	None
Encrypt the data transferred over the network during a real-time migration	Do you want the data transfer over the network to be encrypted during a real-time migration?	States whether the data transfer during a real-time migration is encrypted or not.	True or False Defaults to False	None

Note: If you select the encryption option while capturing the settings and then use the CA Merger and Acquisition Tool to perform the migration, you need to make sure that you have entered the key path in the DMM Options file. If the tool does not find the key path in the DMM Options file, the tool stops the migration without displaying any error message. The reason is that the CA Merger and Acquisition Tool performs the migration in the silent mode and hence cannot prompt for the key path. However, the following error message is logged in the log file to specify that the migration has failed because of the non-availability of the key path in the DMM Options file:

Creation failed for "<DNA File Name>": No encryption key is available. A well-known encryption key was returned.

Merger and Acquisition

The Merger and Acquisition option lets you specify the time in minutes you want to wait for to start the migration after CA Merger and Acquisition Tool is relaunched.

Name	Explanation	Comment	Valid Values	Dependency
Windows Registry NTFS Security Mapping	Do you want the NTFS security permissions mapping to be done for registry?	You may turn off the NTFS security mappings for registry to improve the performance if none of the registry keys have user-specific security permissions set. However, it is recommended that you do not turn it off if user-specific security permissions are present.	True or False Defaults to False	None.
Wait Time at Relaunch (in minutes)	How much time do you want to wait for the migration to start after Merger and Acquisition Tool is relaunched?	Sometimes the computer may take some time to contact the domain after restart, wait time depends on this.	Defaults to 3.5	None.

Chapter 8: Verifying DNA Files using the Command Line

This chapter describes using the command line to verify the DNA files both quickest and surest.

Command Line Syntax

The syntax for running a command line is:

"*installation path*\DNAExplorer.exe" /switch [DNA file path]"

Verify a DNA File Using the Command Line

You can verify the DNA files to detect a possible DNA file corruption.

To verify a DNA file using command line, open the command prompt and type the following command:

installation path\DNAExplorer.exe [/VQ|/VS] [/X] <DNA file path>

/VQ (Verify Quickest)

Attempts a basic open and also performs a checksum test on DNA files that were created with checksum information.

/VS (Verify Surest)

performs the same tests as /VQ and in addition verifies all file records stored in the DNA file to further ensure data integrity.

/X

Exits DMM Explorer after verification and returns any error resulting from the attempt to open the file given on the command line as the application's return code. A zero return code indicates success and any non-zero value indicates a Win32 error code.

Examples:

DNAExplorer.exe /VQ "c:\myFile.dna"

DNAExplorer.exe /VS /X "c:\myFile.dna"

DNAExplorer.exe /?

Chapter 9: Batch and Wrapper Files

A template lets you customize and automate migrations for the different departments in your company or for specific individuals.

The DMM Template Editor is a powerful tool that provides the capability to simplify the reusing of migration settings. It also lets the administrator create a migration template without being on the machine to be migrated.

Use the CA DMM wizard to create a template. If you want to save a template without migrating, you can go directly to the File menu and select the Save Template menu item after specifying settings and destinations in the Settings and Destinations tab pages.

You can also create and edit templates using the DMM Template Editor.

A list of templates displays in the Select a Template File page in the user interface for easy selection by a user. The default location from which the template list will be built is the My Documents directory of the local machine.

If there are no templates in the default path (local My Documents folder), the DMM Options file or DMM Template Editor (in the Search Paths for Template Files field), the Template page does not display.

If the Open a Template File page is not displayed, to open a template, you must have completed the steps in the Start tab; either be connected to the source system or have opened a DNA file. When the template is loaded, you can proceed directly to the Migrate tab page and begin the migration.

To save the current template, select the Save Template File menu item, and in the Save As dialog, specify a file name for the template.

Note: The file extension for the template must be .dtf.

Automation: Batch and Wrapper Files

Batch migration is the best method for mass upgrades, deployments and migrations, because it lets you integrate CA DMM with some other processes you may need as part of your migration. In some cases you may need more control or may require dynamically changing settings as part of the migration. You can do that by modifying any options file manually using a text editor, or programmatically using the ATL COM interface.

All settings can be set programmatically by a wrapper application, including all logs locations and levels.

Wrapper or batch files may be used to find the last template, DNA file, and IP connection for a migration. To do this and retain a unique record of each migration for processing or applying the DNA file, you need to copy the default options file for each migration.

DMM settings can be stored statically in the DMM Options file (DNAOptions.xml). The options file is an XML file that defines the CA DMM default behavior.

You can customize the default options file using a text, or XML editor and can place it in a location accessible by the wrapper. The wrapper should copy the file to a folder that is unique for the migration. The wrapper then calls CA DMM with the /O switch along with the name and path for the unique batch file for the migration. To do this, use the following command line option:

```
/OPTIONSFILE [/O] D:\XML file path\XMLfileName.xml
```

CA DMM uses this XML file for all operations. Any items that get written back to the XML file (last template file, last DNA file, last IP address) are saved after the migration is completed. When CA DMM has finished, the wrapper may get any information that is needed from the XML file using the same mechanism that was used to populate the file (ATL COM object).

Using the ATL COM object for accessing an XML file, the wrapper can push or pull any necessary information to or from the XML file.

Programmatic Access to the DMM Options File

You can programmatically access and manipulate options in a DMM Options file.

DNAXMLAccess.dll is an ATL COM DLL that supports the IDispatch interface. This enables the component to be called directly from a Visual Basic program or any script language that supports ActiveX controls. Some examples of member functions used in this access are shown following:

- Open the file specified by bstrFile for access. The file must be a valid DMM Options file in the form of DNAOptions.xml.

  ```
  HRESULT SetFile([in] BSTR bstrFile);
  ```

- Add or replace the string option specified by bstrOption to the value bstrValue.

  ```
  HRESULT SetStringOption([in] BSTR bstrOption, [in] BSTR bstrValue);
  ```

- Retrieve the string option specified by bstrOption.

  ```
  HRESULT GetStringOption([in] BSTR bstrOption, [out, retval] BSTR* bstrValue);
  ```

- Add or replace the Boolean option specified by bstrOption to the value fValue.

  ```
  HRESULT SetBoolOption([in] BSTR bstrOption, [in] VARIANT_BOOL fValue); [out,
  retval] VARIANT_BOOL* fValue);
  ```

- Retrieve the Boolean option specified by bstrOption.

  ```
  HRESULT GetBoolOption([in] BSTR bstrOption,
  ```

- Add or replace the integer option specified by bstrOption to the value lValue.

  ```
  HRESULT SetIntOption([in] BSTR bstrOption, [in] LONG lValue);
  ```

- Retrieve the integer option specified by bstrOption.

  ```
  HRESULT GetIntOption([in] BSTR bstrOption, [out, retval] LONG* lValue);
  ```

Visual Basic Example:

- To access a DMM Options file using Visual Basic (pseudo code):

  ```
  REM Create the CPM object for accessing
  Options file
  DIM XMLAccess As CNAXMLAccessor
  Set XMLAccess = New DNAXMLAccessor

  REM Set the file to use for subsequent
  XML calls, use the file path you copied above.
  XMLAccess.SetFile
  "c:\SomeFile\Path\To\MigrationSpecific\
  XMLFile.xml"

  REM Set any options that need to be customized for this migration
  REM BOOL, INT, and STRING options are set like this:
  XMLAccess.SetBoolOption "Network log
  ```

- To access a DMM Options file when the command line exceeds the 255-character limit:

```
XMLAccess.SetStringOption "command line",
"/D" "c:\MyDNAFile.DNA" "/T"
"C:\MyTemplateFile.dtf"" /M /X"
```

- To use Get* calls to the options file to retrieve post-migration data:

```
REM Get any options that need to be retrieved after this migration
REM BOOL, INT, and STRING options are retrieved like this:
Dim StringVal As String
DIM BoolVal as Boolean
Dim IntVal As Integer
BoolVal = XMLAccessGetBool-Option("Network log enabled?')
StringVal = XMLAccess.GetStringOption("Network log level")
```

File Types

CA DMM creates a number of file types, such as DNA files and log files, whether in the process of using the wizard, or when you are using its advanced automation features. Advanced users can also create files that can be used by CA DMM such as templates, script files, or Windows batch files.

Different file types created or used by CA DMM are described in the following table. In the table, C:\ indicates the Windows start up drive.

File Type	Default Location	Extension	Description
Executables	*installation path*	.exe	CA DMM and DMM tool executables
Scripts (compiled)	*installation path*\Application Scripts i*installation path*\System Scripts	.dnajso	Compiled CA DMM scripts distributed with the software.
Scripts (uncompiled)	No default	.dnajs	Uncompiled (editable or custom) scripts.
Settings File	*installation path*\Settings.xml	.xml	XML file.
Options File	*installation path*\DNAOptions.xml	.xml	XML file containing DMM options.

File Type	Default Location	Extension	Description
Template Files	My Documents folder	.dtf	Template files specifying CA DMM settings and destination information that will be migrated.
DNA Files	My Documents folder	.dna	DNA files containing all migrated information, including data, settings, and application settings.
Event Log Files	*installation path*\Logs	.log	Saved as: \%DNA_User_Name%_DNAEvent_%DNA_Date%DNA_TIme%.Log Event log files contain events that occurred during a migration.
Debug Log Files	*installation path*\Logs	.log	Saved as: \%DNA_User_Name%_DNADebug_%DNA_Date%DNA_TIme%.Log Debug log files contain very detailed information about a migration.
		.hdr	CA DMM header file.
Self-extracting DNA Files	My Documents folder	.exe	Files created by CA DMM as self-extracting files, meaning they can execute a migration without CA DMM being installed on the destination system.

Chapter 10: Printer Migration

CA DMM supports migration of printer configurations from the source machine to the destination machine during a desktop migration.

The printer migration is supported in CA DMM by the following files located in the installation directory:

File	Folder
DNAPrinter.dll	Script Extensions
DNAScriptExtension.dll	Script Extensions
Printers.dnajso	System Scripts

DNAPrinter.dll

The DNAPrinter.dll file contains all the necessary code for adding drivers, and reconnecting local and network printers.

As *n* network printers need to be set up after any network settings migration because the migration of network settings may change the network conditions. Because of this situation, any failed installation must be run again after a restart. To accomplish this, the DNAPrinter.dll file is copied to each migrated user's Temp directory and is executed (using a RunDLL32.exe that is included in every version of Windows) from there on restart.

The DNAPrinter.dll file is located in the directory where CA DMM is installed in the Script Extensions folder.

DNAScript

The DNAScriptExtension.dll file contains the code necessary for migrating the printer drivers that are not supported by the scripting language (such as retrieving the location of the users Temp directory). This is a general script extension DLL that is used by many scripts.

The DNAScriptExtension.dll file is located in the directory where CA DMM is installed in the Script Extensions folder.

Printers.dnajso

The Printers.dnajso file is available in the System Scripts folder where CA DMM is installed. It contains the base code for migrating drivers and running the installation process if necessary.

Printer Logging Messages

CA DMM returns Event Log messages. Event messages are written after a migration is complete if an issue occurs during the migration.

If an issue occurs that is not the result of a message, a Debug log is the best means of troubleshooting the printer migration.

Migrate Network Printers on Windows 7 or Windows 8

Before you migrate the network printers on Windows 7 or Windows 8 computer, you must modify certain security settings on the destination computer.

Follow these steps:

1. Ensure that the user on the destination computer has access to the network printer server that you are migrating.
2. Open command prompt and run **gpedit.msc**.
3. Click Local Computer Policy, Computer Configuration, Administrative Templates, Printers.
4. Double-click the Point and Print Restrictions option in the right pane.
5. Select the following options in the Point and Print Restrictions dialog.
   - Select the Enabled option.
   - Under Options, Security Prompts, select "Do not show warning or elevation prompt" for the following options:
     - When installing drivers for a new connection
     - When updating drivers for an existing connection),
6. Save the changes.
7. In the command prompt, run the following command:

   ```
   gpupdate /force
   ```

   Note: If the update fails, remove your machine from the domain, add it to the domain, and try again.
8. Restart your computer after the update is successful.

   You can now migrate your network printer to the destination computer.

Chapter 11: Web Update

Web update lets you automatically download script updates if you have an active Internet connection.

This feature can be launched from two locations:

- From the Help menu, choose Web Update
- Follow the Start menu path and choose Web Update

Scripts can change to include more system and application settings, support new versions of applications or new applications. To update the application and system scripts, CA DMM must be installed.

Chapter 12: Network Access

You can access CA DMM from a network location when performing migrations manually or in an automated process.

The machines that will be accessing CA DMM from a network location must have the following components already installed, or installed as part of the process before running CA DMM:

Required Components	Minimum Version
Internet Explorer Version	4.72.3110.0
msxml3.dll	8.0.5226.0
oleaut32.dll	2.40.4275.1
mfc42.dll	6.0.8665.0
msvcrt.dll	6.1.8637.0

Chapter 13: Third-Party License Acknowledgements

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