**10**

**Capabilities**

**Chapter Contents章节内容**

Overview概览 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10-1

Required Capabilities . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10-3

Capabilities in Categories of Functionality . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10-3

The Capability ListingsCapability列表. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10-12

**Overview概览**

Sources *may* support a large number of capabilities but are *required* to support very few. To

determine if a capability is supported by a Source, the application can query the Source using a

DG\_CONTROL / DAT\_CAPABILITY / MSG\_GET, MSG\_GETCURRENT, or MSG\_GETDEFAULT operation. The application specifies the particular capability by storing its identifier in the Cap field of the TW\_CAPABILITY structure. This is the structure pointed to by the pData parameter in the DSM\_Entry( ) call.

源可能支持大量的capabilitys，但是被要求必须支持的仅是一小部分。为了获知一个capability是否被源所支持，应用程序可以用过DG\_CONTRL/ DAT\_CAPABILITY/MSG\_GET,MSG\_GETCURRENT，或者MSG\_GETDEFAULT操作来查询Source。应用程序通过在TW\_CAPABILITY结构中的Cap字段中保存标识符来指明一个特定的capability。这个结构被DSM\_Entry（）函数的pData指针所代表。

DG\_CONTROL / DAT\_CAPABILITY operations for capability negotiation include:

DG\_CONTROL/DAT\_CAPABILITY操作包括：

MSG\_GET Returns the Current, Default and Available settings for a capability.

返回一个capability当前的，默认的和可用的设置。

MSG\_GETCURRENT Returns the Current setting for a capability.

返回一个capability当前设置。

MSG\_GETDEFAULT Returns the value of the Source’s preferred Default values.

返回Source推荐的默认设置的值。

MSG\_RESET Returns the capability to its TWAIN Default (power-on) condition

(i.e. all previous negotiation is ignored).

返回（设置）capability成TWAIN默认。（所有之前的negotiation都将被忽略）

MSG\_RESETALL Returns all of the current values to the default settings used when the

driver was first installed.

返回（设置）所有当前的值成默认（当驱动第一次被安装时）。

MSG\_SET Allows the application to set the Current value of a capability.

允许应用程序设置一个capability的当前值。

MSG\_SETCONSTRAINT Allows the application to set the Current and Default value(s) and

restrict the Available values to some subset of the Source’s power-on

set of values. Sources are strongly encouraged to allow the

application to set as many of its capabilities as possible, and further to

reflect these changes in the Source’s user interface. This will ensure

that the user can only select images with characteristics that are

useful to the consuming application.

允许应用程序设置当前值和默认值，将可用的值限制在源的某个子集上

一组值。强烈建议源允许应用程序设置尽可能多的capabilitys，并且将其改变反应在源用户接口中。这将确保用户只能选择对目的程序有用的 图像。