

### Introduction

Wacom STU Display is an application for displaying a set of images as a slideshow on a Wacom STU tablet. Tablets currently supported are STU-300, STU-430, STU-500, STU-520 and STU-530.

The purpose of this guide is to provide general information on how to install and configure STU Display, and instructions on how to configure STU Display for use in network environments.

### Installation

The Wacom STU Display installer combines the Wacom STU Display installer with the colour driver needed for the STU-520 and STU-530. Available installation options can be displayed by running the installer with the /? or /help option.



For a silent, unattended installer operation, the following command is recommended:

Wacom-STU-Display-1.1.0.exe /quiet /norestart

This will install Wacom STU Display, and a 32- or 64-bit driver for bulk data transfer with STU-520/530.

Note: a driver is not required for STU-300, STU-430 or STU-500.



### **Customization**

The Wacom STU Display application consists of the following portions:

- 1. Windows Service Wacom STU Display (wgssStudSvc.exe)
- 2. Windows Control Panel Wacom STU Display (wgssSTUDCPL.exe, wgssSTUDCPL.dll)
- 3. Folders containing sample images for each supported tablet

The Wacom STU Display Control Panel can be used to customize STU Display settings.

🔟 Wacom STU Display 💼 🗉 💽			
Generic STU	-300 STU-430 STU-500	STU-520 STU-530	
Folder: Layout Size: Border: Position:	C:\Users\Public\Pictures\W Best fit Auto	acom STU Display\	
Change image every 5 seconds			

Changing settings requires clicking the *Change* button. That will initiate the UAC prompt for elevated privileges. If you are a member of the local administrator group you should simply have to select continue, otherwise you need to enter the administrative password.

Note: the control panel cannot be used to select an image folder on a network or removable drives, because that requires the Wacom STU Display Service to run under a user with (domain) network credentials. Please see the section *Installation and configuration for network operation* below for further information on this.

#### Customizing images

By default, the sample images folders are created under the following folder on the local machine:

- Windows XP: %ALLUSERSPROFILE%\Documents\My Pictures\Wacom STU Display
- Windows 8, 7, Vista: %PUBLIC%\Pictures\Wacom STU Display

Included sample images can be replaced by your own, custom imagery. Ideally, images will be provided in the following resolutions and color depths (images provided in other sizes or color formats will be converted by STU Display):



Tablet	Sub folder name	Resolution (color depth)	
STU-300	STU300	396 x 100 (1 bit)	
STU-430	STU430	320 x 200 (1 bit)	
STU-500	STU500	640 x 480 (1 bit)	
STU-520	STU520	800 x 480 (24 bit)	
STU-530	STU530	800 x 480 (24 bit)	

### Network deployment and configuration

The installation and configuration of STU Display for network operation is carried out in the following steps:

- 1. Installation of software on client computers as described above
- 2. Configuration of STU Display service for network operation
- 3. Deployment of STU Display settings

#### Configuration of Wacom STU Display Service for network operation

When the *Wacom STU Display* Service is installed, it starts under the *LocalService* account. In most cases the permissions provided by the *LocalService* account are adequate for the normal function of Wacom STU Display. In some cases it may be required to run the STU Display under a different account, such as to allow access to network. This would be the case if you are planning to centrally maintain the images folder on a network share / mapped drive for all users of STU Display.

It is not recommended to use the *Local System* account, as it is a very high-privileged built-in account. It has extensive privileges on the local system and acts as the computer on the network. Instead, it is recommended to create a dedicated domain user account under whose credentials the service will be executed. Further information on that is provided on the following websites:

Windows Server 2003: <u>http://technet.microsoft.com/en-us/library/cc739458%28v=ws.10%29.aspx</u> Windows Server 2008 R2: <u>http://technet.microsoft.com/en-us/library/dd548356%28WS.10%29.aspx</u>

Note: If the STU Display service (wgssStudSvc.exe) cannot access image files, for example, if a network path is configured, which is not accessible by the service because it's running under default credentials, the following error will be logged in the Windows Application log:

#### system\_error exception in WacomGSS::STUD::ImageList::readDirectory std::system\_error FindFirstFile

In this case, make sure that the user under whose credentials the service is executed has sufficient privileges to access the network folder containing the image files.



#### Deployment of STU Display settings

The STU Display Control Panel writes option settings to the following key Windows Registry. These are created under the following key:

[HKLM\SYSTEM\CurrentControlSet\services\STUDSVC\Parameters]

#### The following settings are available:

CPL Option	Description	Registry value	Data type	Data type in .reg
Change	Changes image every	Update	REG_DWORD	dword
image time	N msec (dec)	Time		
Folder	Determines path to	Folder	REG_SZ	string
	generic images folder			
	(network paths must			
	be accessible by			
	Service)			
Size	Image sizing, hex	Scale	REG_DWORD	dword
	(dec):			
	stretch = 0 (0)			
	best fit = $1(1)$			
	original = $2(2)$			
Position	Image position, hex	Clip	REG DWORD	dword
	(dec), applies only if	-	_	
	scale = 2:			
	$T_{op} \left[ off - 0 (0) \right]$			
	Top = 1 (1)			
	10p - 1(1) Top right - 2(2)			
	10p  fight = 2 (2)			
	Let $I = 10 (10)$			
	Piabt = 11(17)			
	Right = 12 (18)			
	Bottom left = $20(32)$			
	Bottom = $21(33)$			
	Bottom right = $22(34)$	Develop		ale e co al
Border	Color of border	BOLGEL	REG_DWORD	awora
	around image, nex			
	(dec):			
	auto = n. s.			
	black = <i>0 (0)</i>			
	white = <i>1 (1)</i>			



Size, position and border can be changed individually for each supported tablet. In this case, one or more subkeys for the tablet(s) to be supported can be created, which may contain the same values specified above, except for the update time, which applies globally to all tablets.

Tablet	Key name
STU-300	[HKLM\SYSTEM\CurrentControlSet\services\STUDSVC\Parameters\STU300]
STU-430	[HKLM\SYSTEM\CurrentControlSet\services\STUDSVC\Parameters\STU430]
STU-500	[HKLM\SYSTEM\CurrentControlSet\services\STUDSVC\Parameters\STU500]
STU-520	[HKLM\SYSTEM\CurrentControlSet\services\STUDSVC\Parameters\STU520]
STU-530	[HKLM\SYSTEM\CurrentControlSet\services\STUDSVC\Parameters\STU530]

If you'd like to configure standard settings for all machines running STU Display, you can deploy these settings as follows:

- Create a startup or login script to add a .reg file (syntax: "regedit <filename> /s"), see <u>http://technet.microsoft.com/en-us/library/cc770556.aspx</u> for details
- Create a Group Policy Object to deploy custom settings via .adm template, see <a href="http://technet.microsoft.com/en-us/magazine/2008.01.layout.aspx">http://technet.microsoft.com/en-us/magazine/2008.01.layout.aspx</a> for details

#### Examples

Below examples show a .reg file and an .adm template. These set the image update time to ten seconds, determine a UNC path to a network folder containing the images to be displayed, and configure the STU Display Service to show images with its original size centered on the display surrounded by a white frame. These settings apply to all tablets.

```
; Registry Template for Wacom STU Display
Windows Registry Editor Version 5.00
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\STUDSVC\Parameters]
"Update Time"=dword:00002710
"Folder"="\\\\192.168.0.1\\Pictures\\Wacom STU Display"
"Scale"=dword:0000001
"Clip"=dword:0000001
"Border"=dword:0000001
```

```
; ADM Template for Wacom STU Display
CLASS MACHINE
CATEGORY "STU Display"
```



```
POLICY "Parameters"
  KEYNAME SYSTEM\CurrentControlSet\services\STUDSVC\Parameters
   PART "Update Time" NUMERIC
   VALUENAME "Update Time"
    DEFAULT
    END PART
    PART Folder EDITTEXT
   VALUENAME "Folder"
    DEFAULT "\\192.168.0.1\Pictures\Wacom STU Display"
    END PART
    PART Scale NUMERIC
    VALUENAME "Scale"
    DEFAULT 1
    END PART
   PART Clip NUMERIC
    VALUENAME "Clip"
    DEFAULT 17
    END PART
   PART Border NUMERIC
   VALUENAME "Border"
   DEFAULT 1
    END PART
  END POLICY
END CATEGORY
```