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Avatar Signature Module

Introduction

The Avatar Signature Module can be utilized by any application running RADplus version 2006 or higher.

The Signature Module provides the ability to capture signatures within user-defined options. The user can add signature data elements to the user-defined option through the Table Definition option. The signature pad is used to input the signature into the data element.

On the larger 4x3 displays, the user can add a message (limit 4 lines) that displays in the Signature Screen as well as the Signature Pad.

Some product options can have signature fields added through Site Specific Tab Modeling. For example: Client Treatment Plan and Progress Note options.

This release of Avatar Signature Module supports the following Topaz models:

- **SignatureGem 4x3 LCD T-LBK755**
  - T-LBK755-BHSB-R -- This is a dual Serial/HSB/USB pad for use in thick- and thin-client environments.

- **SignatureGem 1x5 LCD T-LBK462**
  - T-LBK462-HSB-R -- This is an HSB/USB pad for use in thick- and thin-client environments.
  - T-LBK462-BSB-R -- This is a BSB/USB pad for use in Citrix and Terminal Services (thin client) environments.

- **SigLite 1x5 LCD T-LBK460**
  - T-LBK460-HSB-R -- This is an HSB/USB pad for use in thick- and thin-client environments.

- **SigLite 1x5 T-S460 (non-LCD)**
  - T-S460-HSB-R -- This is an HSB/USB pad for use in thick- and thin-client environments.
  - T-S460-B-R -- This is a serial pad for use in Citrix/Terminal Services environments as well as thick-client environments.

**Note** While other models may work with Avatar, they were not tested for compatibility and support cannot be guaranteed. For additional information regarding any of the tablets listed above, or for assistance in determining the best model for use in your clinical environment, please visit the Topaz website at: www.topazsystems.com
What's new in Version 4

Customize Signature Pad Display

Avatar Signature version 4.x provides the ability to customize the display to create a larger signature capture area. This can be done by either removing the OK and Cancel buttons completely:

X

or by using the new display template to enlarge the signature area and move the Cancel and OK buttons to prevent accidental triggering:

CANCEL OK

This customization can be done on the following tablets:

- SigLite LCD 1x5 (T-LBK460-HSB-R)
- SignatureGem 1x5 LCD (T-LBK462-HSB-R and T-LBK462-BSB-R)
- SignatureGem 4X3 LCD (T-LBK755-BHSB-R)

Note: The display can be enlarged and the buttons repositioned on the 4X3 display; the buttons cannot be removed completely on this display.

To customize the tablet display:

1. Locate the \Program Files\Netsmart directory on the workstation, or on the server for Citrix or Terminal Services environments.

2. If the SigPlus.ini file is not found, copy the file from the \Windows directory. In Terminal Services environments, copy the file from one of the user profiles.

3. Open the SigPlus.ini file in Notepad and add one or more of the following to the bottom of the [TABLET] section:
   a. TabletTemplate1X5=NoButtons (to remove the OK/Cancel buttons on the 1X5 LCD screen)
   b. TabletTemplate1X5=NewDisplay (to enlarge the signature area by moving the OK/Cancel buttons above the signature box on the 1X5 LCD screen.
   c. TabletTemplate4X3=NewDisplay (to enlarge the signature area by moving the OK/Cancel buttons above the signature box on the 4X3 screen.)

4. Save and close SigPlus.ini.

If you are using this in a thin-client environment such as Citrix or Terminal Services, make this change in the SigPlus.ini file found in the \Program Files\Netsmart directory on the server. The change affects all LCD pad users and it is not necessary to change any other files.
If you are using this in a local environment (ie, not utilizing Citrix or Terminal Services), copy the SigPlus.ini file to the \Program Files\Netsmart folder and make the changes indicated in Step 3 above. The change affects only the local computer/workstation.

- The SigPlus.ini file must exist in the \Windows directory for local environments.

**Debugging log**

If you are experiencing problems with Avatar Signature or the Topaz pad, it is recommended that a debugging log be created to help in diagnosing the problem.

To enable the debugging log feature:

1. Create a blank file with the following file name:
   
   DebugSignature.txt

2. Save the file to the applicable location:
   
   - When running locally (thick-client), the file must be located in the \Windows directory. This will activate debugging for all users of this workstation only.
   
   - When running on Citrix or Terminal Services (thin-client), the file must be located in the \Windows directory that the user is mapped to; this is typically the user’s profile directory. This will activate debugging for all users who are mapped to this location.

Once activated, a debugging log is created in the same location that the DebugSignature.txt file was placed in, and has the following file name:

   DebugSignature_%userid%_MMDDYYYY.log

where %userid% is the ID of the user who was logged in and created the log, and MMDDYYYY is the date that the log was created.

A new log is created for each day and each user for which the feature is activated. Records are appended to the current log for the same date/user. It is recommended that the debugging feature be deactivated when no longer needed, as it continues to generate logs and consume disk space.

To deactivate the debugging log feature, simply delete or rename the DebugSignature.txt file. Debugging logs are not required for running Avatar Signature and should only be utilized to resolve specific problems.
Avatar Options Modified

Prerequisite

- The Signature functionality is for Avatar systems running on RADplus version 2006 or higher.
- Valid license key from Netsmart is required.

The following Avatar options are modified to support the Signature Module:

System Security Defaults

System Security Defaults are defined in RADplus Utilities and are used to set various system password parameters such as password length, password validity time limit, password deactivation on login failure, and the number of login failures to allow before deactivation. The following two fields are available in the System Security Defaults option:

- Enable Signature Pad Support
  
  Yes enables the Signature Pad Support function and displays a License Key Screen for entering the Signature Support license key information. The license information is case sensitive and must be entered exactly as displayed in the license key document. Incorrect license information prohibits activation of the Signature Pad function.

- Signature Timeout in Seconds
  
  This field displays after entering the licensing information and enabling the Signature Pad Support function.

  Type the default number of seconds to allow for correct signature input. When an option requires a signature before filing, the Signature Pad displays. If a signature is not entered and validated prior to the define timeout, the pad is disabled, preventing filing of the option.
Enable Avatar Signature Module

To enable the Signature Module in Avatar:

2. Click Yes in the Enable Signature Pad Support field to display the License Key screen.
3. Enter the Customer name and license key in the applicable location. License and key information is case sensitive and must be entered exactly as displayed in the license key document supplied with the module.
   
   The license and key information is only required the first time the signature module is enabled. The functionality can be enabled and disabled at any subsequent time without the need to re-enter this information.
4. Click OK in the dialog box to display and enable the Signature Timeout in Seconds field in the System Security Defaults option. Type the number of seconds to allow for signature before timing out the signature pad.
5. Click to save the settings.

Table Definition

The RADplus Modeling, Table Definition option has been modified to include the Signature field as one of the selections in the Type of Column field. Adding the Signature field to a user-defined option allows a user to record a signature and store it within a binary storage table associated with the option.

To use the Signature field:

1. Click Get Signature within the data element to enable the Signature Pad and display the Signature Screen.
2. Sign the signature pad in the appropriate area and tap OK. The signature displays within the Signature field.

   Note: Tapping Cancel on the signature pad, or clicking Cancel in the signature screen disables the pad and closes the screen.
3. Click File Data to save the data with the signature in the associated tables for the user-defined option.

Site Specific Tab Modeling

Prerequisites

1. RADplus Version 2006 or higher.
2. CWS 2004 with Enhancement 71 or CWS 2010.
3. Avatar Signature Module enabled.
4. Must be in the Build environment for the selected option.

Adding or creating a Signature Data Element to Avatar is accomplished using the RADplus Utilities Modeling option. This option increases the functionality of all Avatar products by providing a facility with the tools required to create custom options for inclusion in the Avatar application.

A Signature data element can be added to any user-defined option. This data element allows the user to use the signature pad to capture a signature and store it with other option related data.

Refer to the RADplus Utilities online help for information on using the Modeling option.
Installing Avatar Signature

Installation procedures are dependent on the networking environment in use (i.e., thick-client or Citrix/Terminal Services.)

Please follow the procedure appropriate for your environment:

Thick-Client

Thin Client using BSB Signature Pads

Thin Client using Serial Signature Pads

Installation in Thick Client Environments

The following HSB and serial model tablets are supported with Avatar in a thick-client environment:

- SignatureGem 4x3 LCD
  T-LBK755-HSB-R
- SignatureGem 1x5 LCD
  T-LBK462-HSB-R
- SigLite 1x5 LCD
  T-LBK460-HSB-R
- SigLite 1x5 (non-LCD)
  T-S460-HSB-R
  T-S460-B-R

A thick-client environment is a client-server environment where the local [client] computer can perform some functionality independent of a central server.

Applications must be installed on the local [client] computer in a thick-client environment.

To use the Signature functionality in a thick client environment, the signature pad drivers must be installed on every workstation where a signature pad is connected. Signature related processes cannot be performed without these drivers. There are two drivers requiring installation:

AvatarSignature.exe

- Locate the AvatarSignature.exe file on the Signature Module Installation CD and double-click to open.

  This installation requires Administrator rights to the workstation. An MSI file is also provided on the Avatar Signature module installation media for use when installing remotely via network tools such as Microsoft SMS.

  The installation runs in the background and does not require user input. To verify that installation was completed, open the Windows Add/Remove Programs dialog and look for the Avatar Signature program.

SigPlus.exe

1. Locate the sigplus.exe file on the Signature Module Installation CD and double-click to open. This file can also be found on the Topaz CD, minimum version 3.74.

2. Click Next on the Welcome screen, and Next on the Read Me File screen.
3. Click Next to accept the Destination Folder shown, or click Browse to select a different location.

4. Select the workstation’s operating system and click OK.

5. Select the Signature Pad to use and click OK.
   
   Signature Pads are easily interchangeable and can be reselected at any time.

6. Select the connection type and click OK.

7. Disconnect the signature pad if it is currently connected and click OK in the HSB Tablet Message dialog.

8. Click Agree on the License Agreement screen.

9. Select No on the Demo OCX.exe screen and click OK.


12. Connect the signature pad to the workstation once the installation has finished; this will complete the installation of the Topaz driver.

Troubleshooting Thick Client Installations

1. If you are using a SignatureGemLCD4X3 (T-LBK755-BHSB-R) pad connected to the workstation’s serial port, and nothing is displaying on the tablet, you will need to make the following modifications to the SigPlus.INI file located in the individual user’s \Windows directory:
   
   o Change the TabletBaudRate to 38400.
   
   o Ensure that the TabletModel is SignatureGemLCD4X3.

2. If you are using a tablet with an LCD display with Windows 7, and the text on the tablet appears difficult to read, you will need to turn off the ClearType Text Tuner option in Windows:
   
   a. Open the Start Menu
   
   b. In the Start Menu search line, type cttune.exe and press Enter. (Note the ClearType Text Tuner exe file is located at C:\Windows\System32\cttune.exe)
   
   c. To turn off ClearType, uncheck the Turn on ClearType box and click Next.
   
   d. If you have multiple monitors, select to tune one or all of them and click Next.
   
   e. If your monitor native screen resolution is not correct, correct it and click Next; if the native resolution is correct, click Next.
   
   f. On the next four screens, click on the text that looks best to you and click Next.
   
   g. Click Finish; if you selected to tune all monitors in step (4) click Next instead of Finish and repeat steps 5 through 6 for the next monitor.

3. If the "This signature pad model is not supported" message appears, and a non-LCD SigLite 1X5 tablet is connected to the workstation, ensure that SigPlus.ocx is version 4.3.2.5 or higher. Some versions of this file have a bug that does not correctly recognize this tablet.
4. The following error message displays when an incorrect version of Avatar Signature is installed. To resolve the error, Install Avatar Signature version 4.x.

![Error Message]

Error 339: Component 'SigValid.ocx' or one of its dependencies not correctly registered: a file is missing or invalid
Installation for Thin-Client Environment using BSB Signature Pads

Avatar Signature version 3.x and higher supports signature capture in Citrix or Microsoft Terminal Services environments using a BSB signature pad from Topaz. The BSB signature pad model contains an internal serial-to-USB converter, allowing the USB port to behave as a serial port when connected to a virtual COM port mapped to a server. Topaz currently only offers BSB signature pads in the T-LBK462-BSB (Signature Gem 1X5) configuration.

The following BSB signature pad model is supported with Avatar:

- SignatureGem 1X5 LCD
  T-LBK-462-BSB

Installation must be done on both the server and the client workstations, as described below.

Server Installation and Setup

1. Run the sigplus.exe file to install SigPlus. This file can be found on the Avatar Signature installation media as well as on the Topaz CD supplied with the signature pad. The minimum recommended version for use with BSB pads is 3.89.

2. Locate the AvatarSignature.exe file on the installation media and double-click to open. The installation runs in the background and does not require user input.

   Note: This installation requires Administrator rights to the workstation. An MSI file is also provided on the Avatar Signature module installation media for use when installing remotely via network tools such as Microsoft SMS.

Client [Workstation] Installation and Setup

   Note: While it is not necessary to install Avatar Signature on the workstations, SigPlusBSB must be installed on the workstations.

1. Run the sigplusbsb.exe file to install SigPlus BSB. This file is located on the Avatar Signature module installation media as well as on the Topaz CD supplied with your signature pad. The minimum recommended version for use with Avatar Signature is 3.89.

2. The local COM ports must be mapped to the server to be accessible by the client workstations. The procedure for configuring a Remote Desktop connection is dependent on the Windows version. Please consult Windows online help for information on creating a Remote Desktop.

Troubleshooting Thin Client BSB Installations

The following are some common problems that may occur and recommended solutions:

COM Port Does Not Exist

![Unable to open COM port.
Either it does not exist, or is in use by another program. OK]
The COM port must match on both the server and workstations. All workstations must have the COM port available and not in use for another device or program.

If the Unable to Open COM# error message displays, perform the following steps:

1. Check the COM port setting on the workstation:
2. Choose Control Panel->System from the Start menu.
3. Click the Device Manager button on the Hardware tab:

![Screen Capture of Device Manager]

4. Expand the Ports (COM & LPT) item and verify that the port noted in the error message exists:

![Expanded Ports (COM & LPT) Item]

Occasionally, a USB Serial Port is listed with a COM port not matching the one needed to use the signature pad. Perform the following procedures to change the COM port:

1. Right-click on the port and choose Properties from the menu.
2. Click the Advanced button on the Port Settings tab to display the Advanced Settings dialog:
3. Select the correct port number from the COM Port Number drop-down list and click OK to close the Properties window:

4. Verify that the SigPlus.ini file on both the server and workstations contain the correct port number. Open the SigPlus.ini file with Notepad and ensure the port shown in TabletComPort is the same for both the server and the workstation.
The Display on the Signature Pad is Unreadable

Check to ensure that CSMSignature.dll, version 3.x or higher is installed on the server. This file may be located in C:\Windows [32-bit systems], or C:\Windows\SysWOW64 [64-bit systems]. Right-click on the .dll file and select Properties from the menu. Click the Version tab and verify the File Version value:

Non Supported Signature Model

If the *This signature pad model is not supported* error message displays, and a non-LCD SigLite 1X5 tablet is connected to the workstation, ensure that SigPlus.ocx is version 4.3.2.5 or higher. Some versions of this file have a bug that does not correctly recognize this tablet.

Invalid or Missing SigValid

1. The following error message displays when an incorrect version of Avatar Signature is installed. To resolve the error, Install Avatar Signature version 4.x.
Installation for Thin-Client Environment using Serial Signature Pads

This section describes installing the Avatar Signature module in thin-client environments using serial signature pads. A thin-client environment is one in which the local computer (client) does not have application software installed directly on it and must rely on a central server for functionality. Typical thin-client environments include Citrix and Microsoft Terminal Services.

The following Topaz serial model tablets are known to be supported with Avatar in a thin-client environment:

- SignatureGem 4X3 LCD
  T-LBK755-BHSB-R – this model requires a Serial Y Adapter to provide power for the LCD screen.

- SigLite 1X5
  T-S460-B-R

Note⇒ Installation is done on the server. It is not necessary to install anything other than the signature pad itself on the client. If you are using Microsoft Terminal Services, it will be necessary to make the local client serial ports available to the server.

Server Installation and Setup:

1. Locate the sigplus.exe file on the Avatar Signature module installation media and double-click to open. This file can also be found on the Topaz CD supplied with your signature pad. The minimum recommended version is 3.74.

2. Copy SigPlus.ini from the \Windows directory into the \Program Files\Netsmart directory; if this directory does not exist, create it.

3. Locate the AvatarSignature.exe file on the Avatar Signature module installation media, and double-click to open. The installation runs in the background and does not require user input.

4. Map the serial port on the client to the serial port on the server which is assigned to SigPlus. In Citrix environments, mapping should be done using the NetUse command.

Note⇒ This installation requires Administrator rights to the workstation. An MSI file is also provided on the Avatar Signature module installation media for use when installing remotely via network administration tools such as Microsoft SMS.
Client [Workstation] Installation (Microsoft Terminal Services Only)

The local COM ports must be mapped to the server. Please refer to the Remote Desktop Connection instructions for your Windows application to verify that the Serial ports are selected as devices.

1. Start Remote Desktop Connection.

2. Click the Options button, and click More on the Local Resources tab.

3. Verify that Serial Ports is checked and click OK to close the window.
4. Click Connect to continue to connect to the server.

**Troubleshooting Thin Client Serial Installations**

1. If you are using a SignatureGemLCD4X3 (T-LBK755-BHSB-R) pad connected to the workstation’s serial port, and nothing is displaying on the tablet, you will need to make the following modifications to the SigPlus.INI file located in the individual user’s \Windows directory:
   - Change the TabletBaudRate to 38400.
   - Ensure that the TabletModel is SignatureGemLCD4X3.

2. If a “This signature pad model is not supported” message appears, and a non-LCD SigLite 1X5 tablet is connected to the workstation, ensure that SigPlus.ocx is version 4.3.2.5 or higher. Some versions of this file have a bug that does not correctly recognize this tablet.

3. The following error message displays when an incorrect version of Avatar Signature is installed. To resolve the error, Install Avatar Signature version 4.x.

4. If a virtual server is in use, the following additional setup steps must be performed:
**For Citrix Server**

a) Connect to the server via a Remote Desktop (RDP) session.
b) Determine the correct COM port to be used for SigPlus.
c) Start Command Prompt on server. Run NetUse; a list of mappings appears. Look for COMx in this list, where x is the number of the COM port to be used – it should not appear.
d) Install SigPlus to the appropriate COM port; this is done by running the SigPlus installation program and selecting the appropriate COM port when prompted to do so.
e) Change or modify the Registry setting for HKEY_LOCAL_MACHINE. The Serial Comm folder stores serial connection information. The Topaz device installed on the server connects to \Device\Serial0 by default with value data COM1; the COM1 value data setting on \Device\Serial0 needs to be removed. If needed, create COM1 key and assign value data COM1.
f) Publish DOS as an application on the Citrix Server running SigPlus.
g) Grant Avatar Signature users access to the DOS published application.

**For User Computer**

a) Login with Administrator rights.
b) Install SigPlus to the appropriate COM port; this is done by running the SigPlus installation program and selecting the appropriate COM port when prompted to do so.
c) Restart.
d) Log on to the computer as the User.
e) Copy SigPlus.ini to the User profile at c:\Documents and Settings\User\WINDOWS.
f) Run the published DOS application
g) Log on to an ICA session as the User.
h) Run NetUse (in the published DOS session). A list of mappings displays. If the DOS window states that the connection will not be remembered, run netuse/Persistent:YES (in the published DOS session.)
i) Run netuse (in the published DOS session). A list of mappings displays. The DOS window should state that the connection will be remembered.
j) Log off Citrix ICA.
k) Run the published DOS application.
l) Run netuse COMx: \client\COM1: (in the published DOS session), where x is the number of the COM port on the server. A list of mappings displays; COMx should appear as Unavailable.
m) Test the signature application.
n) Repeat the above steps for ALL users who will be using Avatar Signature per computer.