Vanguard Standard   **Version:** 4.33.2   **Release Date:** 11 November 2024

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.33.1   **Release Date:** 31 January 2024

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.33.0   **Release Date:** 12 January 2024

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.27.5   **Release Date:** 15 April 2021

Fixes
1. Server events in certain environments could cause exhaustion of the application's thread pool.

Vanguard Standard   **Version:** 4.27.4   **Release Date:** 2 April 2021

Fixes
2. Message preview now includes graphics from slots 1-255; previously only used graphics in slots 1-50.

Vanguard Standard   **Version:** 4.27.3   **Release Date:** 25 June 2020

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.27.2   **Release Date:** 15 November 2019

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.27.1   **Release Date:** 19 August 2019

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.27.0   **Release Date:** 30 November 2018

NOTE: Microsoft .NET Framework 4.7.1 will install as a prerequisite, previously was Microsoft .NET Framework 4.5.

Fixes

1. Removed unnecessary files from installation.

Vanguard Standard   **Version:** 4.26.1   **Release Date:** 19 September 2018

Features

1. New font for VFC.

Font Name	Height (inches)	Height (pixels)	Ave Width (pixels)	Stroke (pixels)	Char Spacing (pixels)	Line Spacing (pixels)
29x19_4	18" @ 16 mm	29	19	4	6	12

Fixes

1. Message previewer in Quick Message supports up to 30 fonts (previously error if more than 20).

2. Setting brightness configuration within Display Control Panel will correctly show the updated configuration.

3. Prevent server crash when generating thumbnail for a message containing PNG image (new VFC feature in 4.27.0).

Vanguard Standard   **Version:** 4.26.0   **Release Date:** 1 March 2018

Fixes

1. Server Log Viewer will load significantly faster for large systems (initial query is now last 1 day instead of 14 days).

Vanguard Standard   **Version:** 4.25.2   **Release Date:** 22 May 2017
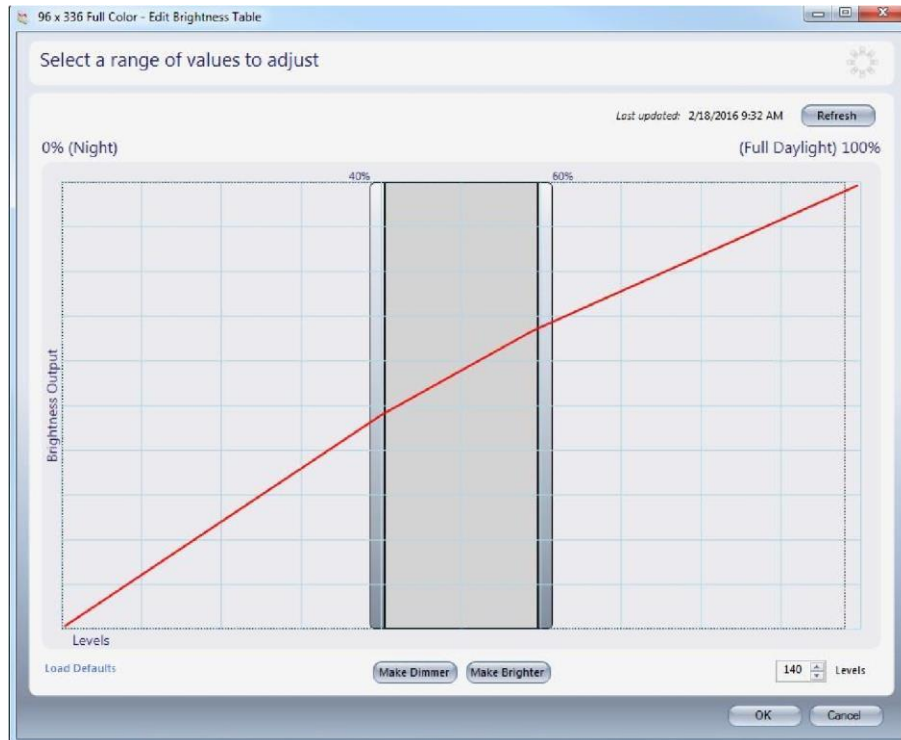
Features

1. SQL Server 2014 is now installed for Windows 10 compatibility.

Vanguard Standard   **Version:** 4.25.1   **Release Date:** 22 September 2016

Fixes

1. Improved error messages and logging if error encountered during view/edit of brightness table.

Vanguard Standard   Version: 4.25.0   Release Date: 19 September 2016

Features

1. Added a dialog to adjust the brightness table. This allows fine tuning a displays brightness under different ambient light conditions to improve the display's visibility.

2. Added fractional seconds to Data Scope to facilitate troubleshooting of timing issues.

Fixes

1. Remove "Standard Upgrades" license in UI since this is not currently used.

2. Improved look of Database Utility on Windows 10 and Windows Server 2012.

Vanguard Standard   Version: 4.24.2   Release Date: 14 June 2016

Features

1. Support for Windows 8.1, 10, and Server 2012 R2 when SQL Server 2014 SP1 is installed manually (DD3302758).

2. For advanced situations, added GET/SET ability for `daktHeartBeatThreshold` and `daktLuxLightScalar` within NTCIP profiles for Daktronics VFC 3000.

Fixes

1. Corrected specific issues introduced in version 4.24.0: ○ Listing of signs not loading in certain situations ○ Task progress of sign operations not shown ○ Unhandled error when navigating away from create message page

2. Clicking the button to import within the Data Scope window will no longer clear existing data if the user cancels.

3. System up time will show correctly for new VFC within Diagnostics Test in Display Control Panel.
4. Restoring a backup via Nucleus Database Utility was failing in situations when folder permissions were invalid.

Vanguard Standard   **Version:** 4.24.1   **Release Date:** N/A
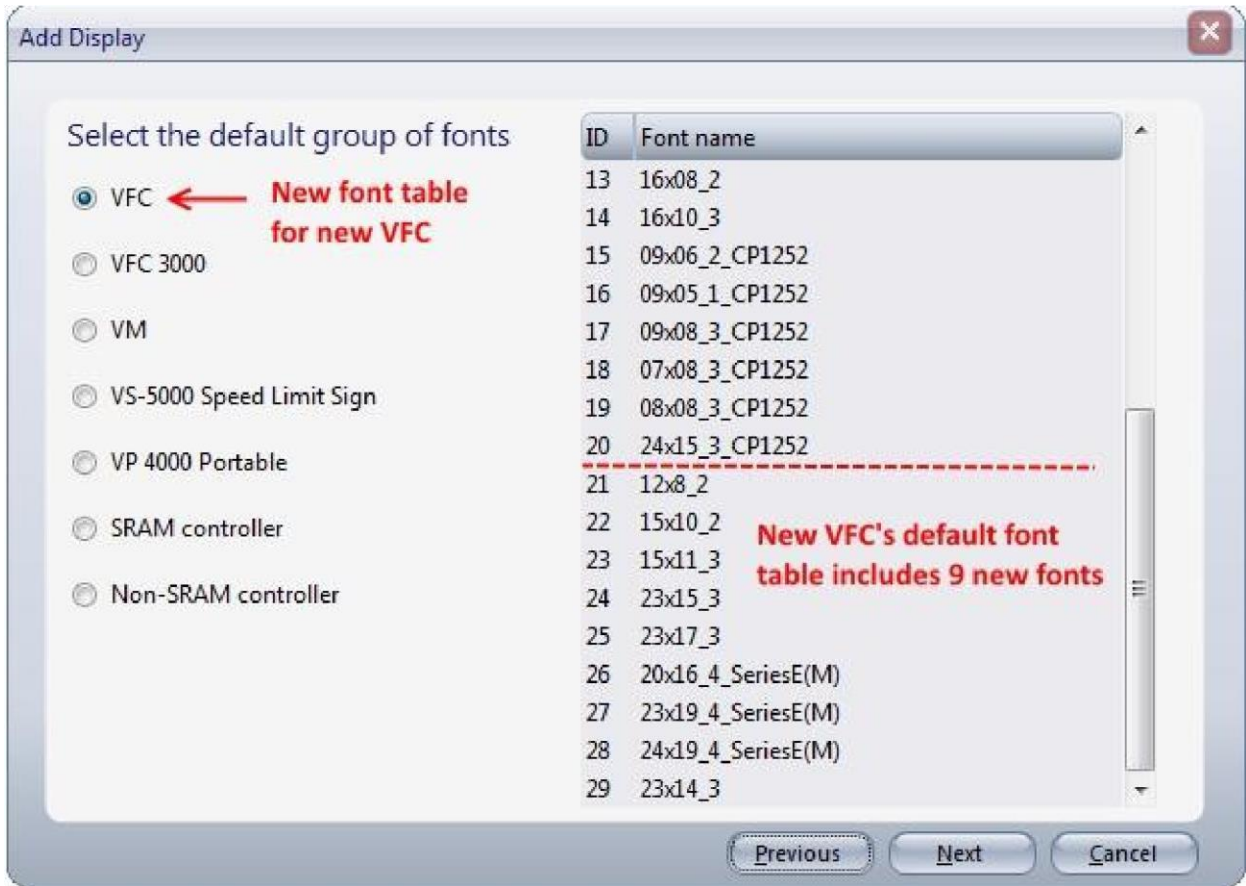
NOTE: There was not a release for Vanguard Standard v4.24.1.

Vanguard Standard   **Version:** 4.24.0   **Release Date:** 9 November 2015
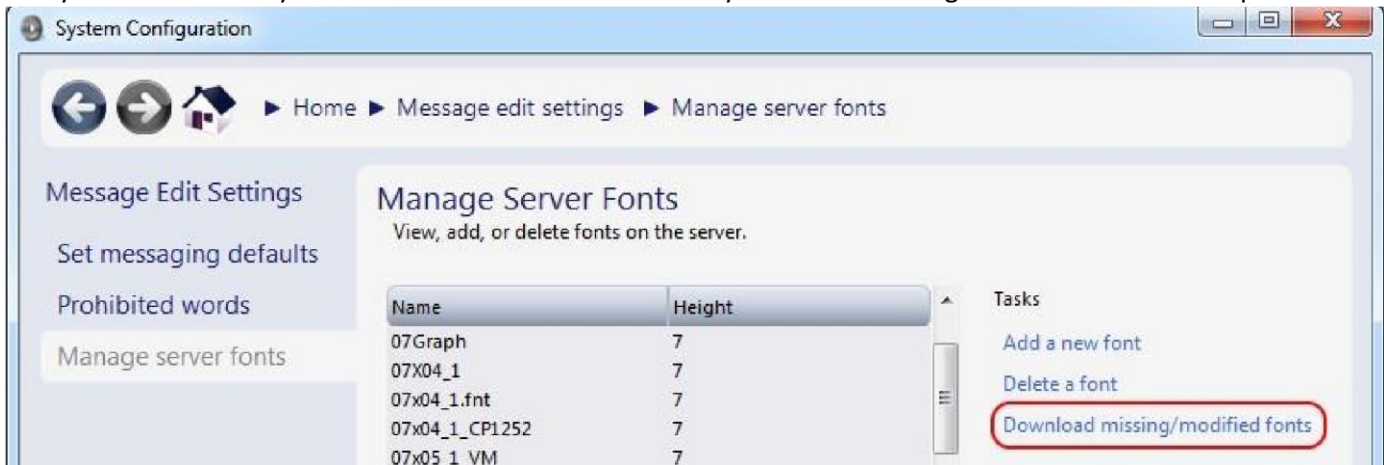
Features

1. Automatic configuration in the Add Display wizard supports the next generation VFC. Vanguard will connect to the display to determine the display type and a matching NTCIP profile. Previously, only the VFC-3000 was supported for automatic configuration.

2. Font table support for the next generation VFC, which has 29 default fonts compared to the VFC-3000's 20 fonts.

    IMPORTANT: The new VFC font table is now the default selection, if configuring a display for a VFC-3000 be sure to select the appropriate font table.
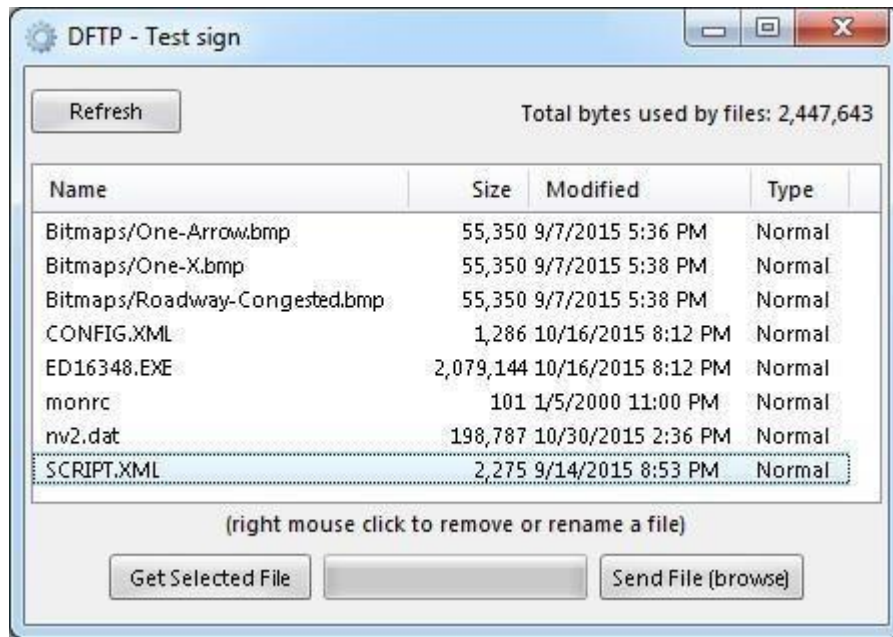
    KNOWN ISSUE: The previewer in Quick Message does not yet support font indexes beyond 20, however this has no adverse impact to the message and it will play successfully when sent to the display.

3. Download missing/modified fonts will look on the local client computer for any missing or modified server fonts. Previously this was titled "Synchronize fonts with server" and only looked for missing fonts on the client computer.

4. Vanguard Configuration Utility's DFTP window will show file attributes (size, modified date, and type).
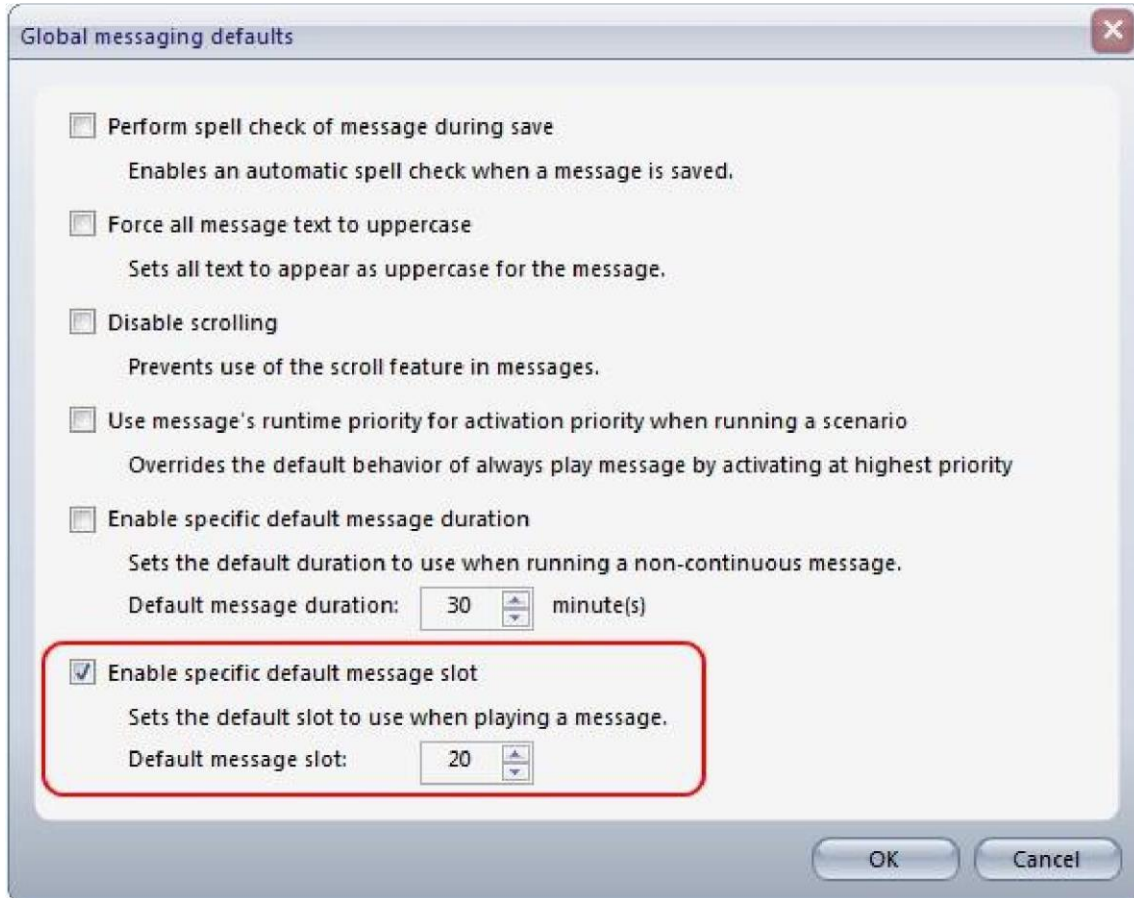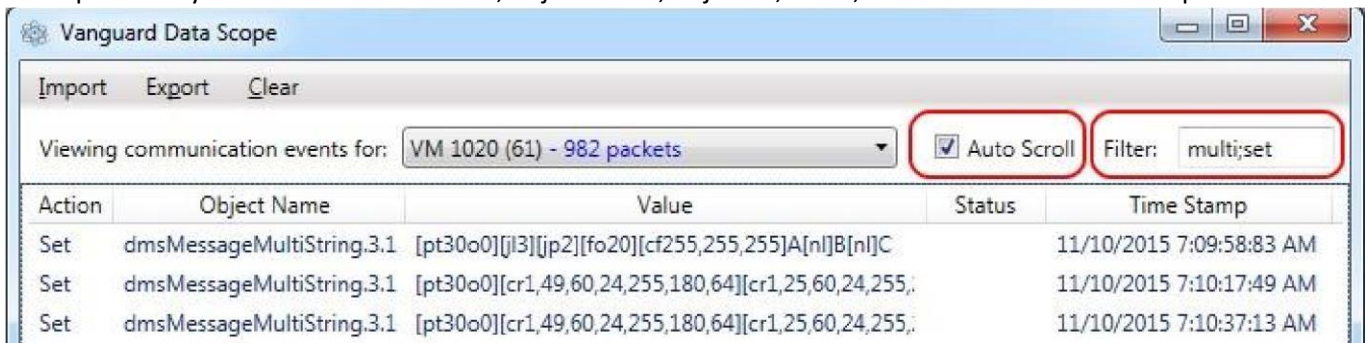
Fixes

1. Status for full brightness correctly reported as 100%, previously Vanguard sometimes interpreted as 97%.

2. Arrow and apostrophe characters are correctly included in the 23x15_3 and 23x17_3 fonts.

3. Font 23x14_3 is corrected by dropping the "_2013" suffix in the name.

4. Improve initial success rate of file uploads over Daktronics File Transfer Protocol (DFTP), previously Vanguard would sometimes fail when reach 100% progress and then restart the upload process again with reduced packet sizes. This could cause unnecessary slowness and/or failures when uploading new firmware.

5. File downloads over Daktronics File Transfer Protocol (DFTP) was not working in Vanguard 4.22 and 4.23 which prevented viewing file listing or retrieving a file from the controller through Vanguard Configuration Utility.

6. Additional cleanup of resources that may have contributed to a benign accumulation of operating system handles.

7. Previously retrieved diagnostic bitmaps are no longer used after the functionality is disabled in NTCIP profile's MIB.

8. If a client or integration application requests summary information from server at the same time the diagnostic bitmaps are being downloaded from the controller the resulting summary information will correctly include rendered thumbnails and subsequent requests of summary information will include the diagnostic bitmaps when available. Previously in Vanguard v4.17.4 to v4.23 this situation resulted in no thumbnail for the current message.

9. Entries in the verbose log file for sign operations in certain situations included incorrect username.

Vanguard Standard   **Version:** 4.23.0   **Release Date:** 11 August 2015

Features

1. Name of NTCIP profile for next generation VFC is now named "Daktronics VFC (NTCIP v3)". Previously the profile was added as "Daktronics VFC Gen 2 (NTCIP v2)".
   NOTE: VFC-3000 based controllers (VF, VL, VM, VSLS) should continue to use the "Daktronics VFC 3000 (NTCIP v1)" or "Daktronics VFC 3000 (NTCIP v2)" profiles.

2. Missing NTCIP / Venus fonts on a client computer are automatically downloaded from server.

3. The default slot used when playing a message is now configurable within System Configuration. The default will continue to be slot 1.

4. Data Scope window includes auto scroll and filter options. The case-insensitive filter can include multiple search criteria separated by a semicolon. The action, object name, object id, value, and status columns are inspected.

5. Source mode (`dmsMsgSourceMode`) for current message is included in the log entry when status is retrieved.

6. Static values of `dmsDrumIndex` and `dmsDrumDescription` are no longer retrieved when retrieving status of a drum sign. Vanguard will infer the index from the table index and generate the description by appending the index to the "Drum Motor #". In addition to reducing unnecessary communication, on occasion drum controllers were abnormally timing out on these requests and consequently delaying completion of a preceding message activation.

Action	Object Name	Object ID	Type	Value
Get	dmsDrumIndex.1	1.3.6.1.4.1.1206.4.2.3.9.7.27.1.1.1	Integer	No longer retrieved
Response	dmsDrumIndex.1	1.3.6.1.4.1.1206.4.2.3.9.7.27.1.1.1	Integer	1
Get	dmsDrumStatus.1	1.3.6.1.4.1.1206.4.2.3.9.7.27.1.4.1	Integer	
Response	dmsDrumStatus.1	1.3.6.1.4.1.1206.4.2.3.9.7.27.1.4.1	Integer	2 (No Error)
Get	dmsDrumDescription.1	1.3.6.1.4.1.1206.4.2.3.9.7.27.1.2.1	OctetString	No longer retrieved
Response	dmsDrumDescription.1	1.3.6.1.4.1.1206.4.2.3.9.7.27.1.2.1	OctetString	Drum Motor #1
Get	dmsDrumMfrStatus.1	1.3.6.1.4.1.1206.4.2.3.9.7.27.1.3.1	OctetString	
Response	dmsDrumMfrStatus.1	1.3.6.1.4.1.1206.4.2.3.9.7.27.1.3.1	OctetString	Position: H00M00 = 2032; Current

Fixes

1. Certain client errors due to an extended period of inactivity are now prevented.

2. Page background color specified in message defaults for a display type is now correctly applied in Quick Message.

3. In certain situations, Vanguard v4.18 to v4.22 could have displayed incorrect message properties (name, priority, and/or thumbnail). Specifically, if the CRC of the newly activated message was the same as the previous message or if the message changed in the source location after activation.

Vanguard Standard   **Version:** 4.22.0   **Release Date:** 7 July 2015

Features

1. Data Scope window includes a description in addition to integer value for several common objects.

Action	Object Name	Object ID	Type	Value
Get	dmsMessageStatus.3.1	1.3.6.1.4.1.1206.4.2.3.5.8.1.9.3.1	Integer	
Response	dmsMessageStatus.3.1	1.3.6.1.4.1.1206.4.2.3.5.8.1.9.3.1	Integer	1 (Not Used)
Set	dmsMessageStatus.3.1	1.3.6.1.4.1.1206.4.2.3.5.8.1.9.3.1	Integer	6 (Modify Request)
Response	dmsMessageStatus.3.1	1.3.6.1.4.1.1206.4.2.3.5.8.1.9.3.1	Integer	
Get	dmsMessageStatus.3.1	1.3.6.1.4.1.1206.4.2.3.5.8.1.9.3.1	Integer	
Response	dmsMessageStatus.3.1	1.3.6.1.4.1.1206.4.2.3.5.8.1.9.3.1	Integer	2 (Modifying)

2. Time since last boot sequence of the controller (sysUpTime) is retrieved in diagnostics test.

Description	Value
% of database used or marked as dead	6%
% of flash memory marked as dead	0%
Available graphic memory	241,384 bytes
Controller temperature	67
Front light sensor	1
System up time	2 days, 9 hours, 5 minutes
Watchdog failure count	18

Vanguard Standard   **Version:** 4.21.0   **Release Date:** 2 June 2015

Features

1. Additional memory-related values retrieved within diagnostics test.

Description	Value
% of database used or marked as dead	6%
% of flash memory marked as dead	0%
Available graphic memory	241,384 bytes

> % of database used or marked as dead
>> Percent of the flash database file that is used or no longer usable. Controller will automatically reclaim the portion that is unusable when this value is greater than 75.
>> Applies to Daktronics M2/M3 based controllers with firmware version v1.9.4588.19 or newer.

> % of flash memory marked as dead
>> Percent of free memory that is currently unusable. Controller will automatically reclaim memory during a a regular restart if the value is between 75 and 90 or at runtime when the value reaches 90. Applies to Daktronics M2/M3 based controllers with firmware version v1.9.4588.19 or newer.

> Available graphic memory
>> Number of bytes currently available to store NTCIP graphics.
>> NOTE: Daktronics firmware prior to 1.9.4588.22 will incorrectly report a constant value.

2. Windows service will automatically restart if unexpectedly stops due to an error.

Fixes

1. Message status will correctly be reset to 'notUsed' if non-communication error occurs during send message and current message is not valid. Previously the message status would have been left as 'modifying'.

2. Message will be resent if status is not valid when activating a message.

Vanguard Standard　　　　**Version:** 4.20.1　　　　**Release Date:** 23 March 2015

Fixes
1. Always use RGB value for the ten NTCIP classic colors within MULTI tags (new optional setting added in 4.20.0) will correctly be ignored and revert to classic color value for monochrome and tri-color signs. The setting will also be ignored if the NTCIP profile is configured as version 1.

Vanguard Standard　　　　**Version:** 4.20.0　　　　**Release Date:** 13 March 2015

Features

1. Performance improvement when creating new message in Quick Message.
2. Ability to always use RGB value for the ten NTCIP classic colors within MULTI tags for full color NTCIP v2 signs. This applies to all color tags: page background, color foreground, and color rectangle

NOTE: The default will be to continue using the classic color which allows sign manufacturers to map classic colors (such as amber) to what looks best for the sign.

To instead force RGB value in all cases, edit NTCIP profile within System Configuration and check the box.

Fixes

1. Task Progress window will again report percent complete (step based, not time based).
   NOTE: This applies only to sign tasks that have incremental steps such as send message or run pixel test.

2. Data Scope window will open correctly.

Vanguard Standard　　　　　**Version:** 4.19.1　　　　　**Release Date:** 10 March 2015

Fixes

1. Signs with multiple networks configured will correctly fallback to the backup if the primary fails to connect. After the backup is disconnected, subsequent sign operations will begin with primary again.

Vanguard Standard　　　　　**Version:** 4.19.0　　　　　**Release Date:** 18 February 2015

Fixes

1. Significantly improved the performance of retrieving all sign summaries from the database. Previously the amount of time needed increased considerably as number of signs increased. Vanguard client will load faster, even if older than version 4.19. Existing SDK integrations will also benefit.

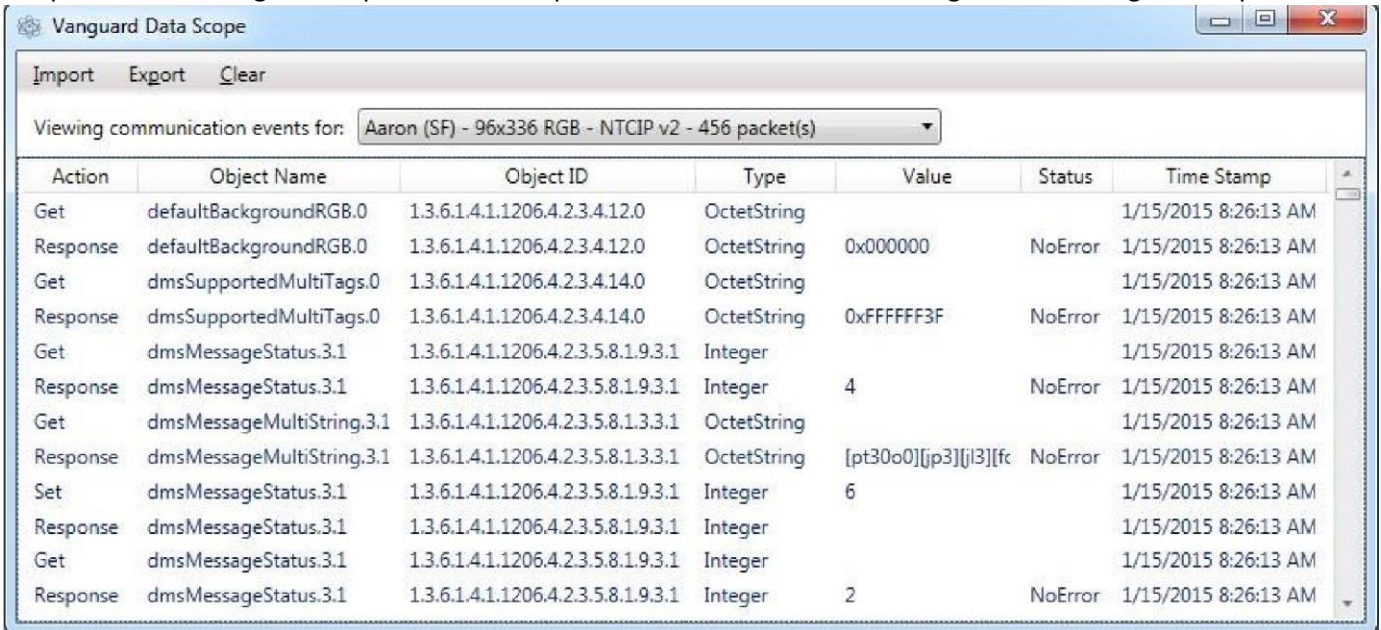## Vanguard Standard   Version: 4.18.0   Release Date: 26 January 2015

NOTE: Microsoft .NET Framework 4.5 will install as prerequisite, previously was Microsoft .NET Framework 4.0.
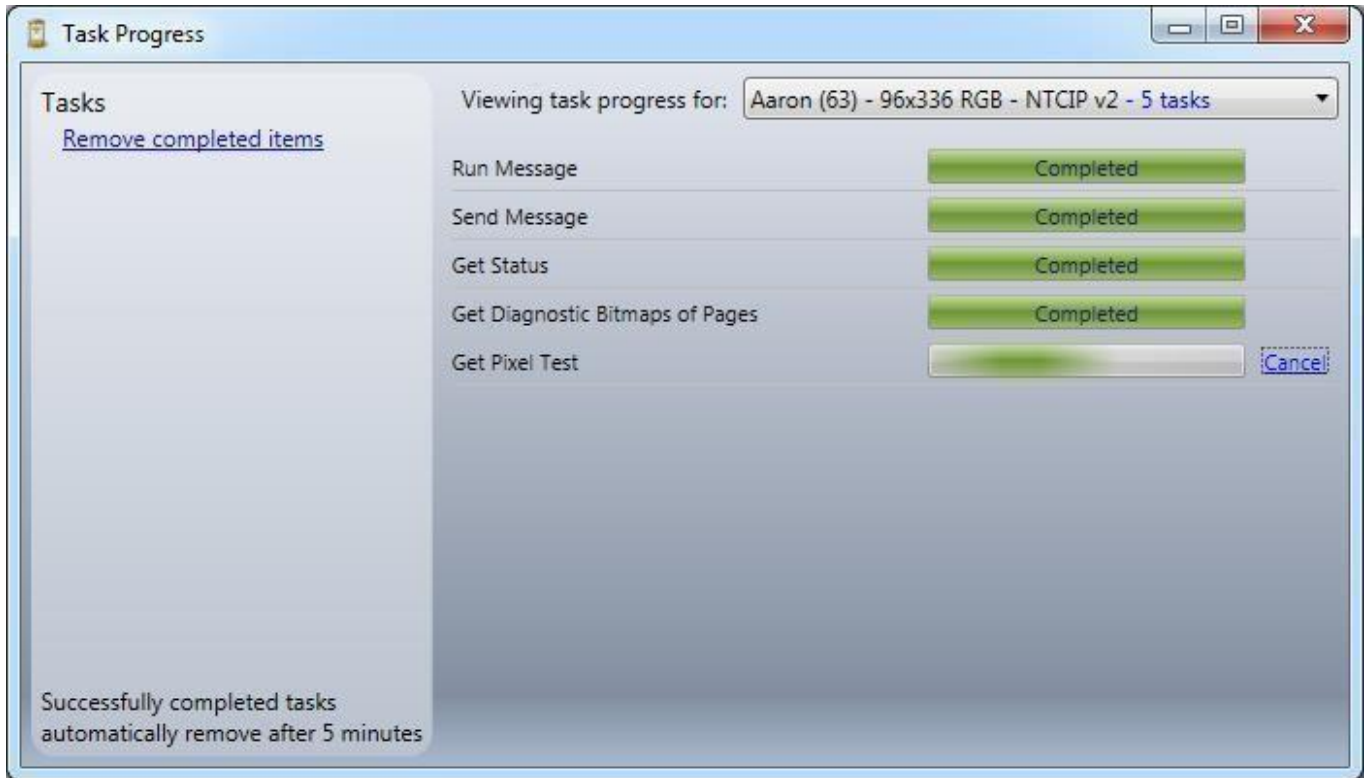
Features

1. Added four new fonts. Note that in order for a font to be used it will first need to be added to a display type's font table in the software and then uploaded to all signs via Display Control Panel that use that display type.

Font Name	Height (inches)	Height (pixels)	Ave Width (pixels)	Stroke (pixels)	Char Spacing (pixels)	Line Spacing (pixels)
20x16_4_SeriesE(M)	16" @ 20 mm	20	16	4	5	10
23x14_3_2013	18" @ 20 mm	23	14	3	4	6
23x19_4_SeriesE(M)	18" @ 20 mm	23	19	4	6	12
24x19_4_SeriesE(M)	18" @ 20 mm	24	19	4	6	12

2. Data Scope window has significant performance improvements for situations with high volume of sign activity.

3. Task Progress window has significant performance improvements for situations with high volume of sign activity.

4. Drum diagnostics will be retrieved within a standard get status operation for drum signs.

Fixes

1. Current message's name, thumbnail, and priority show correctly when a new message is sent to the same message slot of the currently running message but not activated. The current message is obtained from Current Buffer (5.1) instead of message slot referenced by dmsMsgTableSource.

   Example: Message "one" is sent to slot 1 and activated, then a new message "two" is sent to slot 1, but not activated, performing a Get Status will return the proper message that is playing ("one") instead of the current message in slot 1 ("two").

2. Message thumbnails for character sign types are improved in certain situations. Note this fix applies to new messages and not existing message thumbnails.

   If the character width was 5 pixels but the sign's width was divisible by 6 (ex. 12 characters wide sign is 60 pixels) the thumbnail previously used the wrong module spacing.

   Before: Now:

   If the message's MULTI did not specify a font tag the thumbnail previously defaulted to a variable width font.

   Before: Now:

3. Diagnostic bitmap is correctly retrieved when activating a message after sign was blank. Note this issue only existed in version 4.17.4.

4. Get sign summary API call will again return a blank (all black) bitmap for thumbnail when the currently activated message is the blank message. This returns the behavior to what existed in version 4.15 and earlier.

5. Nucleus Database Utility correctly waits for the Nucleus Server.exe process to exit before interacting with the database. Previously, the utility would often encounter an error due to active database connections. For an overview of the utility, see this [Knowledge Base article](#).

Vanguard Standard   **Version:** 4.17.4   **Release Date:** 2 December 2014

Fixes
1. Updating the status table in the database is done after retrieving diagnostic bitmaps. Previously it was possible after activating a new message to have the sign summary retrieved when the last update timestamp for status is updated to new value prior to the diagnostic bitmap thumbnails being updated. This could have resulted in a mismatch of message name and thumbnail in certain integration systems.

Vanguard Standard   **Version:** 4.17.3   **Release Date:** 21 November 2014

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.17.2   **Release Date:** 29 October 2014

Features
1. Improved error message when attempt to use a connection that has been disconnected. Previously, the error message would be the generic "*Object reference not set to an instance.*" and now it will be "*Connection has already been disconnected and cannot be used.*" While the error itself is not addressed, it is uncommon and will be further investigated.

Vanguard Standard   **Version:** 4.17.1   **Release Date:** 10 October 2014

Features
1. Ability to override the default (10) maximum number of concurrently executing sign operations. Changes to configuration are applied next time the Windows service is started. Value must be between 2-100.

   Within Nucleus Server.exe.config, the following example would set maximum concurrent sign operations to 20.

```
<configuration>
  <daktronics.nucleus>
    <taskProcessor>
        <maxThreads value="20"/>
    </taskProcessor>
  </daktronics.nucleus>
</configuration>
```

If a valid value is provided in the server configuration an informational log entry will be created on start up.

Severity	Title	Message
Information	Task Processor	Default overridden in configuration. Maximum concurrent sign operations: 20

Vanguard Standard **Version:** 4.17.0 **Release Date:** 6 October 2014

Features

1. Split the request for dmsDrumStatusTable entries into multiple packets instead of one to accommodate manufacturers that may return GenErr on dmsDrumDescription and dmsDrumMfrStatus for valid table entries.

Vanguard Standard **Version:** 4.16.1 **Release Date:** 9 September 2014

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard **Version:** 4.16.0 **Release Date:** 8 September 2014

Features

1. Increased maximum values for sign types configuration.

Fixes

1. Removed an unnecessary delay after activating a message when daktDiagBitmap is not enabled in the sign's NTICP profile.

2. Removed an unnecessary delay after activating a message and daktDiagBitmap is enabled in the sign's NTCIP profile but its size exceeds supported dimensions for diagnostic bitmaps.

3. Removed an unnecessary delay after blanking a sign and daktDiagBitmap is enabled in the sign's NTICP profile.

4. Setting dmsMessageBeacon when sending a message is done in a separate packet after setting dmsMessageMultiString, dmsMessageOwner, and dmsMessageRunTimePriority. This corrects an issue where beacons sometimes did not correctly activate.

5. Log entry when connection attempt fails did not have the correct user name for who initiated the sign operation.

Vanguard Standard **Version:** 4.15.2 **Release Date:** 8 August 2014

Fixes

1. No longer add extra new line tag in MULTI when sending a message with blank line(s) at bottom of page to character or line sign. This fix eliminates the need of work around by adding a space to the blank line.

2. Correctly handle diagnostic bitmap differences between BMP and PNG.

Vanguard Standard **Version:** 4.15.1 **Release Date:** 25 July 2014

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard **Version:** 4.15.0 **Release Date:** 18 July 2014

Features

1. Security user roles has been expanded from four to five. The primary change is restricting sign configuration to only users with "Administrator" role. Previously configuring signs was allowed to users with "Power User" role.

   IMPORTANT: Existing users that had "Standard User" role who still require Content Studio access should be manually upgraded to a "Power User" role by an administrator.

   IMPORTANT: Existing users that had "Power User" role who still require sign configuration ability should be manually upgraded to a "Administrator" role by an administrator.

   Comparison from earlier versions

Retrieve status and diagnostics	Limited	Read Only*
Blank Display	Standard	Limited
Play existing message, schedule, scenario	Standard	Limited

Play quick message	Standard	Standard
Create or edit message, schedule, scenario	Standard	Power
Edit Sign Configurations	Power	Administrator

*Existing users with "Limited User" role will be automatically migrated to new "Read Only" role

Listing of functionality and required role with new version

Functionality   **Required Role**

Display Software Control Mode   Standard User
Content Studio Message   Power User
Schedule Studio   Power User
Scenario Management   Power User
View NTCIP Community Names   Power User
Manage Maintenance Heater   Power User
Auxiliary Output Management   Power User
Manage Display Event Logging   Power User
Display Brightness   Power User
Display Time   Power User
Modem Connections   Power User
Manage E-mail Notifications   Power User
Unlock content by all users   Power User

Display Status   Read Only
Display Diagnostics   Read Only
Task Progress   Read Only
Data Scope   Read Only
Display Monitor   Read Only
Server Log Viewer   Read Only
Unlock content by me   Read Only
UI Color Scheme   Read Only
Play Existing Message   Limited User
Play Schedule   Limited User
Play Test Patterns   Limited User

Permission	User Level
Run Scenarios	Limited User
Blank Sign	Limited User
Retrieve Server Fonts	Limited User
Reboot Display	Limited User
Modify Display Message Library	Limited User
Pixel Failure Test	Limited User
Play Text Template Message	Standard User
Quick Message	Standard User
Add/Modify/Delete Displays	Administrator
Add/Modify/Delete Display Groups	Administrator
Modify/Delete Display Types	Administrator
Add/Modify/Delete NTCIP Profiles	Administrator
Add/Delete Server Fonts	Administrator
Add/Modify/Delete User Accounts	Administrator
Password Requirements	Administrator
Global Message Defaults	Administrator
Display Message Defaults	Administrator
View Prohibited Words	Administrator
Modify Prohibited Words	Administrator
Modify Communication Timeouts	Administrator
Email Server Management	Administrator
Reboot Display and Clear Memory	Administrator
Add/Delete Display Fonts	Administrator
Modify Display Event Activations	Administrator
Pixel Failure Threshold	Administrator
Display Callback Configuration	Administrator
LCD Password Management	Administrator
CHAP Management	Administrator

2. Improved error strings when fail to activate a message, particularly for activation priority.
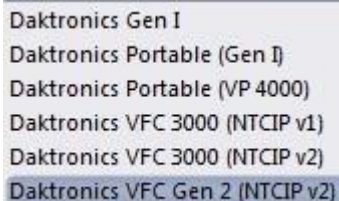Before: "Activate message error 3. Activation priority is too low."
Now: "Activation priority (64) is lower than currently running message (190)."

Fixes

1. Server Log Viewer will always open maximized. Previously, the initial size and position would occasionally open small and off the screen.

2. Improved various server log entries.

Vanguard Standard   **Version:** 4.14.0   **Release Date:** 5 June 2014

Features

1. Improved support for various features of next generation Daktronics controller. New profile added named "Daktronics VFC Gen 2 (NTCIP v2)".

```
Daktronics Gen I
Daktronics Portable (Gen I)
Daktronics Portable (VP 4000)
Daktronics VFC 3000 (NTCIP v1)
Daktronics VFC 3000 (NTCIP v2)
Daktronics VFC Gen 2 (NTCIP v2)
```

2. Added new server fonts: 12x8_2, 15x10_2, 15x11_3, 23x15_3, and 23x17_3.

Vanguard Standard   **Version:** 4.13.9   **Release Date:** 31 May 2014

Features

1. Fan RPM Sensor shows value of "Off/On" instead of "Fail/Success".
2. Added new operation to NtcipSignManagementService to retrieve multiple sign summaries (SDK).

Fixes

1. Log Viewer no longer fails to open if have large number of signs.
2. Resources are correctly released when creating message thumbnails with high frequency of saving messages (typically via Travel Time). Previously, the server's handle and memory usage would continuously grow in this scenario until the service is restarted.
3. If a dial-up connection encounters a modem failure on first attempt it will correctly recover during second attempt.

Vanguard Standard   **Version:** 4.13.8   **Release Date:** 20 November 2013

Fixes

1. Assume all blank message type CRCs are 0 and status is valid when issuing a blank sign command. This fix was for a nonDaktronics sign.
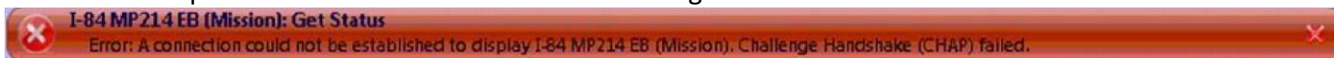

Vanguard Standard   **Version:** 4.13.7   **Release Date:** 14 November 2013

Fixes

1. CHAP failures are reported to user interface instead of showing as connection could not be established.

I-84 MP214 EB (Mission): Get Status
Error: A connection could not be established to display I-84 MP214 EB (Mission). Challenge Handshake (CHAP) failed.

2. When CHAP failures occur for non-Daktronics signs, modems are released properly. Previously, the modem became unusable until a service restart.

Vanguard Standard   **Version:** 4.13.6   **Release Date:** 24 October 2013

Fixes

    1. Dialup improvements to better handle connection and disconnection timeouts to improve connectivity.

Vanguard Standard   **Version:** 4.13.5   **Release Date:** 12 October 2013

Features

    1. Added additional logging to the debug output that can be viewed in real-time from DebugView or similar utility.

Fixes

    1. Prevent lock up of sign communications that can occurred when an active connection is lost unexpectedly at the same time an idle dialup modem is being disconnected.

Vanguard Standard   **Version:** 4.13.4   **Release Date:** 25 September 2013

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.13.3   **Release Date:** 23 September 2013

Fixes

    1. Removed the network test button in the sign configuration wizard due to not always returning the correct success or failure result.

    2. Prevent a server crash when updating message thumbnails. This is preventative for situations where Travel Time messages are generated frequently.

Vanguard Standard   **Version:** 4.13.2   **Release Date:** 3 September 2013

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.13.1   **Release Date:** 27 August 2013

Features

    1. Added ability to resend the message if the CRC does not match when setting message time remaining. This functionality is used by the Daktronics Travel Time application.

Vanguard Standard   **Version:** 4.13.0   **Release Date:** 20 August 2013

Features

1. Increased the default for maximum concurrent client calls for a service in relation to the number of processors on the computer.

2. Increased performance of climate control test by running in parallel instead of sequential.

3. Changed retrieve message list to get one message per packet instead of two for better support of controllers with lower maximum packet size restriction.

4. Brightness objects can be disabled in the NTCIP profiles. This is specifically for better drum sign support.

Fixes

1. Message Activations view in Display Control Panel shows the values for any activations even if one of the objects are disabled in the NTCIP Profile.

2. Dialup connection (PPP and PMPP) error handling improvements were made to improve the stability of the server from shutting down in various conditions. Specific exceptions were Object Reference Not Set and Index Out of Range. Note: in some cases when these exceptions occur, the server modem may be in a state and may not recover instantaneously. However, the server will remain active waiting for modem to return to operational state.

3. NTCIP v2 font sending handles fonts in unmanaged states when replacing an existing font. Previously, the existing font had to be removed first. Note: this also fixed the font synchronization in Manage Display Fonts.

4. Retrieving event activation values when one or more of the NTCIP objects are disabled no longer is reported as an error.

5. SNMP version checking validates correctly when value is encoded with two byte length. This only occurred with US Traffic signs.

6. Thumbnails are created correctly for character matrix sign types. Previously, the thumbnail sometimes failed to be created.

7. Thumbnails are created correctly in certain situations when refreshing the message list or sign status. The problem existing more often with non-Daktronics signs or pre VFC3000 controlled signs.

8. Thumbnails are created correctly when creating many thumbnails. This fixes a problem with Travel Time service and Vanguard Server when messages are being generated frequently.

9. Get diagnostics bitmap task is not generated if Daktronics specific diagnostics bitmap objects are disabled.

Vanguard Standard   **Version:** 4.12.0   **Release Date:** 3 June 2013

Features

1. Add new service call for integration to be able to send and play messages including graphic files.

2. Added support for event activation messages IDs of 0x or 0x00000000 to be treated as a blank message.

Vanguard Standard   **Version:** 4.11.0   **Release Date:** 9 May 2013

Features

1. Added support for dmsMsgTableSource with value of 0x0000000000 when sign is non-compliant with NTCIP.

Fixes

1. Font View status for NTCIP v1 sign shows full font list instead of only font number 1.

2. Removed a memory leak when sending MULTI messages to the sign.

3. Removed possible dead lock condition based on timing of new tasks when idle disconnect set to zero. 4. Improved client notifications to include all applicable data eliminating subsequent callbacks to server.

5. Combined get status and brightness task to improve performance with single error if connection failure.

6. Improved threads utilization after disconnecting from a sign.

7. Fixed problem with TrueType font text boxes when sending to sign.

Vanguard Standard   Version: 4.10.1   Release Date: 10 April 2013

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   Version: 4.10.0   Release Date: 26 March 2013

Features

1. Auto archive logging occurs when log size reaches 3.5 GB and no longer defaults to a scheduled time basis.

2. Additional logging output (Verbose.log in the Nucleus Server\Logs folder).

3. Added support for NTCIP 1203 v2 object 'dmsActivateMessageState' to monitor message activations of drum type sign messages.

Fixes

1. Display types sorted by name within Set Message Defaults in System Configuration.

Vanguard Standard   Version: 4.9.2   Release Date: 4 January 2013

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   Version: 4.9.1   Release Date: 17 January 2013

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.9.0   **Release Date:** 17 December 2012

Features

1. Vanguard now utilizes the .NET framework v4.0, previously was v3.5.   This update will require .NET 4.0 to be installed on every client and server computer.   The install will download the files necessary for update. NOTE: Any custom addins will be required to be updated with v4.9.

2. On new installs Vanguard server will install SQL Server 2008 Express as the database engine. Existing installs will remain on SQL Server 2005 Express.

3. Windows 8 and Windows Server 2012 added to supported operating systems.

4. Installer supports installations to custom locations other than C:\Program Files (x86)\Daktronics.   NOTE: This is not recommended if other Daktronics products are also installed.

5. Installer supports the server to be on different computer than the SQL database.
    NOTE: This is for advanced use only and requires contacting Daktronics for installation support.

6. NTCIP 1203 v2 Temperature Status Table is visible in the Temperature Status Views under Sensors. Example:

View Temperatures
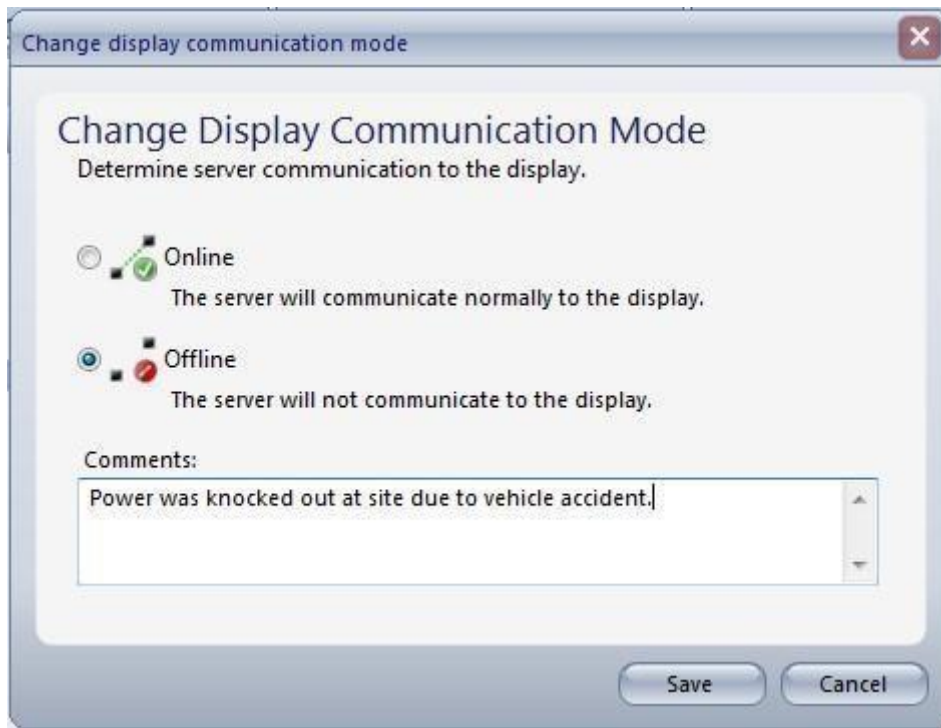Monitor the temperature inside and outside the display.

Summary

Sensor Type	Minimum value	Maximum value
Control cabinet sensors	49°C / 120.2°F	49°C / 120.2°F
External sensors	30°C / 86°F	30°C / 86°F
Internal sensors	33°C / 91.4°F	33°C / 91.4°F
Critical temperature	Not available	103°C / 217.4°F

Sensors

Description	Status	Value	Warning Low	Critical Low	Warning High	Critical High
TEMPCONTROLLER	0	49	0°C / 32°F	0°C / 32°F	0°C / 32°F	0°C / 32°F
TEMPAMBIENT	0	30	0°C / 32°F	0°C / 32°F	0°C / 32°F	0°C / 32°F
TEMPSIGN1	0	33	0°C / 32°F	0°C / 32°F	0°C / 32°F	0°C / 32°F
TEMPSIGNMODS	0	37	0°C / 32°F	0°C / 32°F	0°C / 32°F	0°C / 32°F

7. Online/offline option allows user to specify text why display was set offline.

Fixes

1. No longer allow editing of default Daktronics NTCIP Profiles' MIBs.   Must create new profiles to edit.

Vanguard Standard   **Version:** 4.8.7   **Release Date:** 26 November 2012

Features

1.   Added predefined auxiliary output: Lane Use Sign - Blank, Red X, Green Arrow.

2.   Log entries for get values via DirectAccessNtcip web service are verbose instead of information.

Fixes

1. UDP/IP string within the display wizard is corrected.
1. Fixed certain serial timeouts when PMPP packets contain CRCs with 0x7E and 0x7D values.

Vanguard Standard   **Version:** 4.8.6   **Release Date:** 15 October 2012

Fixes

1. Safely handles an unexpected trailing null in the font name's octet string when retrieving a display's font list.

Release Date: 14 September 2012

Vanguard Standard Version: 4.8.5

Fixes   uery builder view.

    1. Server Log Viewer correctly shows the default 14-day filter in the q

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Vanguard Standard　　　　　**Version:** 4.8.4　　　　　**Release Date:** 7 September 2012

Features

    1. Added ability for custom application code to be executed when a message is activated or blanked.

Fixes

    1. Improved performance of Server Log Viewer start up and queries.

Vanguard Standard　　　　　**Version:** 4.8.3　　　　　**Release Date:** 1 August 2012

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

    Release Date: 9 May 2012

Vanguard Standard　Version: 4.8.2

Fixes   due to disposed connection failures.

    1. Improved connection timeout period on PMPP when network failed

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Vanguard Standard　　　　　**Version:** 4.8.1　　　　　**Release Date:** 19 April 2012

Fixes

    1. Task progress indicator stops when the server is stopped.

    2. Improved PMPP communication to not crash the server if the connection was disposed.

Vanguard Standard　　　　　**Version:** 4.8.0　　　　　**Release Date:** 2 April 2012

Fixes

1. Module temperature map correctly shows values when module temperature is less than 0°C.   Actual values are shown in tooltips.
2. Fix problem with serial communications that does not require Idle Disconnect timeout to 0.
3. Fix problem with serial communications and hardware address that did not force a disconnect between display connections.   This required serial port and multiple displays on same COM port.
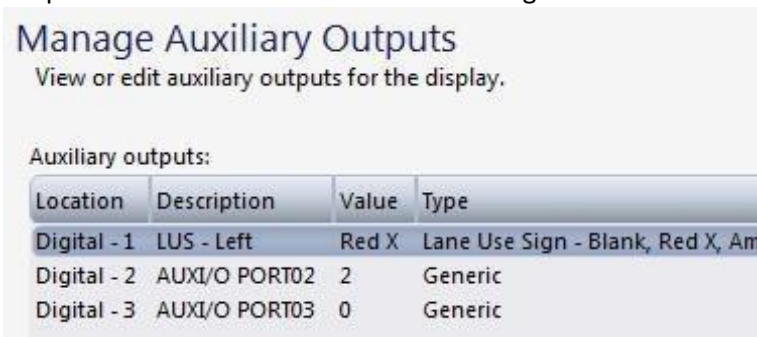

Vanguard Standard   **Version:** 4.7.0   **Release Date:** 4 January 2012

Features

1. Added support for Auxiliary Outputs.   Attached devices can now be controlled through the Display Control Interface. This functionality will require hardware attached to the sign and requires Firmware v1.8.3936.26 or higher. An example of this control would be a lane use signal.

Fixes

1. Log entries have been cleaned up.   The server no longer logs Get Status operations and duplicate log entries (Ex: Message Save, Failed to Connect) have been fixed to only log it once per user command.
2. Diagnostics entries include analog table results for non-Daktronics NTCIP profiles.
3. Licensing Lock Codes have been updated to improve licensing support on virtual server environments.

Vanguard Standard   **Version:** 4.6.2   **Release Date:** October 2011

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

          Release Date: 10 October 2011

Vanguard Standard   **Version:** 4.6.1

a line to allow the text to fit the full width of the

Fixes

1. Character spacing is now correctly ignored for the last character on display.

Vanguard Standard **Version:** 4.6.0 **Release Date:** 29 August 2011

Features

1. Display font management shows the NTCIP 1203 v2 font status values when supported.
2. Improved diagnostics results to include peripheral number, e.g. Power Supply 01, Power Supply 02.
3. Added ability to set CHAP name and secret for dialup PPP displays.

4. Added new server fonts: 24x17_4_CP1252, 24x19_5_CP1252, 24x21_7_CP1252, 32x25_5_CP1252, 32x28_9_CP1252, and 32x22_4_CP1252.
5. Vanguard Configuration Utility added support for configuring VM displays.

Fixes

1. The server correctly handles displays that do not support blank message type.   This related to older displays and early NTCIP support.
2. When playing a message, the server will only blank the display if the currently running message has a NTCIP v2 graphic object in message. Previously this was done every time.
3. STMF sequences are safely decoded when length exceeds the expected amount in certain situations.
4. The NTCIP Profile community name is correctly used from configured setting.
5. Fixed PPP connection error when communicating to Daktronics' Generation I controller.
6. Improved handling of various communication drops and recovery from the drops. Cellular IP networks will be primary benefactor.
7. Activating message commands only request activate message error when a general error is received from the activation packet.
8. Improved SNMP exception handling during unexpected states in situations with non-Daktronics displays.
9. The view temperatures operations work on non-Daktronics signs.
10. Removed fault contract that caused code generation issue with certain SOAP toolkits (SDK).
11. Quick Message for Character and Line based display types no longer include a new line spacing value.

Vanguard Standard **Version:** 4.5.4 **Release Date:** 11 August 2011

Fixes

1. When playing a message, the server will only blank the display if the currently running message has a NTCIP v2 graphic object in message. Previously this was done every time.
2. STMF sequences are safely decoded when length exceeds the expected amount in certain situations.

Vanguard Standard　　　　**Version:** 4.5.3　　　　**Release Date:** 14 July 2011

Features

1. Added ability to set CHAP name and secret for dialup PPP displays.

Fixes

1. The NTCIP Profile community name is correctly used from configured setting.

2. Fixed PPP connection error when communicating to Daktronics' Generation I controller.

Vanguard Standard　　　　**Version:** 4.5.2　　　　**Release Date:** 24 June 2011

Features

1. Added new server fonts: 24x17_4_CP1252, 24x19_5_CP1252, 24x21_7_CP1252, 32x25_5_CP1252, 32x28_9_CP1252, and 32x22_4_CP1252.

Fixes

1. Improved handling of various communication drops and recovery from the drops. Cellular IP networks will be primary benefactor.

2. Activating message commands only request activate message error when a general error is received from the activation packet.

3. Improved SNMP exception handling during unexpected states in situations with non-Daktronics displays.

4. The view temperatures operations work on non-Daktronics signs.

Vanguard Standard　　　　**Version:** 4.5.1　　　　**Release Date:** 31 May 2011

Features Client

1. Vanguard Configuration Utility added support for configuring VM displays.

Fixes

1. Removed fault contract that caused code generation issue with certain SOAP toolkits (SDK).

Vanguard Standard　　　　**Version:** 4.5.0

　　　　　　　　　　　　　　　　　　　　Release Date: 20 May 2011

Features

1. Display types can be automatically configured based on settings of displays.

2. All Log Viewer columns are now adjustable by width.

3. Added operations for SDK users to individually get and set SNMP objects.

4. If a message exceeds the boundaries of NTCIP 1203 v2 graphic specifications, the message will be sent using Daktronics custom graphics.

5. Messages sent to monochrome displays no longer add color foreground or background tags for NTCIP 1203 v1. This was added in 4.4.1 hot fix.

6. The server logs will automatically be trimmed quarterly and when size reaches 1 GB at any given time. The trimmed log data is archived to a .CSV file on disk.

7. The SQL Database transactional history is now set to Simple mode. This prevents large transactional history files from being created when these files are unnecessary.

Fixes

1. Fixed pixel test results colors to be more distinguishable.

2. Send Message log event was not logging all event details.

3. The activation IP address is now set properly when an IPv6 address is present.

4. Fixed a problem when retrieving pixel tests that would not report errors in rare situations.

5. Server Log Viewer's close button functions correctly.

Vanguard Standard Version: 4.4.1

Release Date: 8 April 2011

Features

1. Messages sent to monochrome displays no longer add color fore ground or background tags for NTCIP 1203 v1.

Vanguard Standard Version: 4.4.0 Release Date: 10 February 2011

Features

1. Added ability to activate messages from the display's changeable message library.

Fixes

1. Brightness level is properly saved to database after setting the value.

2. Message thumbnails are correctly created when converting from version 3 database.

Vanguard Standard Version: 4.3.0 Release Date: 14 December 2010

Features

1. Version information in about box will now show product version instead of file version.

2. Added configurable foreground color to text.

3. Changed diagnostic test results to show textual value instead of numeric values.

4. For NTCIP v2 messages, the server will minimize the graphic usage and utilize text rectangles when possible. NOTE: NTCIP v1 will still combine frame into a single image and is only supported on Daktronics displays.

5. Changes to Nucleus Server.exe.config are now persisted between upgrades.

6. Added MULTI string to log entry when sending messages.

Fixes

1. Fixed problem that would not check message priority when messages were activated.

2. Server events will now work if user has the log in screen open for more than 10 minutes.

3. Tab order was corrected for controls within configuration wizards.

4. Error message during log in when WCF services failed to load is now more helpful.

5. Fixed a rare problem where new connections to displays fail.

6. Sending a font with NTCIP v2 will no longer result in a blank font.

7. Controller graphics are set to 'not used' if an existing message is replaced to keep controller memory free.

8. Retrieving legibility threshold is now possible prior to the initial setting of the value.

9. Log Viewer no longer prompts for credentials a second time if password contains special characters.

10. Log Viewer now will export the full query and not just the current page.

Vanguard Standard   Version: 4.2.1   Release Date: 30 August 2010

Fixes

1. NTCIP v2 graphic entries now set to not used when removing a message from a display's message list.

2. Diagnostic bitmaps for a message with several graphic pages now properly waits for all pages to be rendered.

3. Synchronizing fonts with a NTCIP v2 display now compares height in addition to CRC and follows the state machine for removal of fonts.

4. Message thumbnails now properly generate if the message originated from a source other than the server and contains a NTCIP v2 graphic tag with a CRC value.

5. Enabling a test pattern prior to ever getting status for a display no longer shows as an error.

6. Message list representation within server no longer gets cleared in certain situations.

Vanguard Standard   Version: 4.2.0   Release Date: 6 July 2010

Features

1. Added context sensitive help using the F1 key and manual.

2. Added module temperature view to monitor temperatures across the display face.

3. Enabled character matrix line justification support.

4. Added import for data scope files within Data Scope.

5. Added email notification service.

6. Enhanced logging details for configuration changes.

7. Enhanced real time diagnostics retrieval for Daktronics displays.

Fixes

1. Fixed bug if window opened outside of screen resolution then will relocate the window position.

2. Changed pixel test (only NTCIP 1203 v2) to correctly retrieve the pixel failure count.

3. Removed inter-character timeout.

4. Fixed bug when sending a message a second time, it would resend the entire message instead of verifying it already existed.

Version: 4.1.4   **Release Date:** 4 May 2010

Vanguard Standard

Version: 4.1.3

Vanguard Standard

Release Date: 29 April 2010

No applicable changes for Vanguard Standa   n Vanguard Professional.

Vanguard Standard	**Version:** 4.1.2	**Release Date:** 15 April 2010

No applicable changes for Vanguard Standard in this release, all were within Vanguard Professional.

Vanguard Standard   **Version:** 4.1.1   **Release Date:** 7 March 2010

Fixes

1.   Fixed communication failure due to remote dropping the connection, thus causing a server restart to resolve.

Vanguard Standard   **Version:** 4.1.0   **Release Date:** 17 February 2010

Features

1. Support for upgrades which does not require uninstall first.

2. Ability to refresh and remove dialup modems.

3. Support for 120 DPI display setting.

4. Automatic support for light communications (smaller packet size) if packet failure occurs.

5. Task progress steps when sending graphics during message send.

6. Updated Daktronics NTCIP profiles.

Fixes

1. VM display types now have default fonts.
2. Fixed modem resource failures and failing to disconnect. Using improper Windows drivers for modems increases failure rate.

Vanguard Standard   **Version:** 4.0.1   **Release Date:** 10 December 2009

Features

1. Trial version information now shown in application's title.

Fixes

1. Network install no longer prompts for setup password up to 3 times.
2. Font files no longer install to the root folder (c:\).
3. Improved sending message sequence to allow for larger MULTI string lengths.

Vanguard Standard   **Version:** 4.0.0   **Release Date:** 16 November 2009

http://www.daktronics.com/ProductsServices/Products/Software-Controllers/dmssoftwarecontrollers/vanguardv4controlsoftware/Pages/default.aspx