Velocity 3.5 SP1 Release Notes

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Overview

The Velocity 3.5 SP1 release:

- provides a larger and resizable browser window for an AXIS camera's video,
- renames the "Perform Database Maintenance" default task to "Full Database Backup",
- includes new options for disabling alarm sounds,
- supports PIV-I cards with a UUID (128-bit GUID),
- allows you to specify which port the Email Writer uses to send email,
- enables you to easily test the Email Writer's SMTP settings,
- supports newer PIV cards which use the updated FIPS201 data layout,
- allows you to use the Windows built-in SYSTEM account to install Velocity updates,
- supports an unlimited number of USB Smart Card Readers,
- adds a Ping Port feature for IP XNET/SNET ports,
- shows which edition of Velocity you have licensed (in the Velocity Client's title bar),
- makes the Velocity database more secure,
- makes sure the Client and Server are running the same version of Velocity,
- includes several other minor enhancements, and
- fixes numerous bugs.

This release also provides support for the new Mx controller, which includes a 6-pin Wiegand terminal for each door that enables you to directly connect the Mx controller to an industry-standard Wiegand card reader, without a separate MATCH2 board. For more information, see **Chapter 8, Mx Controller**, in the *DIGI*TRAC Systems Design and Installation Guide*, or the **DIGI*TRAC Hardware Configuration > Controllers > Mx Controller** topic in the Velocity online help.

The following documentation has also been updated:

- Velocity 3.5 main online help system
- Velocity 3.5 Installation online help system
- Velocity 3.5 Installation Guide
- DIGI*TRAC Systems Design & Installation Guide (includes a chapter about the new Mx controller)

NOTE: This Velocity 3.5 SP1 release includes all the relevant bug fixes, enhancements, and new features of the Velocity 3.1 KB640 release. If you have 3.1 KB640 installed and want to upgrade to 3.5, be sure to upgrade to the 3.5 SP1 (or newer) release.

To utilize all the features of 3.5 SP1 (including support for the new Mx controller) requires CCM version 7.5.04 (in production as of 9/5/2013). To utilize the PIV-I/128-bit GUID support (first provided in CCM Version 7.4.58) also requires MATCH2 version 130127 (available on special order from 6/1/2013). Check with Inside Sales to verify the current production version of MATCH2 or ScramblePad.

For more information, see the tables of New Features and Enhancements and Bug Fixes.

This document also summarizes the Known Issues in this release.

NOTE: The XML Writer server extension (and its associated role permissions) was removed from Velocity, starting with the initial 3.5 release. If you were using the XML Writer, you will need to rewrite your application so it uses the Message Queue Writer instead. See the **Interfaces Configuration > Writers (E-mail, Message Queue, and Serial Port) > Message Queue Writers** topic in Velocity's online help system. If you need additional assistance, contact Identiv's Technical Support department.

New Features and Enhancements

Reference ID	Feature	Description
VEL-251	Browser window for AXIS camera video is larger and resizable	Previously, the link provided with Velocity Graphics for an AXIS camera opened a small browser window which was not resizable. Now the browser window is larger (initially 800 x 600 pixels), is resizable, and retains the size at which it is closed.
VEL-253	'Perform Database Maintenance' task renamed to 'Full Database Backup'	Previously, the Scheduling Agent included a default task named "Perform Database Maintenance". Now that task is named "Full Database Backup" to more clearly indicate its function.
VEL-288	Added options to turn off the beeps in Alarm Viewer or Event Viewer when there is an active alarm, without disabling sound for the entire computer	On the Alarm Options page of the Velocity Preferences dialog, there are two new options: • **Disable Default Alarm Sound (Beep)**, which enables you to disable the default sound (but not any customized alarm sound) which is repeatedly played during an active alarm. This setting applies only to the current operator; it is not a system-wide setting. • **Disable Customized Alarm Sounds (Audio Response)**, which enables you to disable only the customized alarm sounds (but not the default alarm sound) which are repeatedly played during an active alarm. This setting applies only to the current operator; it is not a system-wide setting. Regardless of this option's setting, you can play the customized sound for an alarm or event by right-clicking on it (in the Alarm Viewer or the Event Viewer) and choosing 'Replay WAV' from the pop-up menu.
VEL-899	Credentials will not expire/deactivate if the "Activate/ Deactivate Credentials" task is removed from the Scheduling Agent	If the "Activate/Deactivate Credentials" task is removed from the Scheduling Agent and you have credentials set to expire on a date or on other limits, the credentials will never expire. A warning dialog has been added to notify the operator that removing this task will prevent Velocity from automatically activating and expiring credentials.
VEL-2719	Added support for PIV-I cards with a UUID (128-bit GUID)	Velocity now supports the UUID (128-bit GUID) in PIV-I cards which use the updated FIPS201 data layout, as specified in the NIST Special Publication 800-73-3. This feature requires CCM firmware version 7.4.58 or later and MATCH2 firmware version 130127 or later. For more information, see Using PIV and PIV-I Cards later in this document.
VEL-2743	Icon in title bar of some dialog boxes in the Badge & Graphic Designer was changed to match its toolbar icon	The icon in the upper left corner of some dialog boxes in the Badge & Graphic Designer was changed to match the toolbar icon which launches them.
VEL-2805	Added ability to specify which port the Email Writer uses to send email	Previously, the Email Writer was hard-coded to use port 25 when sending email. Now a Port field has been added to the Settings page of the Email Writer's Properties dialog, so you can change the port from its default value of 25 to a different value if necessary.
VEL-2809	Added "Test Email" button to test the Email Writer's SMTP settings	A "Test Email" button has been added to the Settings page of the Email Writer's Properties dialog, so you can test the Email Writer's SMTP settings.
VEL-2852	Added support for updated FIPS201 data layout	Enrollment Manager can now read the Printed Information Buffer (PIB) from newer PIV cards which use the updated FIPS201 data layout, as specified in the NIST Special Publication 800-73-3. See Using PIV and PIV-I Cards later in this document.

Reference ID	Feature	Description
VEL-2873	Velocity supports an unlimited number of USB Smart Card Readers	Velocity now supports a virtually unlimited number of USB Smart Card Readers. (Previously, if you had more than 4 USB Smart Card Readers attached to your computer, they would not all appear in the drop-down list of the Select Smart Card Reader dialog.)
VEL-2901	Support Mx advanced Wiegand card formats in Velocity	For an Mx controller, there is a new Entry Reader > Card Reader Setup page of the Door Properties dialog, for configuring a reader wired to an external 5-pin MATCH board or directly wired to the onboard 6-pin Wiegand terminal of an Mx controller's door.
VEL-2907	Add Velocity License Schema Name to Velocity Client's Title	The Velocity Client's title bar now includes the "License Schema Name" from the Velocity license (as shown in the License column on the Velocity License Manager window), to indicate which edition of Velocity you have licensed. For example, instead of just showing "Velocity" in its title bar, a Velocity Client will now show something like "Velocity – Demo", "Velocity – Corporate", or "Velocity – Federal".
VEL-2909	Detect Industrial Mx model numbers	Velocity now supports the new Mx controller, which is available in Mx2, Mx4, and Mx8 models to control either 2, 4, or 8 doors. (An Mx controller can be easily upgraded in the field by changing its CCM.)
VEL-2925	Compliance with DISA's Application Security and Development STIG	Some portions of the Velocity software were updated to validate compliance with the specifications outlined in the "Application Security and Development Security Technical Implementation Guide" by the Defense Information Systems Agency (DISA). (These enhancements did not change the functionality of Velocity.)
VEL-2934	Scramblepad entry reader's "Accept programming codes" option's default changed to unchecked, and is not available for Mx controllers	In the Entry Reader > Scramblepad Options page of a door's Properties dialog, the "Accept programming codes" option's default value has been changed from checked to unchecked, and this option is not available for an Mx controller.
VEL-2949	Controllers - Advanced Options Setups dialog change for Bypass Code conflict checking	To help support facilities using multiple variations of PIV and PIV-I smart cards, the function of the "Bypass CODE conflict checking" option on the Advanced Options Setups dialog (which is reached by clicking the Advanced button on the Setup page of the Controller Properties dialog) has been changed, starting with CCM firmware version 7.4.58. A PIV card can output either a 64-bit, 75-bit, or 200-bit FASCN, while a PIV-I card will output a 128-bit GUID/UUID. However, a controller's CCM handles data in chunks of 16 hex digits, so card codes greater than 64 bits must be represented in two chunks. Although unlikely, it is possible that even though an entire 32-digit card code is unique in the Velocity database, its first 16 digits could be the same as one or more other 16-digit or 32-digit card codes. In prior versions an error would be generated when attempting to download the credential to a controller where this conflict existed. For example when multiple card readers that support different variations of PIV and PIV-I smart cards were used one system. To ensure that unique 32-digit card codes can be downloaded to a controller, the CCM no longer checks for uniqueness of the first 16 digits. As indicated this change also caused a change in the function of the "Bypass CODE conflict checking" option on the Advanced Options Setups dialog for a controller. Un-checking this option would previously enable the controller to check PIN# or CARD# for conflicts in the user database. In this version un-checking the option checks only the PIN# for apparent conflicts.

Reference ID	Feature	Description
VEL-2975	New UDF type "UUID" tor PIV card support	To support the UUID (128-bit GUID) in PIV-I cards, Velocity now includes a new UDF type called UUID, which consists of 32 hexadecimal digits. When entering a UUID, you can include dash characters ("-"), but they will be stripped out when the value is saved. User-Defined Fields with this new field type will show up, along with numeric UDF types, when you press the UDF mapping button for a credential's Card data.

Although ideally a UUID should be unique, Velocity does not check for uniqueness, to support legacy PIV cards (which often have dummy UUID data that is not unique). |
| VEL-2984 | Added Ping capability to TCP/IP ports | A Ping button was added to the Properties dialog of a TCP/IP port. The functionality is also available through a new Ping Port command which appears on the pop-up menu when you right-click on a port in the system tree in Velocity's Administration window. |
| VEL-3127 | Add check to Velocity client to not connect to server running an older release of Velocity | The Velocity Client software now performs a more detailed check of the version number of the Velocity Server, to make sure the Client and Server are the same version. (If the Client is newer than its Server, it will not run.) |
| VEL-3167 | Added ability to install Velocity updates using the built in SYSTEM account | You can now use the Windows built-in SYSTEM account to install Velocity updates.

NOTE: After using the SYSTEM account to install SP1, Velocity will generate an Access Denied message dialog when it first tries to start up, because it is using the SYSTEM account which is not a Velocity operator. Click OK to close the message dialog, then restart Velocity, at which point it will use the account you are logged on with. |
| VEL-3179 | Support Wiegand Keypad on Mx | The "Enable Wiegand Keypad" checkbox option was added to the new Entry Reader > Card Reader Setup page of the Door Properties dialog (for an Mx controller). That option enables you to indicate that the card reader directly wired to the onboard 6-pin Wiegand terminal of an Mx controller's door includes a keypad for entering PIN codes. |

Bug Fixes

Reference ID	Bug	Description
VEL-385	Missing host and controller time in the Velocity Event Viewer	In the Event Viewer, certain events were missing the timestamps for both the Host and the Controller. This happened only for events occurring exactly at midnight, when the time was being displayed in 24 hour time format.

This was caused by a Windows / VisualBasic problem with date/time formatting. Now Velocity checks for midnight, and displays the time as (00:00:00) if the time is set to display in 24 hour time format. |
| VEL-394 | If customization is changed to not have multimedia, the sound doesn't get changed back to default ding sound | The audio cache in Velocity was not being refreshed when the Customization Manager made changes, so if a customization used to have multimedia and then was changed to not have it, the sound wasn't being reset to the default ding sound.

NOTE: Even though Customization Manager says you need to restart the Velocity services for the changes to take effect, that really applies only to data the services cache, such as event descriptions. Audio changes are updated right away; you don't need to restart the Velocity services to notice those changes. |
| VEL-557 | Misspelling in the word Tag for "Credential Status" report | The Credential Status report used to have a column header where "Tag" was incorrectly spelled as "Tagg". |

Reference ID	Bug	Description
VEL-616	Status Viewer not reflecting the correct status in the Enabled column for CSR port	The current status for a Central Station Receiver port was not being shown in the Enabled column of the Status Viewer. (On Windows Server 2003, this problem occurred for all types of ports, including XNET ports for controllers. On Windows Server 2008, XNET ports would automatically refresh their status, but other interfaces such as DVRs would need to be manually refreshed.) This issue was fixed by a database script that made the insert trigger on the CSR table also update the Enabled column in the serverports table.
VEL-693	Velocity archive file names conflict for 1/11/2010 and 11/1/2010 causing the archive to fail	A Velocity database archive would fail when the generated file name conflicted with a previous archive. The naming conflict was caused by not consistently representing months and days as two digits (with a significant leading zero for January through September and for the first nine days of each month). Conflicts could occur for January 11 versus November 1, or for January 12 versus November 2. Now, database archive file names are created using two digits (with a leading zero when necessary) for every month and day.
VEL-1105	Customized WAVE File NOT playing when assigned Alarm & RTN Option is configured	A custom .WAV sound file was not being played in some situations.
VEL-1192	When configuring an AXIS Digital Camera Viewer link in Graphics, you get a Permission dialogue box	After plotting an AXIS Digital Camera Viewer link in Graphics, clicking on Properties > Custom field would generate the following error dialog: Velocity Graphics You do not have permission to perform this function. <OK>
VEL-1218	Status Viewer does not update consistently when stopping Security Domain Service from the Velocity Client machine	After the Security Domain Service was stopped from a Velocity Client computer, the Status Viewer sometimes didn't update to show that the controllers were no longer online.
VEL-1286	Download Monitor not displaying accurately when you launch it after the batch files are in the spooler directory	Importing users was not correctly updating the Download Monitor, regardless of whether it was open or closed when the download began. Also when importing users was batch activated, the batches inserted into the database had a wrong controller ID.
VEL-1390	Deleting Central Station Receiver (CSR) points does not remove them from Point Level Customization	Customization Manager was not automatically deleting a point defined in Point Level Customization after you went to the Central Station Receiver (CSR) and deleted that point. This was causing orphaned points to remain in Point Level Customization, which could not be deleted.
VEL-1441	Status Viewer Displaying Blank Status for Ports	When the connection to a port was dropped and then came back online, the Status Viewer had an empty status for the port, which an operator could interpret as meaning the port was offline. To get an accurate status, the operator would have to disable then re-enable the port. This issue was fixed by updating the Superstatus table with the port status when the xbox status comes in.

Reference ID	Bug	Description
VEL-1728	'Last Access by Person' Report sorting issue	In Report Manager, the Person Information report for 'Last Access by Person' did not follow the sorting criteria selected in the Sorting tab. Instead, the report was always producing information based on Person last name.
VEL-2204	"Show Last Door" toggle menu under View menu in Enrollment Manager does not do anything	The interaction between the "Show Last Access for Credentials" and "Show Last Door Name" commands on the Enrollment Manager's View menu is not apparent from the user interface, and was not properly explained in the Velocity online help. Here is an updated explanation of all the View menu commands: **Show Last Access for Credentials** - toggles the display of the 'Last Access' and 'Last Door' columns in the Credentials pane. By default, this option is unchecked and the columns are not displayed. When this option is checked, the 'Last Access' column shows the date and time of access, and the 'Last Door' column shows either the door's address or name (depending on the state of the 'Show Last Door Name' option). **Show UDF Field Summary** - toggles the display of the first 14 User-Defined Fields in the People Tree pane. By default, this option is unchecked and the additional columns are not displayed (which reduces the load time for several thousand users from minutes to just a few seconds). When this option is checked, the additional columns are displayed (but you must scroll to the right to see them). **Show Last Door Name** - toggles between displaying a door's address or name in the 'Last Door' column in the Credentials pane (which appears only when the 'Show Last Access for Credentials' option is checked). By default, this option is unchecked and the 'Last Door' column shows the door's address. When this option is checked, the 'Last Door' column shows the door's name.
VEL-2228	Changing a credential's Activate Date does not make the credential inactive	Changing an active credential's Activate Date did not make it inactive. The normal process is to expire an active credential and then change its activation date to re-activate it. The fix for this bug is to not allow an operator to change the activation date for a credential that is already active. Now when the activation date is changed on an active credential, it is removed from the controller, then downloaded again when the new activation time occurs.
VEL-2374	Credentials do not get disabled when the expire date is reached on the Credential Template that they are linked to	Credentials were not being disabled when the expiration date was reached on the Credential Template that they are linked to. No credential download appeared in the Event Viewer when the credential was supposed to update and become disabled, and the Status of the credential remained 'Active' instead of becoming 'Inactive'.
VEL-2402	Running a report that includes PIN codes displays **** instead of the PIN code	When an Operator who was part of the default Administrators role ran a Person Access and Function Group report with Codes and Cards from Person information, the report sometimes displayed asterisks instead of PIN codes. (Creating a new role equivalent to the Administrators role and assigning it to the operator caused the report to work correctly.) The reports showing cards and codes rely on the CurrentOperator logged in the Workstations table to query the operator's permission to decrypt the codes. When the Security Domain Service is shut down, CurrrentOperator is cleared from the database. The problem was that when a Velocity client reconnects, it wasn't logging the current operator again.
VEL-2413	Uninstalling Velocity generates several error messages during the uninstall process	Several error messages were sometimes generated when uninstalling Velocity. The root of the problem was sometimes the DVR services didn't shutdown properly. Now an exclusion list prevents files being added to the uninstall log that are in directories that the pre-uninstall wrapper already cleans up.

Reference ID	Bug	Description
VEL-2433	Exit reader address is the same as the Entry reader in the Event Viewer	For a door with separate Entry and Exit reader, the Event Viewer was incorrectly showing the Exit reader's address as the Entry reader's address.
VEL-2520	Incorrect operator name would sometimes appear when downloads would take place	When an operator changed the credentials for a user, Velocity sometimes incorrectly reported that the downloading of the information to the controllers was started by a different operator.
VEL-2563	Creating a duplicate controller while in 'Group Type View' will generate errors	Creating a duplicate controller while in 'Group Type View' would generate the following errors. Error # 1: Hirsch-Identive The following unexpected application error occurred... Function Name: Administration_CallBack FunctionSubItem: 2680 Number: 91 Description: Object variable or With block variable not set \<OK\> Error # 2: Velocity Client Application An error has occurred. Description: Element not found Function: Nodes.FAdministration.AddControllerFolders(160) Error Number: 35601 \<OK\>
VEL-2584	Switching operators while the Graphics or Badge Designer components are open caused an error	Switching operators while the Graphics or Badge Designer components are open caused the following error: Velocity Client Application An error has occurred. Description: Automation error The object invoked has disconnected from its clients. Function: Velocity.FConsole.OkToSwitchOperator(590) Error Number: -2147417848 \<OK\> For some reason, if you load Graphics but never click on it (so that it gains the focus), when Velocity attempts to send the shutdown request, Windows has a problem that makes Graphics crash. Now Windows will still pop up a Graphics crashed message, but Velocity then shuts down without error.
VEL-2590	Download Monitor is out of sync with the Spooler when Stopping and Re-Starting DIGI*Trac Service	When an error in the batch happened, it could result in a discrepancy between the Download Monitor and the Spooler.
VEL-2630	An Application Error Occurred connecting to a Dial-Up controller after an upgrade from Velocity 3.1 KB630 to Velocity 3.5 Iteration 26 Build 1205.2	After upgrading from 3.1 KB630 to 3.5 Build 1205.2 IT26, the following error occurred when attempting to connect to a dial-up controller: Velocity Status Viewer An error has occurred. Description: Control array element '8' doesn't exist Function: StatusObject.MPublic.UpdateList(0) Error Number: 340 File Version: Velocity Status Viewer - 3.5.1156 \<OK\>

Reference ID	Bug	Description
VEL-2717	The windows for the setup.exe do not show up in task bar	If you ran setup.exe on a system that has Velocity 3.1 KB630, the initial Setup window did not come to the front or show up in the taskbar, making it seem as if the installer wasn't running. To reach the Setup window, you had to minimize all other windows.
VEL-2745	Change to customized .wav file assigned to AlarmID does not take effect	In Customization Manager, selecting the 'Enable an Audio Response' option and choosing a .wav file to play when an AlarmID is triggered worked with no issues. But when changing the option to return to the normal 'beep' alarm or play a different .wav file, the change did not take effect unless the computer was rebooted.
VEL-2747	The 3.5 installer should NOT allow you to install on Windows XP as a Standalone Workstation	The Velocity 3.5 installer previously allowed you to install the 'Standalone Workstation' version of Velocity on Windows XP, even though that is no longer a supported configuration.
		Now when running the Velocity 3.5 installer on a Windows XP system, if the logged on account is a domain member, the only install option available is 'Client'. If the logged on account is a local account, no option is available (so the user will have to exit the installer and either reconfigure the log on account or install a supported operating system).
		NOTE: There is no longer an option to "overwrite the current version (all settings & data will be lost)" when running the 3.5 installer with an existing version (either 3.1 or 3.5) of Velocity. In other words, if Velocity 3.1 is pre-installed, the only option is to upgrade to Velocity 3.5; if Velocity 3.5 is pre-installed, you will have to exit this installer, uninstall Velocity, and then re-run the installer.
VEL-2781	Velocity clients receive 'Maximum number of license' message when trying to reconnect after SQL Server has been restarted	After stopping and restarting the SQL Server, when the client was trying to reconnect to the server, the following message sometimes appeared:
		Maximum number of licensed clients logged in. Please contact your system administrator.
VEL-2783	Remove Learning Center Link in Velocity Help fly-out menu	The Learning Center command on Velocity's Help menu and the Learning Center icon on Velocity's toolbar have been removed, because the link is now deprecated.
		NOTE: For new installations of Velocity 3.5 or upgrades from 3.1, the Learning Center help command and toolbar icon will never exist. If you are doing an upgrade from the initial release of Velocity 3.5, you will need to either do a 'Reset Defaults', or delete the Layout_VelocityToolbars.xml file in your Velocity folder. By deleting just that file, you are essentially doing a "partial Reset Defaults" which will preserve your window and column header layouts and will only reset the toolbar/ribbonbar and menus in Velocity.
VEL-2789	Adding a Credential (not from template) with an expiration date then linking it to a template sets the expiration date to the current day/time	If a credential which was created without a template and had an expiration date was later linked to a credential template, the expiration date was being changed to the current date/time.

VEL-2794	Receiving "Maximum number of licensed clients are logged in..." message after closing and restarting Velocity on Client machines	Even though there was a sufficient number of licensed Velocity clients, after closing and restarting Velocity on Client computers, the following error message was sometimes displayed:
		    Velocity Client Application
		    Maximum number of licensed clients are logged in. Please contact your system administrator.
		    <OK>

Reference ID	Bug	Description
VEL-2797	Bulk Clear causes exception in SDServer and disconnects client	Sometimes a Bulk Clear caused an exception in SDServer which disconnected the Velocity client. Now, SDServer detects and logs invalid BULK_CLEAR messages sent from a client.
VEL-2798	Controller Master Control Zones Report does not Display Master Control Zone Name or LED on\LED off Condition	The Controller Master Control Zones report was not displaying the Master Control Zones name or the LED On\LED Off settings.
VEL-2804	The DigiTrac Network Service stops unexpectedly	The DigiTrac Network Service sometimes stopped unexpectedly, after recovering from an SDServer socket error and then the last (or only) port was disabled.

Now the Velocity services will properly recover from database disconnects. Note that the services may not always discover database disconnects until they need to access the database. Reasons for a service to access the database include activity polled from controllers, and internal service features that access the database on a timed basis (such as credential activation or expiration, alarm escalation, etc.). |
| VEL-2810 | The Help button on the Port screen does not work | The Help button on the Port Properties dialog was not opening the correct topic in the Velocity online help system. (This was fixed by adding the correct Help ID to the topic explaining the Port Properties dialog.) |
| VEL-2813 | Point Monitoring Zones in Graphics are not updating status color in real time | After creating a Point Monitoring Zone in Graphics, the zone color was not updating to indicate the status of the point (red for alarm, green for secure, yellow for masked, and grey for unknown) if there were no VIOs plotted. |
| VEL-2820 | Adding a new workstation with an apostrophe in the name caused an error | Adding a new workstation with only an apostrophe (') as the name caused the following error:

Velocity Client Application
An error has occurred.
Description: Unclosed quotation mark after the character string '''.
Function: Microsoft SQL Server Native Client
10.0.FAdministration.lstRightPane_DblClick(4690)
Error Number: -2147217900
<OK>

If the name included an apostrophe (for example "test's"), then the error message was:

Velocity Client Application
An error has occurred.
Description: Incorrect syntax near 's'.
Function: Microsoft SQL Server Native Client
10.0.FAdministration.lstRightPane_DblClick(4690)
Error Number: -2147217900
<OK> |
| VEL-2829 | Long command responses can take controllers and ports offline | Executing a DIGI*TRAC command from the Diagnostics Window that should return a lot of data in a short time (such as ten or fifty credential records in two seconds) sometimes took a long time to respond and caused the port and controller to go offline and then back online. |

Reference ID	Bug	Description
VEL-2839	Velocity 3.5 install using Advanced Authentication generated a Run-Time error	During a Velocity 3.5 installation using Advanced Authentication, the following error sometimes was generated when you clicked on the button to browse the domain: Velocity Installation Wizard Run-time error '-2147016661 (8007202b)' A referral was returned from the server. <OK> The error means that the Active Directory code is looking for credentials/groups on more than one Domain Controller, but only queries one of them. The referral error means "the information is on a different Domain Controller so you need to check with that one, not me".
VEL-2840	Loss of network connection not detected from Velocity clients	Velocity clients failed to detect when they lost connection to the Velocity server on a loss of network connection.
VEL-2842	VWC fails to add a person if the UDF in Velocity Enrollment Manager is set to a required field	The Velocity Web Console failed to add a person if the UDF is set to a required field in Enrollment Manager. Regardless of whether you provided any info for the required field, you got an error message stating: AddUser failed with error: Add exception: User Defined Field [1] value required. The problem was that the user record was being created first, then the UDFs were being added afterwards. Now, all the UDF data is passed in when the user record gets inserted.
VEL-2843	In Status Viewer if you right click on a port and select properties the Administration window opens	In Status Viewer, if you right-click on a port and select Properties, the Administration window used to open (which is not necessary for editing the properties of a port). Now, instead of obtaining the ServerID by querying the Treenode in the Administration window, the ServerID is obtained by querying the Velocity database.
VEL-2846	Arithmetic overflow error when updating a Door Group	When modifying a Door Group that belonged to a Master Door Group where the port address of the Controller was greater than 255, Velocity sometimes generated an unexpected application error. The error generated is as follows: Hirsch Electronics The following unexpected application error occurred… Function Name: MMasterDoorGroup:UpdatedUserCredentialsInMDG FunctionSubItem: 17 Number: -2147217833 Description: Arithmetic overflow error for data type tinyint, value = xxx
VEL-2849	CCTV Call Camera to Monitor custom link prompt not working	In the Graphics module, the "CCTV Call Camera to Monitor" custom link's "Prompt the user for the camera/monitor each time" setting (for the Default Click Behavior option on the Settings page) was not working.
VEL-2850	Graphics generates errors after moving controllers from SNET to XNET Port	The Graphics module was generating errors after a controller's address had changed due to it being moved from an SNET Port to an XNET Port. (Now when a map is opened, the addresses of the plotted VIOs are checked, and automatically updated when necessary.) The error generated is as follows: An error has occurred. Description: Object required Function: Graphics.FMain.InitVIO(160) Error Number: 424 File Version: Velocity Graphics – 3.1.19

Reference ID	Bug	Description
VEL-2855	VWCSetup.exe adds multiple entries into the Velocity and EMF databases when executed multiple times	VWCSetup.exe was adding multiple entries into the Velocity and EMF databases when it was executed multiple times. In the Velocity database, it was duplicating entries in the Operators table. In the EMF database, it was duplicating entries in the Operators, VelocityServers, and Locations tables.
VEL-2858	Stopping and starting the Digi*Trac Network Service would cause active downloads to disappear from the spooler directory	A mismatch between the Velocity database and a controller's information could occur if a download did not complete. Now downloads are monitored to make sure they resume and complete after any of the following problems occur during the download: • The Velocity services are restarted • The Velocity Server is restarted • A controller is powered off • A controller is disconnected from the network
VEL-2861	Error message occurs when adding a new CCTV Port after you have more than 255 ports	If you already had 255 ports and tried to add a new CCTV port, the following error message was displayed: Hirsch Electronics The following unexpected application error occurred... Function Name: SendToDatabase Number: 6 Description: Overflow <OK>
VEL-2862	When batch deleting credentials a .dat.bak file shows in the spooler folder and is not deleted when done	When batch deleting credentials, a *.dat.bak file used to appear in the spooler folder and was not deleted after the download completed.
VEL-2864	Search error on a UDF with the Unique Number type	While searching in Enrollment Manager on a User-Defined Field with the Unique Number type and a value like 5415840865, a search error message was sometimes displayed. The error generated is as follows: The search criteria was malformed. Please check your criteria.
VEL-2868	Opening an expired credential that's also deleted from the panel tries to download to the panel and generates download errors	Opening an expired credential that was also deleted from the controller tried to download it to the controller, which generated download errors of "User not found" and "Command failure 16". Now, the Event Viewer displays messages showing that the credential was changed and no Digi*trac download is required for the credential.
VEL-2872	Customized tab settings get lost when newer KBs get applied	Some changes made using Customization Manager could be lost when applying newer updates to Velocity, because some newer components had lower version numbers than before.

Reference ID	Bug	Description
VEL-2874	Using "is not" "greater than" or "less than" for any search involving numeric types or date type UDF will generate an error	Searching in Enrollment Manager using the "is not" option together with either "greater than" or "less than" generated an error for the following data types: Date, Number, Unique Number, Auto unique, Auto sequential, and UUID. The error is: Hirsch Electronics The following unexpected application error occurred... Function Name: frmQueryBuilder.cmdTextAdd_Click FunctionSubItem: 164 Number: 9 Description: Subscript out of range <OK> (The FunctionSubItem value of 164 is for "less than"; the value for "greater than" is 176.)
VEL-2876	Velocity installer does not detect correct drive size when the size exceeds one terabyte	The Velocity installer was not detecting the correct size of a hard drive when its free space was greater than one terabyte.
VEL-2883	"Type Mismatch" error message occurred when adding Credential in the Enrollment Manager	If you tried to add a credential in Enrollment Manager when the "Credential Enrollment" fields did not match the value in the Credential Properties, the following error occurred: Hirsch Electronics The following unexpected application error occurred.... Function Name: mPublic.OctalToHex FunctionSubitem:12 Number: 13 Description: Type mismatch <OK>
VEL-2886	Opening forms that were previously registered under Customization Manager in KB630 resulted in forms being cut off - Forms appear shorter than they should, OK/CANCEL buttons are cut off	Forms that were previously registered under Customization Manager in Velocity 3.1 KB630 had their OK and CANCEL buttons cut off when they were opened in Velocity 3.5.
VEL-2888	"Event From...To" fields are not editable in "All Video Events" screen	In the All Video Events window, the "Events From" and "To" fields were supposed to be read-only fields which display the start and end time of the events belonging to the selected DVR. However, this information was not being displayed, and a user would think that these were data entry fields. Now, those unnecessary fields have been removed (and the Velocity online help has been updated).
VEL-2896	During the upgrade from 3.1 to 3.5, Velocity should delete 'Velocity Learning Center' link	After an upgrade from 3.1 to 3.5, some items which had been removed from the product (such as the Velocity Learning Center) still remained in the user interface. Now the Velocity toolbar will reset one time, getting rid of the Learning Center toolbar Icon and Help menu command.

Reference ID	Bug	Description
VEL-2899	"HirschEnrollment ManagerTV3.exe *32" does not clear from Task Manager after closing a credential template	Because the Velocity client was holding onto a reference to the last credential template opened, the Windows Task Manager continued to show a process named "HirschEnrollmentManagerTV3.exe *32", even after the credential template was closed.
VEL-2900	The Help button in the Credential Biometrics tab does not work	The Help button on the Biometrics page of the Credential Properties dialog was not working.
VEL-2902	Acquiring a signature after changing a pen or background color to yellow makes the signature capture unusable	In Enrollment Manager, acquiring a signature after changing a pen or background color to yellow in the image preview window made the signature capture unusable. The error generated is as follows: Hirsch Electronics The following unexpected application error occurred.... Function Name: frmTopazTL462.SetupSigBox FunctionSubItem: 5 Number: 0 Description: <OK>
VEL-2911	Transaction Events are not available for selection within the Email Writer, Serial Port Writer and Message Queue Writer	The checkboxes for selecting event types (on the Advanced Event Selection dialog) were not working consistently between E-mail Writers, Message Queue Writers, and Serial Port Writers.
VEL-2915	Credentials linked to a Credential Templates do not go "Inactive" when you expire the template	Credentials linked to a Credential Template did not go 'Inactive' when you expired the template. When the template expiration date was reached, the credential remained Active.
VEL-2919	Database access error after running a "hardening" script	A customer reported a database access error after running a "hardening" SQL script to lock down their database. (This error was caused by the way that the DVR code used the ADO command object to pass parameters to stored procedures by name.) The error generated is as follows: Hirsch Electronics Error in access database <OK>
VEL-2922	Velocity Web Console shouldn't allow you to install it when the "Velocity Services Account" and/or "Velocity Services Password" fields are left blank	The Velocity Web Console could be installed even though the "Velocity Services Account" and/or "Velocity Services Password" fields were left blank.

Reference ID	Bug	Description
VEL-2924	Re-installing the Velocity Web Console adds duplicate entries in the Velocity and EMF databases	Re-installing the Velocity Web Console was adding duplicate entries in the Velocity and EMF databases. Now, the installer/updater checks for an existing EMF database and • If the EMF database exists, it simply applies file updates. • If the EMF database does not exist, then it performs a regular install.
VEL-2932	HirschGraphics.exe remains in Processes forever after closing Graphics	When Graphics was closed, it was not being properly released from Velocity, so the Windows Task Manager continued to show a process named "HirschGraphics.exe" until Velocity was exited.
VEL-2935	Unbundled readers do not display the "Enable Wiegand Hex Pass-through" option	When a reader was unbundled from a door, it did not include the "Enable Wiegand Hex Pass-through" option on the General page of the reader's Properties dialog.
VEL-2938	Off Normal Points counter does not update if the controller is disabled from the right-click menu option	The Off Normal Points counter was not updating if a controller was disabled from the right-click menu. (It was updating correctly if you disabled the controller from the Properties dialog.) Now, the Off Normal Points window will update when it is open, and the counter in the status bar will update on right-click enable/disable functions. This applies to controllers, ports, and XBoxes.
VEL-2963	Changing Central Station Receiver (CSR) point names does not update the name in Point Level Customization	Customization Manager was not automatically updating the name of a point defined in Point Level Customization after you went to the Central Station Receiver (CSR) and changed the name of a defined point. This was causing Customization Manager and the CSR to have different names for that point.
VEL-2965	A credential does not show up in the credential pane if it is created under a Person Group	In the Enrollment Manager, a credential created under a Person Group was not being displayed in the Credentials pane.
VEL-2976	Velocity doesn't check if a Duress digit would cause a code conflict	When you added a duress digit to an existing PIN code, Velocity wasn't properly checking whether the resulting code conflicted with another existing PIN code that had more digits. (For example, a 4-digit PIN code which was later edited to add a 5th duress digit was not being checked for a conflict with the existing 5-digit PIN codes.) This enabled you to define a conflicting code, which caused errors (such as "command failure 69") when Velocity tried to download the code to a controller.
VEL-2981	Velocity crashes after disabling all column headers if a status group contains at least one door	If a status group contained at least one door, and you disabled every column of the Status Viewer (by clearing all the checkboxes on the Column Headers page of the Status Viewer Properties dialog and clicking OK), Velocity used to crash and a "Velocity has stopped working" message appeared. Now at least one column must be visible, and you are prevented from disabling every column.
VEL-2993	The Central Stations Alarm Receiver displays duplicate COM ports for selection	The Add New Alarm Receiver dialog (for a Central Station Receiver) was displaying duplicate entries for the COM ports.

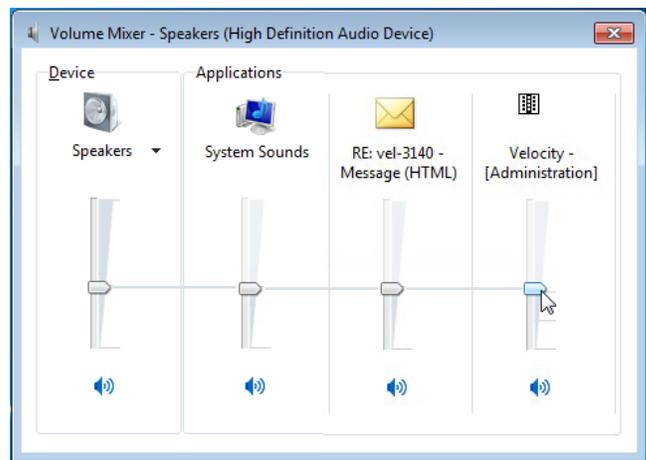| Reference ID	Bug	Description
VEL-3002	'Out of Memory' error on Velocity client when using Auto Display Credentials	An "Out of memory" error was generated sometimes when using the Auto Display Credentials feature on multiple doors. The error generated is as follows: Velocity: Display Credential An error has occurred. Description: Out of memory Function: ImageListCtrl.FPPreview.InitToolbar(6) Error Number: 7 A related error is: Velocity: Display Credential An error has occurred. The object invoked has disconnected from its clients. Function: PhotoCallupBT.FPPreview.TempPictureFiles(34) Error Number: -2147417848
VEL-3006	Status Viewer does not reflect the correct status for Ports under the Enabled column	Status Viewer was not showing the correct status for Ports under the Enabled column. NOTE: DIGI*TRAC SNET, XNET, and CCTV ports will refresh automatically, but DVR and CSR ports need to be manually refreshed to show any changes.
VEL-3009	Error occurs when deleting the port from either the Server or Client	When deleting a port from either the Server or Client, the following error might occur: Velocity Client Application An error has occurred. Description: Object variable or With block variable not set Function: Velocity.FAdministration.Hardware_NodeClick(130) Error Number: 91 <OK>
VEL-3013	Unable to open Properties of an Alarm Receiver port in Status Viewer	If you tried to open the Properties of an Alarm Receiver port in Status Viewer, you got the following error message: ProcessAddress() Invalid address: <OK> This error occurred because the data that the Status Viewer needs wasn't being populated until Graphics loaded for the first time after the CSR port is created. Now if Graphics has not yet created the data when the Status Viewer tries to view the port properties, the Status Viewer creates the needed data itself.
VEL-3014	If a photo is called up while Velocity is loading, an application error will occur	If a photo was being called up while Velocity was still loading, the following error would occur: Velocity Client Application An error has occurred. Description: Object Variable or With block variable not set Function: Velocity.MPublic.ShowPhotoCallupBT(400) Error Number: 91 <OK>

Reference ID	Bug	Description
VEL-3016	If a photo is being called up while a Velocity child window is open, an application error will occur	If a photo was called up while a Velocity child window (such as the search window for a SNIB2's properties) was open, the following error would occur in Velocity 3.5: Velocity: Display Credential An error has occurred. Description: Can't show non-modal form when modal form is displayed Function: PhotoCallupBT.cPrint.DisplayPhoto(770) Error Number: 401 <OK> The similar error in Velocity 3.1 KB640 was: Velocity: Display Credential An error has occurred. Description: Can't show non-modal form when modal form is displayed Function: PhotoCallupBT.cPrint.DisplayPhoto(180) Error Number: 401 <OK> The error in both Velocity 3.1 KB630 and Velocity 3.5 was: Velocity:Display Credential Run-time error '402': Must close or hide topmost modal form 1st <OK> Now instead of an error dialog, a friendlier message dialog tells the user to dismiss the modal window before photo callup windows can be seen.
VEL-3018	DTServer incorrectly treats some database deadlock as database connection failure and does not recover	The DIGI*TRAC service's database connection monitoring code incorrectly interpreted a database deadlock as a database connection failure.
VEL-3021	Error occurred when clicking the Setup Users button for the Pelco DVR/NVR Properties when Customization is enabled	When Customization was enabled, the following error was generated when you clicked the Setup Users button on the Pelco DVR/NVR Properties dialog: Hirsch Localizer Error # 91 occurred in LoadResStringEX at line 72 Object variable or With block variable not set Control Type: Control Name: txtNo This happened because the Pelco Setup Users form was misusing the CSR Area form's ComponentItemID, this was fixed by creating a new ComponentItemID for the Setup Users dialog.
VEL-3022	An operator that does not have permission to a Door Group is able to add the Door Group when creating a Function in Function Groups	An operator that did not have permission to a Door Group was able to add the Door Group when creating a Function in Function Groups.
VEL-3023	Clicking "X" for the concatenate window will cause the window to be blank if opened again before credential is closed and re-opened	Clicking the "X" button to close the Concatenate UDFs window could cause the window to be blank, if it was opened again before the credential was closed and re-opened.

Reference ID	Bug	Description
VEL-3042	Roles permissions "Import controller configuration-use" and "Trigger Action Manager-use" do not stay unchecked	The role permissions of "Import Controller Configuration – Use" and "Trigger Action Manager - Use" were not staying unchecked.
VEL-3048	European date\time format such as "22/05/2013 22.13.17" causes error in CommonVMO	A European date/time format such as "22/05/2013 22.13.17" caused an error in the CommonVMO dll's DetailLogEvent procedure. After changing a setting of the Velocity Security Domain service (on the Advanced page of the Velocity Settings dialog), clicking OK generated the following error message: Velocity Service Control Manager Error at Settings.OnClick.240 [Exception: The conversion of a varchar data type to a datetime data type resulted in an out-of-range value.] <OK>
VEL-3055	Pressing the RQE button on a door gives an event address that ends in .SM00	Pressing the RQE button on a door sometimes gave an event address that ends in .SM00, where it should be SMXX (where XX is the Door Index). This happened because the reader index was not always set to a value, so now the DoorOrExpansion index bit is used.
VEL-3058	Changing value for Enrollment Station "Enable Hex Pass-through" changes setting for all clients	Changing the value of the "Enable Hex Pass-through" option (on the Credential Enrollment page of the Device Configuration dialog) for an Enrollment Station was changing the value of that option for all Enrollment Stations. (This also affected custom card mapping.)
VEL-3070	If you enabled or disabled a controller via the right-click option, the Status Viewer does not update	After you enabled or disabled a controller using the right-click menu, the Status Viewer did not update the controller's status.
VEL-3071	Status Viewer for XBox does not update as expected for right-click Enable option or enabling within Properties window	Status Viewer was not updating the status for an XBox after it was enabled from either the right-click menu or the Properties window.
VEL-3078	Deleting a controller with points plotted in Graphics does not delete the points	Deleting a controller which had points plotted in Graphics did not delete those points.
VEL-3102	Remove Delete option since current implementation does not allow to delete relay	Because you are not allowed to delete an Expansion Relay, the Delete option has been removed from its right-click menu.
VEL-3137	Right click disable function does not show operator action in the Event Viewer	When an operator disables a port, Xbox, or controller from its Properties dialog, Velocity records who did that. However, Velocity was not recording who disabled a port, Xbox, or controller from its right-click menu.

Reference ID	Bug	Description
VEL-3158	Last Access in Credential Status does not update for Exit Readers after applying KB640	The "Last Access" column in the Credentials pane of the Enrollment Manager was going blank when someone used an exit reader.

Known Issues

Reference ID	Name	Description
VEL-2690	Pelco DVR integration does not work on Windows Vista or Windows 7	Velocity crashes (with an "ActiveX component can't create object" error message) when connecting to the PELCO DX8100 DVR's cameras, using a Velocity Client on Windows Vista or Windows 7. (The integration works as expected when using a Velocity Client on Windows XP Professional.) This issue is caused by Pelco not supporting Windows Vista or Windows 7. There is no workaround.
	DVR/NVR video cannot be viewed on Windows Server 2008	When trying to view DVR video from a Velocity Server running on Windows Server 2008, Velocity crashes. The workaround is to view the video from a Velocity Client (instead of the Velocity Server). In general, the Velocity server should not be used to perform client type functions.
VEL-3027	Pelco DVR not functional on 3.5 SP1	On the Velocity 3.5 SP1 release, you cannot connect to a Pelco DVR.
VEL-3140	Custom alarms do not play on some machines	On some computers running Windows Vista or later, custom alarm sounds are not heard (either in the Customization Manager or in the Alarm Viewer). Although the exact cause of this issue is unknown, the reason that the sounds are not heard is because the Velocity application's volume is set to 0% (mute) in the Windows Volume Mixer. The workaround is to open the Windows Volume Mixer (by right-clicking on the speaker icon in the system tray and choosing the Open Volume Mixer command from the pop-up menu), and increase the volume for the Velocity – [Administration] application (by dragging its slider bar up).

Reference ID	Name	Description
VEL-3177	Unable to add a user in VWC when UDF fields are configured for UUID in Velocity	If any of the User-Defined Fields have the Type of UUID (for the 128-bit Universally Unique ID number which appears on PIV-I cards), when you try to add a user in the Velocity Web Console the operation fails with the following error message: AddUser failed with error: GetNewPerson exception: Unknown User Defined Field Type There is no workaround for this issue. (You can still add a user to the Velocity database through Enrollment Manager when a UDF has the Type of UUID; you just cannot add a user to the Velocity Web Console's EMF database.)
MII-26	First digit of the PIN is truncated by the MATCH2 when using 200-bit formats	With the MATCH2 firmware versions 130127 or 120411, when you present a 200-bit PIV card to a reader with a keypad (such as an HID RPK40 reader) and then enter a PIN code, the first digit of the PIN is truncated by the MATCH2 board. For example, the PIN of "56789" becomes "6789". This issue only occurs for ID Formats 3 through 7, and for the 200-bit FASCN format of a PIV card, which is supported by the MATCH2 Customs 27, 28, and 29. One possible workaround for this issue is to enter an asterisk (or any other extra digit) before your normal PIN code, so the truncated result provides the correct value.

Using PIV and PIV-I Cards

Software Requirements:

Velocity now supports the UUID (128-bit GUID) in PIV-I cards which use the updated FIPS201 data layout, as specified in the NIST Special Publication 800-73-3. This feature requires CCM firmware version 7.4.58 or later, and MATCH2 firmware version 130127 or later.

An Overview of PIV and PIV-I Cards:

PIV cards are personal identity verification smart cards issued by federal agencies for their employees. **PIV-I** cards are similar non-federal personal identity verification smart cards that can interoperate with federal PIV systems, and are issued in a manner that enables the federal government to trust the card. For example, PIV-I cards require a specific identity verification process and they must include a photograph, fingerprint information, and an Authentication Digital Public Key Infrastructure (PKI) certificate. Examples of PIV-I cards include the First Responder Authentication Credential (FRAC) and the Transportation Worker Identity Credential (TWIC).

PIV-C cards are also non-federal personal identity verification smart cards that can interoperate with federal PIV systems, but they are not issued in a manner that enables the federal government to trust the card. (Velocity does not differentiate between PIV-I and PIV-C cards, so we will only use the terms PIV and PIV-I.)

PIV cards contain fields such as Agency Code, System Code, and Credential Number which make up portions of the Federal Agency Smart Credential Number (FASCN). For PIV-I cards, these fields are populated with 9s, and the Universally Unique Identifier (UUID) field is used instead of the FASCN.

Both PIV and PIV-I cards have a GUID or UUID field, consisting of 32 hex digits. (On PIV cards, the data in that field is often just a meaningless placeholder such as all 0000 or all 3030, because the FASCN is used instead.) The UUID is 128 bits, and it's always represented as 32 hex digits.

Configuring Readers for PIV and PIV-I Cards:

Multiple-technology card readers exist, sometimes in "high and low frequency" configurations. Depending on the card reader's hardware and firmware, it could send a:

- FASCN when a PIV card is presented
- UUID when a PIV-I card is presented
- card code (which is usually shorter) when a low-frequency proximity card is presented

For a **FASCN**, a multiple-technology card reader could output either the 64-bit, 75-bit, or 200-bit FASCN format. A particular reader will output only one format for FASCN, as specified in its firmware or other settings.

For this output:	Set each reader's MATCH2 board to:	and in Velocity:
64-bit FASCN format	Custom 24, 25, or 26	On the Setup page of each door's Properties dialog (or the General page of each unbundled reader's Properties dialog), select the "64-bit FASCN bypass" value from the Special Handling drop-down list.
		For each enrollment station, select the same value (which you selected for each reader) from the Special Handling drop-down list on the Credential Enrollment page of the Enrollment Manager's Device Configuration dialog. (This value is used to automatically select the appropriate card Type on the General page of the Credential Template Properties dialog and the Credential Properties dialog.)
		If your system does not include any enrollment stations, select the appropriate card Type on the General page of the Credential Template Properties dialog and the Credential Properties dialog.

For this output:	Set each reader's MATCH2 board to:	and in Velocity:
75-bit FASCN format	Custom 18, 20, or 21	On the Setup page of each door's Properties dialog (or the General page of each unbundled reader's Properties dialog), select either the "75-bit (14 digits) FASCN bypass" or the "75-bit (16 digits) FASCN bypass" value from the Special Handling drop-down list. For each enrollment station, select the same value (which you selected for each reader) from the Special Handling drop-down list on the Credential Enrollment page of the Enrollment Manager's Device Configuration dialog. (This value is used to automatically select the appropriate card Type on the General page of the Credential Template Properties dialog and the Credential Properties dialog.) If your system does not include any enrollment stations, select the appropriate card Type on the General page of the Credential Template Properties dialog and the Credential Properties dialog.
200-bit FASCN format	Custom 27, 28, or 29	On the Setup page of each door's Properties dialog (or the General page of each unbundled reader's Properties dialog), select the "200-bit FASCN bypass" value from the Special Handling drop-down list. For each enrollment station, select the same value (which you selected for each reader) from the Special Handling drop-down list on the Credential Enrollment page of the Enrollment Manager's Device Configuration dialog. (This value is used to automatically select the appropriate card Type on the General page of the Credential Template Properties dialog and the Credential Properties dialog.) If your system does not include any enrollment stations, select the "200-bit FASCN" value for the card's Type (on the General page of the Credential Properties dialog and the Credential Template Properties dialog).

For a **UUID**, if your reader outputs the 128-bit GUID/UUID code, then:

- Any of the MATCH2 Wiegand Customs 18, 20-21, or 24-29 will handle it.

- On the Setup page of each door's Properties dialog (or the General page of each unbundled reader's Properties dialog), select one of the "FASCN bypass" values from the Special Handling drop-down list.

- For each enrollment station, select the same value from the Special Handling drop-down list on the Credential Enrollment page of the Enrollment Manager's Device Configuration dialog. (This value is used to automatically select the appropriate card Type on the General page of the Credential Template Properties dialog and the Credential Properties dialog.)

- If your system does not include any enrollment stations, you can use almost any value for the card's Type (on the General page of the Credential Properties dialog and the Credential Template Properties dialog).

If a card with a UUID that is not enrolled in Velocity is presented at a reader, an "Invalid UUID" event is generated. (This is similar to message type 115 for "Invalid FASCN".)

For a low-frequency **proximity card**, you can use the "Standard Wiegand (parity)" format, or the "Octal Pass-through" format (with or without parity), for the card's Type on the General page of the Credential Properties dialog and the Credential Template Properties dialog.

- Customs 18, 24, and 27 take the low-frequency card codes and output them as **Octal Pass-through No Parity**. For example, a 26-bit card would send a 9-digit card code.

- Customs 20, 25, and 28 take the low-frequency card codes and output them as **Standard Wiegand with Parity**. Any bit length card will result in an 8-digit MATCH code, assuming it passes the parity test.

- Customs 21, 26, and 29 take the low-frequency card codes and output them as **Octal Pass-through with Parity**. For example, a 26-bit card would in an 8-digit card code, assuming it passes the parity test.

The "Enable Wiegand Hex Pass-through" option on the Setup page of a door's Properties dialog (or the General page of an unbundled reader's Properties dialog) can be used with any of the Octal Pass-through values, to transform the card code into a 16-digit Hex card code.