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SYSTEM REQUIREMENTS Version 5.8.3

The following requirements are for Perspective operating in a traditional LAN/WAN environment with the Web server component running on a separate Microsoft IIS box. These specs are for planning purposes only and apply to Perspective $^{\text{TM}}$ V.5.8.3, Dispatch, and Connect. Please contact your Resolver representative for a specific assessment of your needs.

NOTE: Meeting the **Minimum** system requirements means you can run the application successfully, but it may not provide the best performance. Meeting the **Recommended** requirements will offer a significantly better experience.

	MINIMUM	RECOMMENDED
CLIENT MACHINE		
Processor Speed	2 GHz dual-core	2.5 GHz dual-core
Memory	2 GB	4 GB
Operating System	Windows 8.1, Windows 10	
.NET Framework	Version 4.7.2	
Web Browser – Launch Perspective	Internet Explorer 11, Edge	
Web Browser – Web Portal	Internet Explorer 11, Edge, Google Chrome, Safari iOS 9+, Android Browser 4.2+	
Web Browser – Connect	Google Chrome	
Third Party Application	Adobe Reader 9.4.0+, Sun Java Runtime Environment 7 U71, 8 U25 ¹	
Mobile iOS App	iOS 10, iOS 11	
Officer Mobile	iOS 10 or newer or Android 8.0 or newer.	
Resolution	1280x720, 1792 x 1344, 1920x1080, 1920x1440, 2560x1600, or 2736x1824. DPI 100%, 125%, 200%, or 225%.	
WEB SERVER MACHI	NE ² (ON PREMISE ONLY)	
Available Disk Space ³	1 GB	2 GB
Processor Speed	2 GHz dual-core	2.5 GHz quad-core
Memory	8 GB	16 GB
Operating System	Windows Server 2012, Windows Server 2012 R2 ⁴ , Windows Server 2016, Windows Server 2019, IIS with WebSockets enabled ⁵ and Secure-Channel configured (HTTPS/SSL)	
.NET Framework	Version 4.7.2 with HTTP and non-HTTP activation, .NET Core 1.0.4 or 1.1.1 (Windows Hosting) ⁴	
C++ Runtime Libraries	C++ 2010 SP1 Runtime Libraries (x64) 10.40219	

Message Queue – Connect ⁴ /Dispatch ⁵	RabbitMQ Server 3.7.7+	
service clustering	Rabbiting Server 5.7.7 1	
Inbound Ports ⁶	443	
Outbound Ports ⁶	443, 2195, 2196, 5223, 5228, 5672	
DATABASE SERVER MACHINE ² (ON PREMISE ONLY)		
Available Disk Space	2 GB	20+ GB
Processor Speed	2 GHz dual-core	64-bit server dual-core or multi-processors
Memory	2 GB	4+ GB
Database Server ⁷	SQL Server 2012 SP3, SQL Server 2014 SP2, SQL Server 2016 SP1, SQL Server 2017	
Reporting Services	SQL Server 2012 Reporting Services, SQL Server 2014 Reporting Services, SQL Server 2016 Reporting Services, SQL Server 2017 Reporting Services	

- 1. This requirement only applies if you're using Visual Analysis.
- 2. These requirements apply to systems with up to 25 users. For systems with 25+ users, contact your Resolver account manager for more information.
- 3. Depending on the size of the Perspective database, more disk space may be needed for Workflow.
- 4. This requirement only applies if you're using Connect.
- 5. This requirement only applies if you're using Dispatch.
- 6. For more information on these requirements, see the Inbound & Outbound Ports article.
- 7. Only SQL Server Enterprise Edition is supported for indexing on audit tables.

Notes:

- Internet connectivity on the client machine is required for full functionality.
- The Perspective client is deployed as a ClickOnce application, launched from IE. It has a zero-client footprint and doesn't require administrative rights to launch.
- If single sign-on authentication or add from Active Directory is used, Active Directory Services must be enabled on the Perspective Web Server.
- Net.TCP binding on port 808 is required only if using DispatchLog.
- For the best Dispatch experience, it's recommended that dispatchers run the application on two monitors with a resolution of 1920x1080.
- Time synchronization is required for Dispatch visual alerts. NTP is strongly recommended for Hosted customers.
- For the best performance, do not run the Indexer on the same server where the database is hosted.

Bug Fixes

- Fixed an issue in Dispatch that caused duplicate officers to appear in the Officers panel.
- Corrected a bug that prevented some users from logging into Officer Mobile with SSO.
- Dispatch layouts are now saved correctly when the On-Duty panel is open.
- Additional performance and security fixes.

Bug Fixes

Dispatch & Officer Mobile

- Fixed an issue that prevented users from logging into additional databases on Officer Mobile.
- Fixed a bug that prevented call signs from being reassigned after an officer is taken off duty.
- Officers are now listed alphabetically in the Bring On Duty panel.

Perspective

- Fixed an issue with session states when changing passwords.
- The API now returns level 3 and level 4 rollup records if the user has visibility to its parent rollup.

New Features

Dispatch

Design refreshes, including an improved Dispatch login screen.

Officer Mobile

- Users can now choose to log in with Perspective or Core, and the user's authentication method and connection information are stored.
- Design refreshes, including an improved login screen and new Officer Mobile logo.

Bug Fixes

Dispatch

- Prefixes on closed activity numbers are now migrated into Perspective using the same characters assigned to the record in Dispatch.
- Vehicle log details are now successfully migrated into Perspective after a dispatch is closed.
- Fixed a bug that displayed selected site rollup locations incorrectly if the rollups didn't share a name with a Dispatch location.
- Users can now use the filter option in the On Duty panel when that panel is docked.
- Corrected a bug that caused the Messages and Detail panels to repeatedly reappear when Auto-Hide is enabled.
- Fixed an issue with dropdown menu options disappearing in the On Duty panel after filters are applied.
- The Set Location text box is now displayed correctly when using the right-click action button on the Officers panel.

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- Fixed an issue with locations not being saved in the User Settings when an option is selected quickly.
- Locations with recently changed lat/long coordinates are now updated and rendered in real-time
 on active or scheduled dispatches.
- Options in the Link To Perspective Site dropdown menu in the admin settings now display the base or system language when the user has a selected language with no values.
- Resolved an issue that prevented a Dispatch location's name from updating when the site rollup's name was changed in Perspective.
- The On Duty panel now correctly refreshes and displays fields after using the Search function.
- Fixed a bug that occasionally displayed the wrong status colors for on-duty officers.
- Fixed an issue that would prevent scheduled dispatches from clearing off the Closed Dispatches panel as per the system settings.

New Features

Dispatch

- Dispatch users can now disable flashing alerts in the user settings to improve performance, user experience, and accessibility.
- A new Email Details option in the Dispatches panel allows dispatchers to the email details of an activity during any stage of the process.
- It's now possible to add officer notes. Admins can add default notes in an officer's user profile that appear each time the officer is brought on duty, while dispatchers can add notes that are cleared when the officer's shift is completed.
- It's now possible to record additional location info in the new Location Details field on the Create
 Dispatch and Dispatch Details panels.
- Improvements to the map and address search, including prioritizing search results based on the
 distance of the map's current centered location, make it faster and easier for dispatchers to
 create temporary locations.

Officer Mobile

 Officers can now create dispatches through the Officer Mobile app and are automatically assigned to a Respond and Assist task on the dispatch.

Bug Fixes

- The date and time of closed dispatches now successfully factor in DST (Daylight Saving Time).
- The Database dropdown menu on the Web Portal login page no longer displays database names belonging to the previously entered business ID.

- Selecting an officer task in the Officers panel now selects the related dispatch in the Dispatches
 panel when Auto-focus is enabled.
- Fixed a bug in Analysis Expert that caused the date and time in a query to differ from the date and time of an incident record.
- Resolved an issue that prevented an officer's call sign from being populated in the Officer
 Response tab when a Dispatch is closed and moved to Perspective as an activity.
- Fixed a bug that resulted in location pins from a previously viewed master location image to carryover on a newly opened master location image.
- Undocking then closing a panel in Dispatch no longer unexpectedly closes the panel it was previously docked to.

New Features

Dispatch

- Dispatch administrators can now quickly make alerts by copying existing officer alerts, RTAs, and alarm alerts from within the application.
- A new Export to CVS option in the Officers panel makes it possible to export and download a spreadsheet with an officer's shift history.
- Vehicle search parameters now include Make, Model, and Year.
- Administrators can now limit users' access to locations and priorities in Dispatch based on their assigned operational zone(s).
- Officers' call signs can be changed mid-shift without taking them off duty and bringing them back on again.

Web Portal

 Admins can now show labels on the lower levels of the Site, Class, and Business Unit rollup fields with a new option in the settings.

Bug Fixes

- Improved the performance of Analysis Expert when handling large queries.
- Fixed an issue that caused query results to display a time different than the incident record's time.
- Corrected a bug that prevented the Service Folder, Business ID, and Database fields from being populated automatically on the login screen.
- Fixed a bug that prevented visual alerts from appearing the application.

 Resolved visual inconsistencies when creating and canceling the creation of a temporary location.

New Features

Dispatch

- SOPs can now be created and configured entirely in Dispatch. This includes creating rules with call categories and/or locations, a list of steps to be completed, creating email notifications or selecting Everbridge templates, and attaching files or links.
- The new Busy States settings allow admins to create busy states with visual alerts for officers in Dispatch.
- The new Officer History panel displays a summary of an officer's on and off duty times, assigned
 tasks, call signs and teams, and last known locations, grouped together by shift. This summary is
 available to admins by clicking the new Officer History button from a user's profile.
- The new Resolver Theme can now be applied to the user interface.
- Users can now rename the panels by clicking the arrow icon at the top-right of any panel and typing a custom name.

Improvements

- Dispatch location information is no longer added to the Notes section of an activity when the location has been linked to a site rollup.
- Indoor location images are no longer included on closed dispatches and activities if the dispatcher didn't indicate an exact location on the floor plan when the dispatch was created or updated.

Bug Fixes

Dispatch templates with several tasks no longer block the view of the map in the Create
 Dispatch panel.



- Resolved an issue that resulted in extra time being added to the Time Elapsed counter in the
 Officers Panel when an officer is set to a busy state.
- Fixed a bug that caused an officer's status in Dispatch to change after updating a secondary task.
- Certain fields no longer appear in black text when the High Contrast theme is selected in Dispatch.
- Users logging into Perspective via SSO will now see their local time zones displayed in the Created By Time/Date fields in Incident Narratives.
- Fixed an issue that prevented some users with Everbridge from logging into Perspective.

New Features

Dispatch

- Users can now integrate their Everbridge mass notification system with Dispatch to:
 - Link Everbridge templates with SOPs in Perspective;
 - Launch notifications directly from the SOP panel in Dispatch and monitor the notification's progress and status; and
 - Review notification details once the dispatch has closed and moved over into
 Perspective as an activity.

Officer Mobile

- The app now uses system sounds for push notifications.
- Officer Mobile now supports iPod Touch.

Improvements

- A new Spanish (Colombia/Latin America) Perspective language pack is now available.
- Improved translations on the French, Spanish (Mexico/Spain), and Russian Perspective language packs.
- Improved visibility in Perspective for users with high-resolution monitors and laptops, including Microsoft Surface[™] devices.
- The maximum number of characters allowed in Perspective email fields has increased from 100 characters to 250.
- Improved support and performance for Dispatch clustered services.
- Improved Perspective security by removing HTML tags that are added to a text field.

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Bug Fixes

- Perspective now supports email addresses that contain apostrophes.
- Fixed an issue that would cause records created before Daylight Saving Time to display the wrong time in Analysis Expert queries.
- Custom reports now use the most recent Analysis Expert query.
- Analysis Expert no longer shows an error when the Case Manager field is added to a query.
- Resolved an issue that would prevent users with the appropriate permissions from viewing activity link relationships in Visual Analysis.
- Fixed a bug that prevented Quick View from displaying correct results when searching for case manager data.
- The Dispatch client no longer occasionally freezes when initializing.
- Activities created from Dispatch are now assigned the correct workgroup prefix.
- Fixed an issue in Officer Mobile that would result in tasks being out of sync with Dispatch.
- Fixed an issue that prevented Web Portal from enforcing some required fields.
- The date and time format in Web Portal is now locked down to a single format (YYYYMMDD).
 This resolved an issue that prevented European Internet Explorer users from submitting forms.
- Fixed a date formatting issue in Web Portal that would prevent forms from submitting for European Internet Explorer users.
- Users are no longer occasionally logged out of Web Portal while creating a BOLO.
- Fixed an issue where available officers were not showing up in the Dispatch Bring on Duty window.

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New Features

Perspective Mobile

- Users can now add, view, edit, or delete assignments, or mark them as complete through an
 incident record or through the new Assignments option on the Home screen.
- Users can now add, view, edit, or delete reviews through an incident record.
- Incident records can be filtered based on your saved views in the Perspective desktop application.
- Custom labels are now supported on incident records.
- Required fields on the Incident section and sub-section of a record are now enforced. Note that using this feature requires that you're running the latest version of Integration Services.
- Users with Supervisor rights can edit an incident's workgroup permissions through the app.
- It's now possible to preview Microsoft Office files (.docx, .msg, .xlsx, etc.) that have been added to incidents as attachments.

New Features

Alarm Management

- Connect can now be used to send alarm alerts to dispatchers.
- Connect can also create activity records in Perspective for events that don't require an alarm or dispatch to be issued to the dispatcher.
- Using the new Alarms Management panel in Dispatch, dispatchers can escalate the alarm to create a new dispatch or acknowledge and/or close the alarm in both Dispatch and the source system.
- Alarms in Dispatch come with many of the same features available for dispatches, including visual alerts, timers, conversations (messaging), and more.

Improvements

- Dispatch administrators can now enable a user's ability to create temporary locations from the
 panels by selecting the "Allow add Locations on the Fly" checkbox in a user's profile. These
 locations are automatically removed from the system once the dispatch is closed and removed
 from the Closed Dispatches panel.
- Dispatch administrators can now control whether global addresses (a new feature that displays
 world map locations) and Perspective site rollups appear in location search results. When
 enabled, users with the "Allow add Locations on the Fly" option enabled in their profiles can use
 these search results to create temporary locations.
- Dispatch location fields now display recent and most commonly used locations for each user.
- Dispatchers can now reassign officers to a task without deleting and recreating the task.
- It's now possible to perform bulk actions in Dispatch (e.g. Close or Reassign) using the new multi-select enhancement in the Dispatches, Officers, and Alarms panels.

- The Dispatches panel now includes Dispatcher, Location, and Call Category filters.
- The Closed Dispatches panel now includes filters to narrow down which records are displayed.
- Improved the display for location search results and the current location in the Map panel in Dispatch.
- Improved Dispatch performance for systems with a large number of locations.
- The new "Update Query" option in Perspective Custom Reports modifies a report to ensure it reflects the most recent version of the associated query or queries.
- All API services (Perspective/Integration Services/Dispatch Services) now provide health data for better uptime monitoring during load balance management.
- Improved translation for the German (de-de) and Dutch (nI-nI) Perspective language packs.
- Full language support is now available for the Web Portal and Officer Mobile applications.
 Translations are also available as part of the updated language packs.
- Full support for TLS 1.2 security protocols is now available.
- Improved the security with HTTP headers.

Bug Fixes

- Modified the Dispatch themes (Default and High Contrast) to make it easier to see certain UI elements.
- Fixed an error that would occasionally prevent the creation of scheduled dispatches.
- Fixed an issue in Dispatch that would prevent some closed dispatches from clearing correctly.
- Resolved an issue that would block access to some SOP attachments in Dispatch.
- Fixed the indoor location UI issues in the Dispatch admin settings.
- Resolved a memory leak issue when connecting to Dispatch.

- Systems with a large number of Person records will no longer experience errors when migrating from DispatchLog to Dispatch.
- Fixed an issue that prevented some data from being displayed after sorting data in the Dispatch panels.
- Resolved an issue that caused some Analysis Expert queries to time out when the "Case Supervisor" field was added.
- Analysis Expert no longer restricts some users from sharing their queries with other users.
- Fixed an issue that would sometimes prevent users from creating or updating officer records or other data in Perspective Administration.
- The Web Portal no longer incorrectly displays certain international characters.
- Resolved an issue with line breaks not displaying correctly in the Web Portal.
- Investigation features are no longer periodically inaccessible due to licensing issues.
- Resolved an issue causing record numbers to skip when certain error messages appeared.
- The Gateway now displays all UDFs.
- Users can now create an incident from an activity that contains vehicle data.
- Resolved performance issues in the Perspective iOS app.
- Visual Analysis no longer looks for .NET 3.5 to be installed.
- Fixed an issue that would cause Perspective to freeze when deleting a workgroup.

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New Features

Connect

Manage all your access control integrations in one place with the new Connect. Connect provides true out-of-the-box features that allow you to configure and fine-tune your integrations from a single browser interface. With Connect, you can:

- Register and install connectors to access control systems, including Lenel OnGuard and Software
 House Tyco C-Cure, with more system integrations coming in future releases.
- Manage your devices, link them to your Dispatch locations, tag similar devices, and map them on floorplans.
- Manage event rules to define which events and device types will trigger an action. Actions
 include creating a new dispatch using a template of your choosing, as well as sending automatic
 acknowledge or close responses back to the system, thereby streamlining the process.

Dispatches generated from Connect will provide specific details about the device that triggered the activity, including its exact location on the floorplan, to help dispatchers respond to critical situations as quickly as possible.

Perspective

• The application now offers a full audit history of login attempts to provide insight on which usernames and invalid passwords are attempting to gain access to your system.

Dispatch

 Dispatchers can get even more details about a selected dispatch through the Location panel by viewing floorplans, mapped Connect device icons, and location pins. Improved support for Windows authentication in IIS for users on Windows 8 and above. Note
that Windows 7 is still supported with the default setup when Windows authorization is not
enabled.

Dashboard

 A performance enhancement has vastly improved the login time for users with a large number of class or site rollups.

Miscellaneous Enhancements

- Microsoft SQL Server 2016 is now fully supported.
- Security improvements with Services and the Android Officer Mobile app.
- Improved Web Portal security by preventing outside HTML tags to be added to text controls.

Bug Fixes

Perspective

- Updated the Perspective web config header information, which now supports HPKP headers and provides improved defaults for HTTP cookies, HSTS, and other options (48089).
- Fixed an issue that prevented users from viewing certain attachments (53604).
- Quick Find no longer displays the "Input string was not in a correct format" error message for certain search terms (53657).

Perspective Mobile

- Fixed an issue that would allow some users to access Add, Edit, or Delete options for certain records without having the appropriate permissions to do so (51752, 54287, 54293).
- Failed logins no longer reset the Service URL (54553).

Dispatch

- Fixed an issue that would periodically prevent some users from logging in to Dispatch (50517).
- Fixed an issue that would prevent updates to existing location addresses and geo coordinates (48844).
- All closed dispatches are now cleared from the application as per the timeframes specified in the System Settings (49402).
- Fixed an issue that caused slow loading times for Officer queries (50886).
- Fixed an issue that caused the application to lag or in some cases freeze and require a restart (52315).
- The Map panel no longer displays duplicate officers or officers on duty in different operational zone (54531, 54532).

Dashboard

• Fixed an issue that sometimes prevented the creation of a new charting widget (51213).

Miscellaneous Fixes

SSO and IP whitelisting can now be enabled at the same time (54490).

New Features

Perspective

- A German Language Pack is now available.
- It's now possible to prevent users who don't fall within a specified IP range from logging into the
 Perspective Suite. Hosted customers can contact Resolver Support to have IP whitelisting
 enabled on their behalf (available on the Enterprise edition of Perspective only).

Dispatch

- New banner notifications, displayed at the top of the panels, display important information, such
 as confirmation messages that a dispatch was successfully created or that record deletion failed.
 Success messages are displayed in green, while error messages are displayed in orange.
- Users can Quick Add person records in Perspective through Dispatch, then select those records
 in the Initiated By, Request Assigned To Person, and Involved Person fields in the Create
 Dispatch, Dispatch Details, and Schedule Dispatch panels (Idea Portal).
- The Call Category dropdown menus in the Create Dispatch, Schedule Dispatch, and Dispatch Details panels now display the call categories in alphabetical order.
- Dispatchers can no longer view lookups or rollups (e.g. Site Rollups, Call Category Rollups, Priority, Request Types, etc.) unless they've been granted access through an appropriate workgroup (Idea Portal).
- Right-clicking a column in the panels gives you the option of showing or hiding columns.
- Through the Default Location feature in User Settings, users can now select a default location for
 the Map and Create Dispatch panels as well as select how zoomed in or out the map is on the
 default location using the Set Zoom Level feature. Note that if you select an indoor location, its
 master location will appear as the default (Idea Portal).



- Location search results in the panels have been extended to better show the names of locations
 and indoor location points and hovering your cursor over a search result will display the
 location's full name.
- Improved the map functionality in the Create Dispatch, Dispatch Details, and Schedule Dispatch
 panels so that the map is automatically resized (without affecting any of the fields) when the
 panels are expanded or contracted.
- On the Map panel, clicking a location pin with indoor location points saved to it will display the
 floorplan images for both the master location and its indoor location points. Users can view the
 next indoor levels by clicking the pins on an image as well as move backwards through the levels
 using the breadcrumb tabs.
- Clicking on a location pin on the Map panel with clustered locations (more than one location saved to the area) will present a pop-up menu where you can select the location you wish to view.
- The temporary location pins placed by dispatchers when creating or editing a dispatch are now displayed when viewing a location's floorplan image on the Map or Location panels.
- Administrators can change the position of previously saved indoor location points by clicking and dragging the pins on the images.
- Closed dispatches no longer remain on the Dispatches panel while the closing process is completed.
- Your User Settings, including the Theme, Default Location, Zoom Level, and Notification settings
 are saved on the database and are restored every time you log in, even if it's on different
 computers.
- Your layout settings are saved to the database and are restored every time you log in, even if it's
 on different computers. This includes your column settings in the panels, such as order, sorting,
 width, and filtering. Clicking Reset Layout will restore the layout to its default settings.

Officer Mobile

Officer Mobile now supports push notifications, including notifications to inform officers that a
task with a higher priority than their current task has been assigned to them, along with
conversation invitations and new message notifications.

Bug Fixes

Perspective

- Users' permissions are now validated before downloading attachments to ensure only authorized users are accessing attachment files (48088).
- Accepting elncidents from the Gateway no longer deletes phone numbers and email addresses from the Notes section of the Involved Persons tab in the incident record (29910).
- Fixed an issue in Analysis Expert that resulted in Flag Notes being automatically selected in new Activity queries (39197).
- Quick Find now successfully indexes all characters when completing a full index (48174).
- The indexer will now log an error message and stop executing when it encounters exceptions (48146).

Dispatch

- Users can no longer edit or delete their own accounts when logged into the application (44543).
- Fixed an issue that prevented the Dispatch Prefix from being saved when creating a new work zone (47752).
- Dispatch now supports the Windows authentication setting in IIS (server-side) (48090).

Dashboard

Users can no longer edit or delete their own accounts when logged into the application (44543).



• Dashboard now supports the Windows authentication setting in IIS (server-side) (48090).

Web Portal

- Request an Officer (Dispatch) is now disabled by default to allow administrators to set up a new workgroup without having to complete the required fields in Request an Officer (Dispatch) settings (45820).
- The Web Portal now supports the Windows authentication setting in IIS (server-side) (48090).

New Features

Dispatch

• Dispatch now supports Person searches by both first and last name.

Bug Fixes

Perspective

- The single sign-on feature now supports the SHA-256 signature algorithm (46284).
- Fixed an issue that sometimes caused Perspective not to launch when clicking the ClickOnce button (46415).
- Users with DPI settings of 125% or more will no longer experience an issue that caused the Business ID field to go missing from the login screen (47116).
- For Hosted customers logging into the latest version of Perspective for the first time, the Business ID field on the login screen no longer changes to "default" and is automatically populated based on the business ID in the myincidents.com URL (47158).
- For On Premise customers logging into the latest version of Perspective for the first time, the Business ID field on the login screen now automatically populates as "default" (47597).
- Fixed an issue that would sometimes prevent users from viewing activity records that have attachments saved to them (45998).
- When creating a new incident, you can now enter the same date and time in both the Occurred From Date/Time and Occurred To Date/Time fields without any error messages (39130).
- The Data Forms now recognize when a required UDF checkbox is selected (checked) and no longer prevents users from saving records (43661).

- Users with Full Control privileges on Incidents and Allow Add privileges on Activities can now successfully create an incident from an activity (45813).
- Users can now create queries that successfully search for non-Latin characters in the Class lookups (44358).
- Creating a new query on Analysis Expert no longer produces an error message when the system date and time is set to French (45501).
- Searching in Analysis Expert for data in a pick list that includes an apostrophe (e.g. "O'Connell") no longer produces an error message (46313).
- Added stability to Quick Find and included additional logs to easily determine if indexable records (excluding attachments) have been successfully catalogued following a full indexing (44781).

Perspective iOS

Selecting a user linked to 1,000 or more incidents no longer displays an error message (45216).

Web Portal

Added security validation to the portal (47500 and 47625).

Dispatch

- A location search among 500 or more indoor locations now returns search results within one second (47123 and 47836).
- Users can now successfully update and save an existing location as an indoor location point (47381).
- Closing an activity now takes no more than 1 second (45060).
- Location pins (coordinate points) are now successfully saved to scheduled dispatches when the pins are placed before the required fields are completed (42473).
- Switching from a dispatch template with tasks to a template without tasks now removes the tasks from the previously selected template (44710).

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 The Officer Alerts administrative settings are no longer enabled when no previously saved officer alert has been selected (40535).

New Features

Single Sign-on (SSO)

Using a third-party SSO provider, you can now configure SSO for the Perspective, Dispatch,
Dashboard, and/or the Web Portal, as well as the Officer Mobile and Perspective iOS mobile
applications (Idea Portal).

Perspective

 The Perspective login workflow has been simplified and now matches the login for Dispatch and Dashboard.

Perspective (DispatchLog)

 You can now disable SOP popup windows in DispatchLog using the new Prevent SOP Popup button in the ribbon.

Dispatch

- The new Command Line feature allows you to quickly perform basic functions, (such as creating
 a new dispatches and tasks, assigning officers, dispatching organizations, etc.) using only your
 keyboard. See the Use the Dispatch Command Line article on the Resolver Support site for a
 complete list of available commands (Idea Portal).
- You can now change the status of all started officer and organization tasks within a selected dispatch to On Scene using the Arrive All function.
- You can now clear all officer and organization tasks within a selected dispatch using the Clear All function.
- Web Portal users can now request an officer through the Dispatch application.

Officer Mobile

Introducing Officer Mobile for iOS and Android. Designed for officers, this app works with
Dispatch and allows officers to view and manage their tasks, bring themselves on or off duty,
create logs, attach images to dispatches, and have live conversations with dispatchers and other
officers. See the Officer Mobile User's Guide for more information.

Web Portal

• Web Portal users can now request an officer through the Dispatch application.

Dashboard

• Users can now log out of Dashboard to end SSO sessions.

Bug Fixes

Perspective

- Fixed an issue that prevented administrators from deleting workgroups that were selected in the Visibility tabs in the Lookups settings (4225).
- The French language pack no longer displays apostrophes as tildes (~) (22160).
- Users logging in using Windows Authentication are no longer bound by Perspective password rules or settings (29105).
- Fixed some minor grammatical/spelling mistakes in the Form Labels (Involved Item Form, Attachments, Custom Footer 1, Custom Footer 2) (38698).
- The Access Level label now appears in the Control Tab filter in Form Labels rather than the General Tab filter (38716).
- Gateway records are now deleted based on the number of days selected in the Available Retention Period section of a workgroup's Gateway settings (38971).
- Involvement fields set to Required in the System Settings no longer prevent users from creating
 a case without linked incidents (41361).

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• Two users logged in at the same time under the same Windows profile will now see the correct Site Rollups based on their visibility rights (41537).

Web Portal

• Selecting white as your Gradient Top and Gradient Bottom colors in the Theme settings will no longer make certain buttons on the forms unreadable (22298).

Dispatch

- Data appearing in filtered panels are now updated in real time (44277).
- Tasks in the Officers panel are now sorted based on status (On Scene > On Route > Assigned >
 Cleared) rather than newest task first (41645).

Dashboard

- Fixed an issue that prevented data from appearing in the Incidents by Month chart (43493).
- Fixed an issue that prevented data from appearing in the Activities by Month chart (43494).
- Logging into the Dashboard for the first time no longer produces lengthy loading times (42493).

New Features

Launch Page

 With the addition of two new applications comes a newly designed launch page. Depending on licensing, the launch page will show between two to four applications. The launch page continues to have links to support, .NET Framework download, and language options, as well as a new link to the Idea Portals available at Resolver.



Dispatch

 Dispatch provides all the functionality of DispatchLog in a separately managed application ideal for mission critical operation centers. Like DispatchLog, activity data is transferred into Perspective, but RTAs, visual alerts, teams, scheduled dispatches, activity locations, and officer and dispatcher account settings are now configured entirely in Dispatch. New features include officer and organization tasks, templates, maps, operational zones and work zones, and a streamlined layout that makes managing officers, tasks, and dispatches easier than ever. New key functionality includes:

- New fast multitasking UI
- Recurring schedules
- o Mapping and floor plans
- Notifications

For more information on the new Dispatch, visit the Resolver Support site.

Dashboard

- The new Dashboard is a fully customizable tool that interacts with data in Perspective, presenting key data and metrics about your organization while you work. You can create an unlimited number of dashboards then add widgets that you can resize and rearrange to suit your needs. The KPI (Key Performance Indicator) widget helps you keep track of important security objectives, the Charting widget presents key incident and activity data, and the Web widget displays external web pages or other external feeds. New key functionality includes:
 - o Chart Widget: Easy to add charts and graphs
 - KPI Widget: Key metrics with trending indicators
 - Web Widget: Add external content

For more information on the new Dashboard, visit the Resolver Support site.

Perspective

- The minimum password length for Perspective accounts has changed from 3 characters to 6.
 The 6-character minimum will be enforced on existing users once those users are prompted to change their passwords.
- In Account Policies, administrators can now view a list of users who are locked out of
 Perspective after exceeding the permitted number of unsuccessful logon attempts. Admins can
 also now reset locked accounts so the users can log in without waiting for 30 minutes.

- Administrators can now search for users by their Perspective logon ID or Windows logon ID (Idea Portal).
- The User List report now has an Active column that indicates whether or not a user is locked.
 Active users can also be separated from locked users in the report by selecting the new Active
 Group By option (Idea Portal).
- A Call Category Hierarchy report is now available under Lookups in Reports (Idea Portal).

Bug Fixes

- Users will no longer see an error message when trying to view narratives from IRIMS records that were migrated into Perspective (38731).
- When creating a new activity in DispatchLog, addresses saved to that site will now autopopulate without any prompts (39052).
- Fixed an issue that prevented users from uploading attachments more than 1GB in size to incidents (38576).
- A condensed incident report in landscape view no longer displays the Investigations section labels as overlapped text when that section is hidden (13764).
- The title for the Yearly Quarterly Monthly Summary report now appears on the correct page (23057).
- Fixed an issue that caused activity numbers to be changed to "Null" when running the Activity Update API call in Integration Services (37778).
- Users who have logged out of the Web Portal no longer occupy a license and are removed from the Active Sessions section (37907).
- Fixed an issue that caused active desktop sessions to disappear from License Management when another user opened Map (38085).
- The Web Portal will now accept valid URLs that don't have a "www." prefix or ".com" suffix (38108).

- Turning off Attachment visibility for cases no longer causes an error to appear when a new case is added (38113).
- The "OR" operator in an Analysis Expert query no longer reverts back to "AND" when criteria are deleted (8804).
- The Business Unit Hierarchy report no longer omits business units with commas in their names (12480).
- Fixed an issue that caused text-wrapped labels to appear incorrectly in condensed landscape incident reports (13762).
- Date UDFs created under Incident Items now display the date on incident reports instead of "M/d/yyyy h:mm tt" (15911).
- Longer incident narratives (2,000 characters or more) no longer duplicate themselves under another narrative's heading when printing an incident report (16646).
- Fields hidden in System Privileges no longer appear as overlapping text in incident reports (17355).
- Users are no longer incorrectly prompted to change existing form labels and lookups when adding a custom User Help file (17615).
- Users with Add Only rights can now print the sub-reports in an incident report (19790).
- Date drilldown labels in the Analyze Results window of Analysis Expert can now be sorted in chronological order (20788).
- Email addresses with special characters or numbers after the @ symbol are no longer flagged as invalid (24413).
- Fixed an issue that prevented users with elncident visibility privileges from seeing elncidents if they were hidden at the system level (29285).
- Fixed an issue that caused Perspective to crash when clicking Save As in the Custom Reports print preview (32117).

- Users with Full History Access rights enabled will no longer experience a significant delay with loading a person record (34089).
- Users can now create an attachment in Integration Services based on the maximum file size specified in Service Manager (37734).
- All fields in the ReadActivityOrganizationRequest in Integration Services are now returned (38097).
- Fixed an issue that caused a new incident to appear locked if it was created after locking another incident (14585).
- Hiding all the Outcome fields will now hide the Outcome tab in the Controls section of an incident (14142).
- Form Labels in Administration now displays the correct filters for the Expiry Date field in the Incidents and Cases data forms (6250).
- The Criteria Designer in Analysis Expert no longer changes a forward slash (/) to a back slash (\) when selecting a Class Rollup value with a forward slash in its name (23375).
- Involved Person flags are now successfully transferred to a new incident record when creating an incident from an activity (31208).

Supporting Documentation

Additional information on Perspective and its features can be found on the Resolver Support site. The dates shown below indicate the month and year the most recent edits were made.

- Perspective Known Issues (September 2020)
- Perspective System Requirements (September 2020)
- Perspective Administrator's Guide (September 2020)
- Perspective User's Guide (September 2020)
- Perspective Installation Guide (May 2020)
- Perspective Update Instructions (May 2020)
- Perspective iOS App Guide (June 2018)
- DispatchLog User's Guide (September 2016)
- Dispatch Administrator's Guide (September 2020)
- Dispatch User's Guide (September 2020)
- Connect Installation Guide (July 2017)
- Lenel OnGuard Connector Installation Guide (July 2017)
- Software House C-Cure Connector Installation Guide (July 2017)
- Connect User's Guide (July 2017)
- Officer Mobile User's Guide (April 2020)
- Dashboard User's Guide (July 2017)
- Perspective Focal Point Installation Guide (June 2015)
- Perspective Focal Point User's Guide (June 2015)
- Perspective Workflow Installation Guide (June 2015)



• Perspective Workflow User's Guide (June 2015)

Known Issues

Any issues discovered between this release and the next will be posted on the Resolver Support site.

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