

Pathfinder X - Advanced Investigation at Scale




Modernize your investigative team with the latest capabilities of Cellebrite Pathfinder

Digital evidence is a critical component of any investigation, but the sheer volume can be overwhelming for agencies to manage. In today's digital world, 90% of cases involve at least one smartphone – which on average, contains more than 50,000 images, over three hours of video and 500,000 messages.

Most cases involve multiple devices and data sources.

The increasing amount of data and digital evidence from multiple sources leads to an overload on teams and resources that can cause delays in investigations. Law enforcement teams end up having to limit the investigation to specific devices or examine only time-sensitive data. This can lead to long, complex data review processes that miss out on key evidence.

What is needed to stay ahead of the clock, is an investigative solution that automates data processing, speeds up time to insights, and enables efficient collaboration.

CONSOLIDATE	INVESTIGATE	COLLABORATE
Automatically process and structure digital evidence from multiple sources.	Review case evidence and leverage advanced investigative tools.	Work efficiently with internal and external teams.
		
<ul style="list-style-type: none"> Automatic normalization of mobile device evidence alongside other digital sources <ul style="list-style-type: none"> Decode and enrich data to allow fast analysis Structure data types into a simplified person focus view 	<ul style="list-style-type: none"> Overview of case data on a person-focused dashboard <ul style="list-style-type: none"> In depth case analysis Drive investigative projects and cross case analysis 	<ul style="list-style-type: none"> Leverage cross-organizational knowledge to drive quicker and smarter investigations <ul style="list-style-type: none"> Collaborate and share insights across an organization and partner with external stakeholders to provide court-ready reports and case narratives

The latest version of Cellebrite Pathfinder addresses these needs with enterprise deployment options, security enhancements, superior capabilities, and enhanced investigative tools to formats used by investigative teams.

Read on to learn more about the enhanced features that come with Pathfinder X.

Enterprise Deployment

This latest version of Cellebrite Pathfinder addresses the needs of investigative organizations – from small to large, geographically-dispersed agencies – that require a secure, compliant and scalable investigation solution.

Cloud-ready

Pathfinder X offers the option for cloud deployment, which can help agencies improve cost efficiency, while running fully secure and scalable investigative analytics processes.

To begin with, it reduces the need for hardware, which means that organizations can reduce the costs associated with purchasing, shipping, and installing servers. Additionally, it makes it easy to scale up or down storage and computing needs in real-time, rather than having to plan and pay for future capacity needs upfront.

Cloud deployment also provides quicker data processing as it allows for the storage and instant import of UFDR files into Pathfinder on AWS S3 and Azure Blob storage services.

Pathfinder X also utilizes cached or managed drives to ensure smooth operation during the absorption of fresh evidence files or imported cases. The size of the storage can be determined according to an agency's needs.

Hub and spoke model: Distributed topology for large scale deployments

Pathfinder X introduces a hub and spoke model, designed to address the scalability needs of large organizations. This configuration connects multiple independent Pathfinder instances (spokes) to a central shared database (hub), allowing each unit to maintain autonomy over their data while fostering cross-organizational collaboration.

The hub stores identifiers from all spokes, enabling investigators with appropriate permissions to identify commonalities across cases in different units. This enhances collaborative investigations and allows organizations to adapt and grow.

With Pathfinder X, we're not just scaling – we're evolving with your organization to enhance efficiency and collaboration.



Security Enhancements

The latest version of Pathfinder X comes with enhanced built-in security and is fully compliant with Federal Information Processing Standards (FIPS) 140-2 requirements. This ensures that all sensitive data is secure – whether in storage or during transfer – and protected against any unauthorized access or tampering.

Cybersecurity threats have increased globally and law enforcement agencies are frequent targets of these attacks. Since law enforcement systems often hold large amounts of data, malicious actors who gain access to these platforms can do a tremendous amount of harm.

This is why Pathfinder X includes features such as advanced user management, comprehensive data protection and encryption, advanced detection and monitoring capabilities, and more.

ENTERPRISE- GRADE	The new user management system is a key update in Pathfinder X that provides increased security, as well as enables relevant IT personnel within an agency to assign roles and monitor permissions for each user in their organization. This new system enables connections to specific Identity Providers (IDP) or Active Directory, which makes it easy for administrators to manage users, roles and their permissions in Pathfinder. Besides integrations with the latest IDP technologies, the new user management system also supports advanced authentication and authorization management options such as multi-factor authentication, single sign-on, as well as other integrations for multi-unit organizations who may need this level of security.
FISMA SSP	To be considered as a solution for use by any of the agencies under the United States (U.S.) Federal Government, Pathfinder has to meet requirements for security management, which falls under the Federal Information Security Management Act (FISMA). Pathfinder X complies with the FISMA standard through its comprehensive SSP document.
ENHANCED PERFORMANCE MONITORING	Spider is a centralized monitoring and analytics platform that combines real-time metrics from servers, containers, databases, and applications with centralized logging and delivers actionable alerts and powerful visualizations to provide full-stack observability.



Superior Capabilities

Pathfinder X has new capabilities that make it an even more effective tool for investigative organizations dealing with large amounts of overwhelming data.

IN-APP TUTORIAL VIDEOS	Pathfinder X offers several features that allow for smoother deployment and implementation. Its large collection of in-app "how-to" training videos provide comprehensive coverage of core functionalities and key investigative views, along with longer videos that offer tips and insights on how to drive efficient investigative workflows.
NEW INVESTIGATIVE REPORT	The new reporting capability combines all case information, events and snapshots into one document that offers improved visibility with additional details so users can craft a compelling narrative for investigations. The events are presented chronologically, allowing for a clear timeline of the investigation, with options to customize the report output to fit case needs and tell the full story of each investigation in a clear, concise way.
API DOCUMENTATION	Pathfinder's comprehensive API documentation supports easy implementation to local systems through local API development, making the integration process quick and seamless. Detailed documentation of Pathfinder's API is available through our support team.



Enhanced Investigative Tools

Pathfinder X has an array of new and upgraded investigation tools to allow for faster, accurate, and more efficient investigations.

PERSON RESOLUTION TRACEABILITY	<p>Pathfinder now offers enhanced person resolution capabilities with an upgraded algorithm featuring full traceability options. Users can now visualize the logic and flow of person resolution, perform automatic/manual merges with the Pathfinder X intuitive graph, highlight specific persons and their associated identifiers, as well as easily identify relationships with configurable levels of detail.</p>
ENHANCED LOCATION MODEL	<p>Pathfinder's upgraded location analysis algorithm is designed to surface more insights by reducing noise through a more granular location model and logic. The new location model divides locations into three categories: visited, points of interest, and media geo-tagging.</p> <p>Pathfinder X also has increased mutual location precision by including call detail record (CDR) based on location data that logs visited locations only. With these advancements, users can trust that location analysis will provide detailed, accurate insights to inform decision-making during investigations.</p>
DUPLICATE DATA IDENTIFIER	<p>Pathfinder X has a unique feature that reviews all the data records comprehensively to identify and flag any duplicate data, such as media files, messages, and emails. This helps to reduce the amount of data overload and streamlines the investigation process by highlighting only the unique and relevant data points. By quickly identifying and removing duplicate data, Pathfinder X enables users to focus on more critical data, which not only saves time but also helps to speed up the investigation process.</p>



Start modernizing your investigations.

Explore how Cellebrite Pathfinder can help you navigate digital data, surface insights, and expedite your digital intelligence processes? Contact us to learn more.

RECOMMENDED SINGLE SERVER DEPLOYMENT SPECIFICATION	
Processor	2x Intel Xeon Gold 5318Y 2.1G
Operating System	Windows Server 2022 standard
Memory (RAM)	12x 32GB RDIMM
OS/Application Storage	1.92TB SSD SATA Read Intensive
Database Storage	3x 3.84TB SSD SATA Read Intensive
Digital Evidence Storage	3x 16TB SATA, RAID5
Graphics Processing Units	NVIDIA Ampere A10
Network Interface Card	2x 10GbE
Web Client	Google Chrome v99





About Cellebrite

Cellebrite's (Nasdaq: CLBT) mission is to enable its customers to protect and save lives, accelerate justice, and preserve privacy in communities around the world. We are a global leader in Digital Intelligence solutions for the public and private sectors, empowering organizations in mastering the complexities of legally sanctioned digital investigations by streamlining intelligence processes. Trusted by thousands of leading agencies and companies worldwide, Cellebrite's Digital Intelligence platform and solutions transform how customers collect, review, analyze and manage data in legally sanctioned investigations.

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