

# Building the Digital Chain

Using BAE Systems IntelligenceReveal  
to transform data into digital intelligence



Digital  
Intelligence

**BAE SYSTEMS**

In a digital world, analysis of the digital footprints and data generated by events, systems and people as they conduct activities can yield intelligence identifying new threats, and provide insights into the intentions and future actions of threat actors, as well as help law enforcement agencies support victims of criminal behaviour, or citizens who go missing. In today's digital society, any criminal using technology cannot help but offer up information about their lifestyle, finances and geographical movements which may prove useful to law enforcement agencies.

The quality, reliability and accuracy of digitally generated intelligence will be dependent upon a host of factors, most notably, the ability to collect relevant data, along with expertise in the analysis of that data to generate fresh insights which can be shared with those able to take action within required timescales.

The successful transformation of data into actionable intelligence is the result of a number of individual actions in a Digital Chain of Law Enforcement or National Security activities.



## Digital Chain of Intelligence



Figure 1: The Digital Chain of Intelligence Generating Activity

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BAE Systems Digital Intelligence is a leader in enabling agencies to generate digital intelligence, and from working with agencies over decades, has developed numerous capabilities that catalyse the required outcomes at the different stages of a Digital Chain of intelligence generating activity, as shown and discussed in the following:

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## Building the digital chain

We provide a comprehensive range products, services, solutions, technology, people, best practices and processes which span the whole digital chain, from initial data acquisition to the satisfactory completion of each agency mission.

In addition, at each stage of the Digital Chain, the capabilities deployed can vary, according to the requirements of each mission.



### Acquire Data

The BAE Systems IntelligenceReveal portfolio of product and solutions provides a platform to which analysts can draw together information from multiple sources and domains and later analyse it to build a single, cohesive intelligence picture.

- **From CSPs:** To yield the best insights from digital data, agencies must first deploy capabilities that can collect the right types of data, acquiring ALL of that data, at CSPs link speeds, all the time, according to local legislation, with the correct handling of warrants and audit trails of data handling.

In this area, BAE Systems Digital Intelligence can provide:

- Law Enforcement agencies with capabilities in Lawful Interception and Data Retention (BAE Systems Databridge and BAE Systems DataRetain)
- Security and Cyber agencies with a range of Network Intelligence Probes supporting high speed data acquisition, Intelligent Flow Steering and Selected Forwarding of data to downstream Intelligence and Cyber Missions.
- **From Government, Commercial and Open-Source Databases:** To build a full and unified intelligence picture that minimises intelligence gaps, the BAE Systems Search and Analysis module enables the federated search and collation of data from multiple independent existing data sources. For customers with relevant permissions and the required authority, this Search and Analysis module enables data in different locations to be searched in situ, copied and brought back to a common database for later analysis and cross-referencing.

The solution will integrate information from a range of different sources at different levels of security classification and sensitivity. Consideration will be given to how an agency's data can be integrated and who should be able to access what, taking into account security clearances, roles and need-to-know principles to ensure that information is fully exploited but properly protected.

Significantly, it will later enable investigators to directly compare data in one place, rather than having to switch between different applications or even different work stations (tackling the 'swivel chair' challenge).



### Analyse Patterns

The BAE Systems Digital Intelligence IntelligenceReveal portfolio of Products and Solutions for Communications Intelligence and Multi-Source Analysis contains several capabilities which enable analysts to interrogate data sources for interesting or relevant data and then facilitate powerful analysis of that data. Using automated techniques for data analysis and intuitive and graphical user interfaces, data analysts are able to quickly discover and analyse patterns found within acquired data. Capabilities to facilitate pattern discovery include:

- BAE Systems IntelligenceReveal Content Monitoring product
- BAE Systems IntelligenceReveal IP Analysis solution
- BAE Systems IntelligenceReveal Multi-Source Analysis solution
- BAE Systems IntelligenceReveal Search and Analysis Product



### Identify Threats

The analysis of data enables analysts, as well as automated digital systems, to identify threats. These threats may be both physical, or cyber based. For example, the analysis of voice or data communications of Subjects of Interest (SOI) could reveal physical threats (terrorist or criminal activities), and the analysis of cyber traffic may reveal historical or real-time cyber-attacks. Cyber threats may target individuals, organisations, business systems, IPR or sensitive data.

The analysis of data relating to communications and activities of individuals (Sols) is performed mainly by our IntelligenceReveal portfolio of products and solutions.

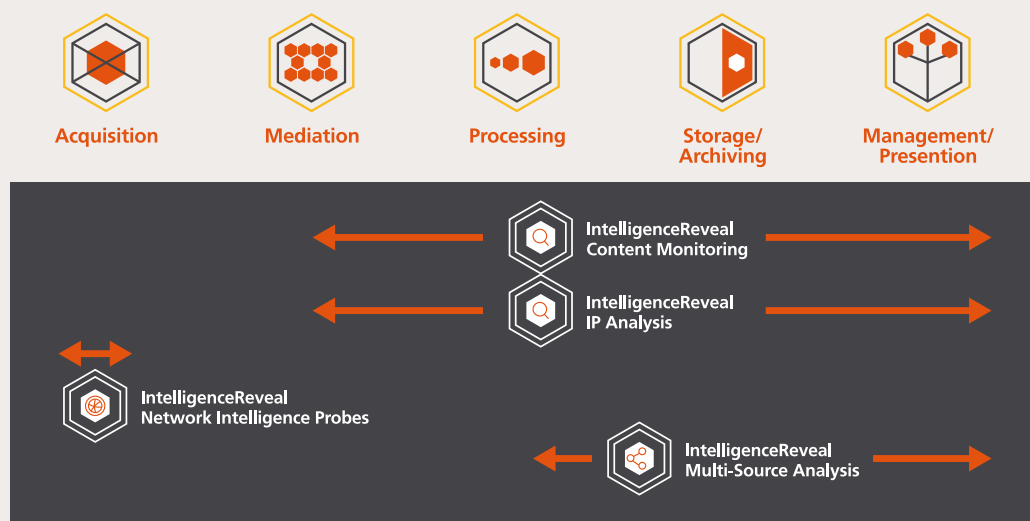


Figure 2: The BAE Systems IntelligenceReveal portfolio



### Reveal Intentions and Historical Actions

The ability to gain insight into the future intentions or historical actions of threat actors is a specialist area still largely dependent upon the skills and experience of human analysts. BAE Systems Digital Intelligence personnel have a rich heritage in combining technology, best practices and processes in interpreting data and establishing connections that yield insight into the future intentions or historical actions of threat actors.

The combination of multiple sources of insight enables agencies to take action in advance of future threats being realised, and can save lives, reduce breach expenses and damages, and protect organisations from data breaches and downtime. They can also identify activities which may have taken place in the past, but have remained undetected until this point. If so, such detections may lead to immediate action being taken to remediate the effect of previous activity, or curtail it, should it still be ongoing.

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At each stage of the Digital Chain, the **capabilities deployed can vary**, according to the requirements of each mission.

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## Build Intelligence

To secure our digital future and enable a digitally secure present so that organisations and citizens can live and work in safe and secure environments, agencies need to build a unified intelligence picture that details the risks and threats we face in an ever-changing threat landscape. Information which can be distilled into actionable intelligence comes from a wide range of sources (multi-source), and is acquired using multiple approaches. From our extensive experience of working with agencies, we have developed best practices and new technologies to empower analysts in their missions. By providing them with the appropriate tools and historical reference data with which data can be combined and enriched, analysts can today discover valuable insights from data which previously may have yielded little intelligence of value.

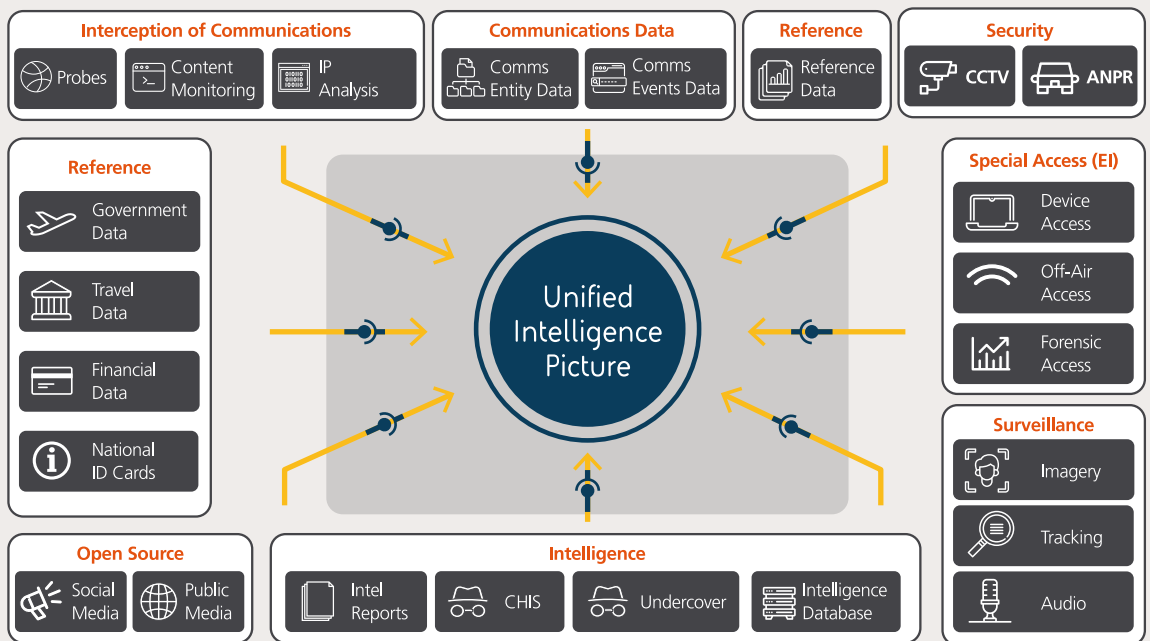


Figure 3: Building a unified intelligence picture from multi-sources of data.



Figure 4: Helping analysts answer investigative questions

A full and unified intelligence picture minimises intelligence gaps. The simultaneous assessment of events from multiple sources can help to establish causality and increase confidence in the quality of the intelligence, allowing it to be cross-referenced and corroborated.

Investigator productivity is increased by being able to search across all available sources and domains at once rather than having to access each system or database individually. Automated analytics and profiling can remove the need for investigators to spend time formatting data before they can make sense of it, and present them with a holistic view of the information so they can see at a glance where they need to drill down into the detail.



### Share Results

To be useful, the results of any analysis that enables action by third parties, need to be shared securely within acceptable limits of risk with those who need access to the data, and within acceptable timeframes. The ability to share conclusions with analysts, investigators and field operatives quickly thus enables more effective collaboration and catalyses the successful outcomes of missions.

Depending upon the need, BAE Systems Digital Intelligence has a range of solutions that enable data of interest to be packaged up securely and shared with those that need to have it. This includes:

- **IntelligenceReveal Content Monitoring**, which supports agencies in the analysis of data provided to them under a Lawful Intercept warrant, and following the mediation, processing and analysis of the communications of targeted Sols can package up information as acceptable evidence to support prosecutions of Sols by the courts.
- **The Report Manager module** of IntelligenceReveal which enables users to create intelligence reports based on the insights and information which they have collated. Reports can be automatically generated from the data that has been returned, and tailored views of data and intelligence products can be created for different groups to accommodate differing security clearance levels, roles and need-to-know principles.



### Take Action

Once intelligence is gained from the monitoring or analysis of data and digital activity, and is successfully shared with those who need to have it, recipients need to action that intelligence as appropriate, in support of their mission, or in defence of organisations, networks or people.

BAE Systems Digital Intelligence has been working with agencies in law enforcement and national security for over four decades, and during this time has developed best practices and processes to support many different mission scenarios.

## Summary

BAE Systems IntelligenceReveal is the market leading portfolio of products and solutions that supports agencies in the digital chain of activity that generates intelligence from digital activity.

To learn more about how we can help you in specific elements of the Digital Chain, or for all activity spanning Data Acquisition to Mission completion, please scan the QR code.



## We are Digital Intelligence

BAE Systems Digital Intelligence is home to 4,800 digital, cyber and intelligence experts. We work collaboratively across 16 countries to collect, connect and understand complex data, so that governments, nation states, armed forces and commercial businesses can unlock digital advantage in the most demanding environments. Launched in 2022, Digital Intelligence is part of BAE Systems, and has a rich heritage in helping to defend nations and businesses around the world from advanced threats.

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