

Corvus Delivering the Complete Solution

The Corvus product suite represents a unique approach to providing a variety of IT solutions.

The patented and award winning infrastructure can be used to deliver searching, reporting, analysis, management information, mapping, charting and integration features. In addition, this infrastructure also provides the framework for a number of standalone applications, including crime, intelligence, duty management, tasking and briefing.

Bluestar and Corvus have been delivering innovative solutions for over seven years developing an enviable record of success.

What is Corvus?

- Intelligent data repository (or extended data warehouse), providing a single 'One Stop Shop' for information
- Management information and statistical analysis engine
- Integrator to legacy systems and external data
- Secure, scalable and resilient application infrastructure proven in supporting thousands of users
- Data delivery hub
- Attachment manager capable of supplementing existing information with complex data
- Data extraction engine

Why is Corvus Different?

- Provides access to a wide variety of databases, spreadsheets, documents, images etc.
- Can replace, or work with, the existing infrastructure and applications
- Customer driven graphical design and configuration
- Support for a wide variety of devices from the same back-end application
- Exceptional range of functionality available to all users
- 100% browser based

Corvus Firsts

Some of the reasons why Corvus is leading the UK Criminal Justice Sector market:

- First operational local Nominal index
- First enterprise wide Linux based implementation (and currently also the largest)
- First co-operative information system intended for regional use (able to include data from other Forces or external agencies)
- First automated briefing and tasking application
- First browser based information portal

Providing Answers

- What similar incidents have occurred within the surrounding area in the last 6 months?
- Who does this item of property belong to?
- Who are the most active offenders?
- Which of my officers detects the most crime?

Corvus Strengths

- Flexible
- Easy to use
- High Performance
- Browser deployment
- Secure
- Low maintenance
- Cost effective
- Mobile ready
- Single logon support

Product Overview

The Corvus infrastructure is used as the principle delivery mechanism for Bluestar's applications. This allows common controls and utilities to be used from a number of modules providing a consistent interface as well as ensuring seamless integration. Clients can tailor the Corvus environment to their exact requirements. Corvus also fully integrates with existing legacy systems allowing the full potential of existing data to be realised without the high cost of replacement systems.

Corvus

The Corvus Information Appliance

Bluestar's patented Corvus technology is designed to form an essential part of a successful information management strategy.

Applications

Corvus SEV Single Enterprise View

Enables organisations to release the inherent potential of information held across a wide range of existing systems without impacting performance or integrity. Data can include offenders, locations, vehicles, telephone numbers etc.

Torc - Briefing System

Powerful automatic data collection utilities with a feature rich graphical environment for capturing and displaying information.

Endeavour - Tasking System

A complete tasking solution offering flexible configuration and integration with the organisational structure.

PPO - Prolific and other Priority Offenders

Addresses all aspects of the Home Office initiative, from identification of offenders, through the case management cycle to resolution.

PPI/KPI - Personal/Key Performance Indicators

- PPI Individual Officers Report
- KPI Area Comparison
- KPI Monthly Statistics
- KPI Target Comparison
- KPI Trend Analysis
- PPI Block Performance

KIN – Key Individual Network

Provides a method of managing the details of individuals and contacts who are of importance to an organisation.

Tempus Duty Management System

Provides an integrated approach to the management of personnel at all levels. Including:

- Duty Roster
- Officer Searching/Availability/Skills
- MG10 Form Production
- Management Information

Court Availability

Uses Duty Roster data to provide Courts and/or Criminal Justice Units with information on the most suitable dates to request court attendance for one or more Police Officers.

Crime Statistics

Extracts data from existing systems and produces reports, charts and statistical analysis, including:

- Ad-Hoc Reporting
- Crime Figures
- Performance Indicators
- Target Comparison
- Trend Analysis
- Standard Deviation

Report Viewer/Custom Reports

Allows complex searches and extraction requirements to be defined and associated with a number of parameters for extended reporting capabilities.

Spotlight - Auto-Briefer

Intelligent screen saver component automating the process of disseminating information by using idle time on desktop machines.

Corona Host Management Console

A monitoring and management tool. It can monitor the performance of servers and can trigger alert messages to a central web based console for operator attention.

Chronicle Incident Recording System

A flexible application for the capturing of any type of incident within a feature rich graphical environment.

Search Modules

High performance access to information, such as:

- Arrests/Custody
- Court Results
- Crimes/Offences
- Incidents/Logs
- Intelligence
- Locations
- Nominals (Offenders/Victims etc.)
- Officers
- Penalty Notices
- Property & Vehicles
- Stop & Search
- Warrants

Tools

PNC Interface

A powerful interface from any Corvus module to the Police National Computer.

Map Viewer

A flexible, high performance mapping capability integrated into many Corvus modules and applications.

Confero Data Extraction

The Confero utility collects data quickly and efficiently without affecting operational performance.

Visual Corvus

Extends the power of Bluestar's SEV module by displaying a visual representation of data relationships.

Mobile Corvus

Support for any mobile device equipped with a web browser, while utilising the same back-end applications as standard Corvus.

Hardware

Corvus New Generation Servers

The latest range of hardware offering a truly exceptional balance of performance and cost.

Corvus Technology

Corvus is founded on a patented and innovative design that combines years of experience in delivering high-end applications with 'best of breed' components. The Corvus infrastructure has also received a government award for innovation.

Delivery Layer

The provision of information to a range of devices, locations or other systems is completely independent from the application logic and data access mechanisms. This allows Corvus to provide a number of specific views and output formats from the same implementation.

Application Layer

Corvus utilises a distributed service model that allows a particular application request to be processed from a number of appropriate locations. This provides inherent resilience because an individual failure does not prevent the application from using an alternative.

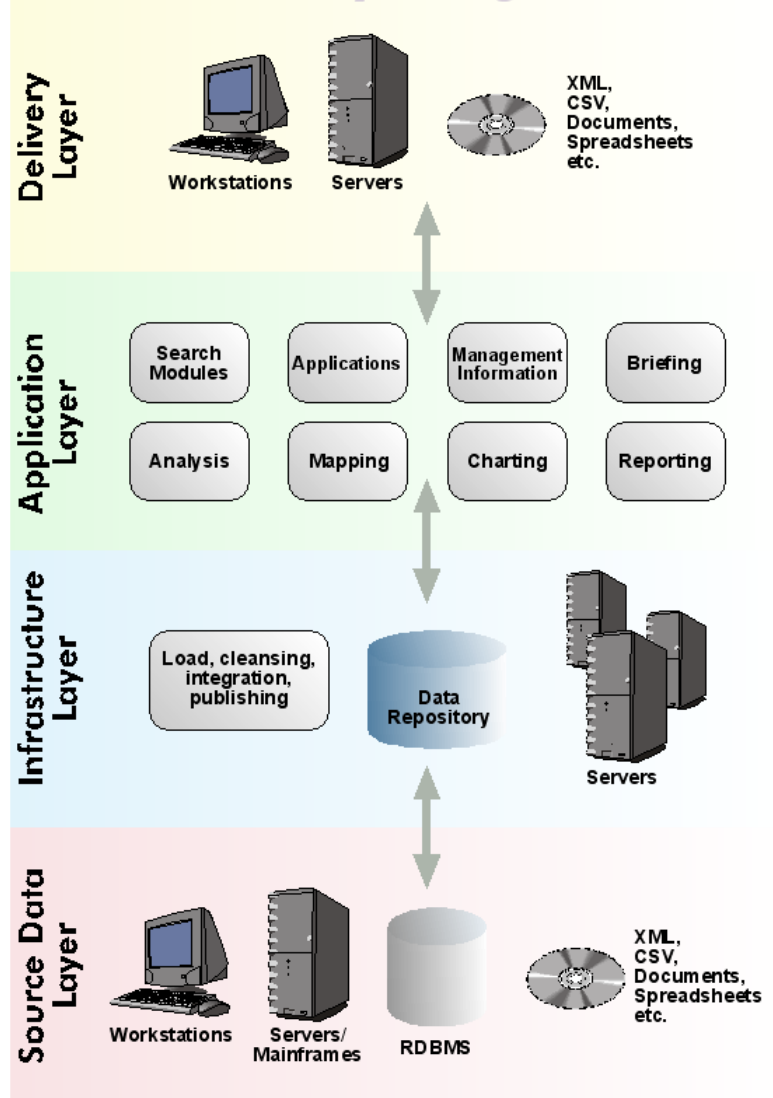
Infrastructure Layer

This layer ensures that data is 'fit for purpose'. Typically this will involve consolidation and reorganisation of data to provide the necessary performance. Additional processing is often undertaken to improve data quality and link disparate sources of information.

Source Data Layer

The mechanism for adding or integrating data within the Corvus repository must be flexible enough to cater for a variety of situations and systems. Bluestar has developed a range of utilities that allow us to rapidly configure extract processing from legacy applications.

The Corvus Four-Layer Integration Model



Software

Primarily developed using Object Oriented Java components, HTML and Javascript. Can be linked to any industry standard RDBMS.

Performance

Bluestar commits to a performance guarantee for each and every project.

Resilience

Using Bluestar's distributed design ensures that high availability is delivered as standard.

Security

Flexible access control model based upon an LDAP repository with optional SSL encryption.

Data Sources

Any ODBC or JDBC compliant source (e.g. Oracle®, Microsoft SQL Server®, Sybase®) as well as information from legacy systems. Conventional documents and spreadsheets can also be processed.

Auditing

Supports a variety of auditing levels dependent upon customer requirements. Specific search engine for auditing delivered as standard.

Management

Corvus is fully integrated with the Bluestar Corona host management console for alerting and application monitoring.

Hardware

Bluestar also supplies a range of low cost hardware components. These are typically utilised in a clustered configuration, designed to optimise the performance of the Corvus technology and to outperform more expensive alternatives. Customers can choose to utilise hardware from another vendor if preferred.

Corvus Features

The following pages give a brief overview of just some of the range of features available within the Corvus environment. Many of these are standard across all Corvus modules.

Browser-Based Deployment

All Corvus modules are browser-based, so can be accessed by any device equipped with a browser. All modules use a familiar web style interface utilising header and footer bars for common functions and a consistent look and feel throughout. This look is completely configurable based on customer preferences. There are numerous advantages in adopting a consistent web-based approach, including:

- Minimal client costs.
- Reduced deployment/administration costs - centralised server-side deployment, administration and security.
- Reduced training costs - all modules look and operate in a similar way that can be tailored to suit the customers preferences.



Security & Encryption

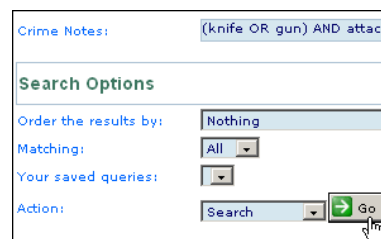
Corvus can connect to, and interface with, existing enterprise security mechanisms such as LDAP or Novell. As well as minimising administration, this also provides a single sign-on capability.

Corvus supports the use of industry standard 128 bit SSL encryption. This is the highest level of encryption supported by current client browsers.

Advanced Searching

Advanced features are available to assist users in supplying search criteria. These can help users retrieve the data they are looking for very easily or allow users to define complex queries. Features can include:

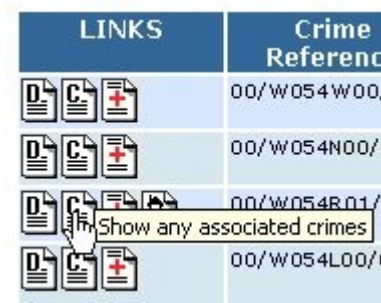
- Full text and partial text wild card searching.
- Logical operators (AND, OR, NOT).
- Range searching of dates and numbers.
- Numeric operators (e.g. >= 10).
- Ordering of results.
- Soundex searching.
- Context searching.



Integration

One of the strongest features of the Corvus environment is integration between modules. For example, the Crime Search Module typically consists of a minimum of four search screens (Crime, Offender, Property, Victim) but they are integrated together to provide a complete view. For example, from the Offender search results page a user can click on a link to then show all Crimes related to a particular Offender, and from each Crime show all Victims etc.

Another example of module integration is the Single Enterprise View (SEV). Using Offenders as an example: Offender data from multiple sources is extracted and matched using customised criteria. A single search screen then allows a user to search for a particular individual and immediately see what associated information is held (for example, crime records, warrants, stop & search records, court results etc). The user can use the links to access the full details of the relevant record in the appropriate Corvus module.



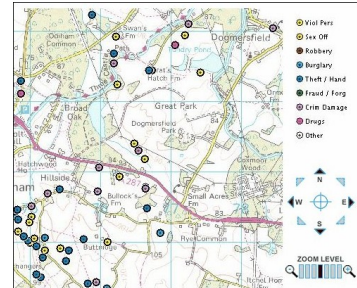
Administration

The Administration modules allow authorised users complete control over all aspects of the Corvus installation including:

- User Administration - Create, Manage, Maintain and Delete users and permissions.
- Corvus Configuration - Adjust various settings and parameters.
- Module Administration - Switch individual Corvus modules On-line/Off-line etc.

Mapping

Map Viewer is a flexible component that may be integrated with any Corvus module or application. Map displays can utilise a variety of scales and formats.



User Customisation

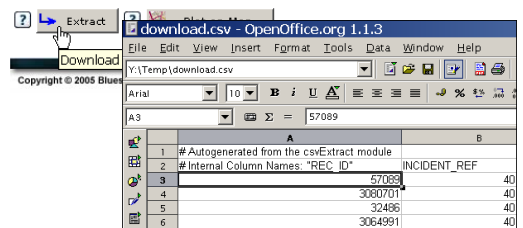
The Corvus technology infrastructure separates presentation from the application logic and data access layers. This allows a completely unique presentation to be configured without compromising on support and maintenance considerations. User customisation is provided as standard.

Data Extracts

Corvus modules can be configured to allow search results to be extracted or downloaded in a number of formats for importing into external programs. The most common format is CSV (Comma Separated Values) files that can either be saved or automatically loaded into a spreadsheet within the browser window depending on client configuration.

00/1404052000	21 Nov 2000	21 Nov 2000	Closed	A:
00/1404052000	21 Nov 2000	21 Nov 2000	Closed	D:
	1651	1716		
	2000	2135		

4 records.



This feature allows users to perform further extended analysis or comparison of the search results provided by Corvus modules.

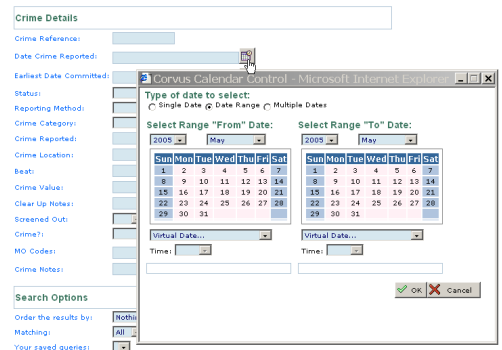
Auditing

All Corvus modules automatically log audit information, configurable from application-level right down to database-level transactions. The Auditing module allows authorised users to search all recorded audit information. Audit data can be searched and ordered using a number of criteria including module name, date/time, username, terminal ID, execution time, transaction details.

Common Interface Controls

Where input or search fields require complex input, Corvus controls can be utilised to allow the selection of appropriate data. Some of the common controls available include:

- Date/Time Calendar Control - Selection of Date and/or Time including date ranges as well as the selection of common "virtual" dates (such as "beginning of this month").
- MO (Modus Operandi) Tree Control - Selection of one or more MO codes using an intuitive tree-view.
- Address Lookup - Find valid addresses using an address gazetteer.
- Nominal Lookup - Find persons already defined within the system.
- Attachment Manager - Allowing the addition of attachments to records, such as photographs, documents etc.



Charting

A variety of chart types and presentation styles are supported including bar graphs, pie charts and trend analysis views. Results can be displayed for a customer specific range of categories and measures. These can be selected at different levels within the organisational hierarchy. Charts can be generated for any combination of date ranges and/or time periods. All chart displays integrate with map viewer and the standard data extraction utility.

Help

Help is always available within Corvus, either through clickable help icons or links. Clicking on links or icons shows a common Corvus help bar containing a brief description of the relevant topic and links to HTML and PDF documentation.

The pop-up tooltips also appear where appropriate, for example hovering the mouse over buttons or controls will give a brief explanation of the usage.

Performance Monitoring

The Monitor Performance module gives a summary view of the performance of different Corvus modules. It shows search counts and average response times for each hour over the current day or the past week. Managers and administrators can use this module to ensure that Corvus is performing as specified and to show how many users are active.

Status Monitoring

The Monitor Status module shows a real-time summary view of the status of all Corvus processes. Further details on job steps and history can also be viewed.

First-line support teams or systems administrators can use this module to easily see if there are any issues to deal with. The module can also be configured to email or SMS relevant support staff with details of warnings or failures.

Monitored jobs would usually include data refreshes and extracts, backups, archiving, daily housekeeping etc.

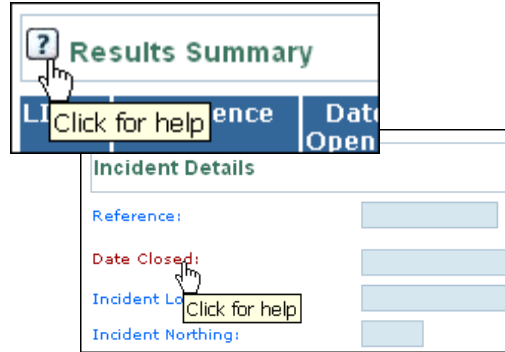
News

The news system can be used by managers or system administrators to inform users of new software releases, or of important items of information. By default, the latest news items are shown on every users home page which is displayed when they login.

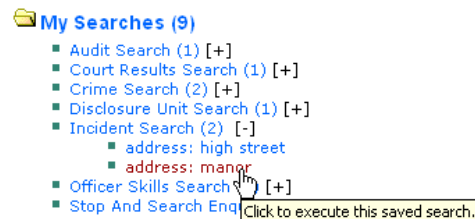
Saved Searches

Many users compose complex searches that they would like to repeat in the future but don't want to continually retype the query details. The 'Saved Searches' option satisfies this requirement by allowing users to associate a name with their search criteria. All standard Corvus search and reporting modules support the Saved Search functionality, simplifying repeat searching and saving valuable time.

Once a user has saved a search it will appear on their Corvus home page as well as in the "My Searches" menu.



Job Title	Latest Job Step	Start Date/Time	Status (Click for details)	Message	History
Roster Refresh	Copy tables to Oracle	2003-12-04 07:02:41	✓	Completed.	
Main Crime Refresh	Extract	2003-12-04 04:24:02	✓	Finished Okay	
Warrants Refresh	Extract	2003-12-03 21:24:02	✓	Finished Okay	
CnC Refresh	Extract	2003-12-03 22:59:02	✓	Finished Okay	
Send archive logs to standby store	Oracle Archive Log Send	2003-12-04 13:29:02	✗	ERROR Failed to send archive file [ARCH1_1211.arcg]	
Apply archive logs to standby database	Oracle Archive Log Apply	2003-12-04 13:41:19	⚡	Started.	
MySQL Backups on	Backup of MySQL database mysq to	2003-12-04	✓	Backup completed.	



Manage My Searches...