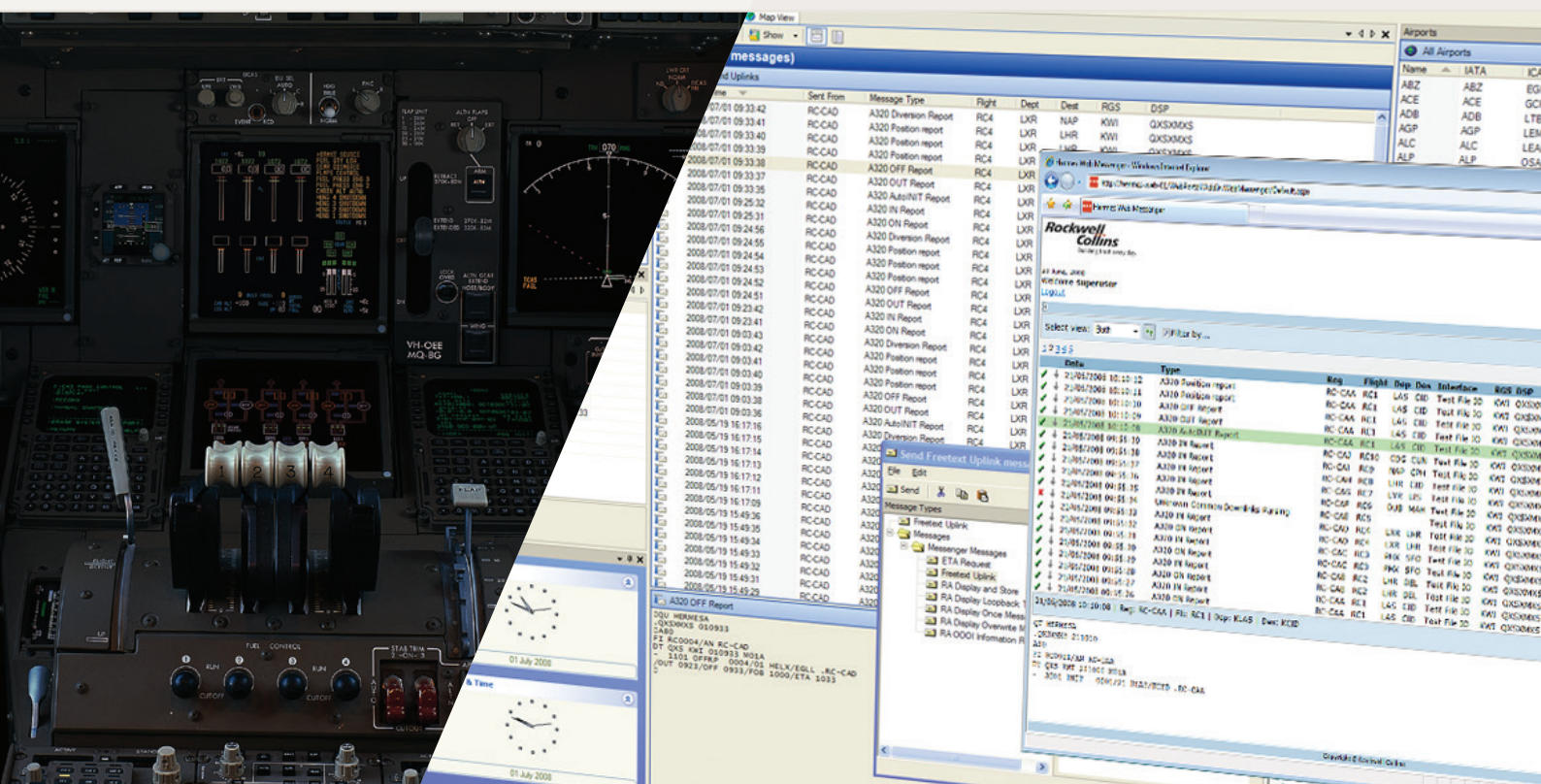


HERMES 2100

The right information at the right time – every time



Our Hermes 2100 system meets the challenge of complex data link, delivering end-to-end business processes which connect the aircraft into the enterprise. The results – better decision making, increased operational efficiency and improved on time performance.

New aircraft are more information enabled than ever before, offering airlines the opportunity to use data link to improve operational efficiency, on time performance and ultimately the bottom line. At Rockwell Collins, we've developed Hermes – bringing together air and ground process automation, and management of data link networks to the aircraft. And the best part is Hermes will easily fit into your existing IT infrastructure with a proven track record of integrating with many airline systems.

**Rockwell
Collins**

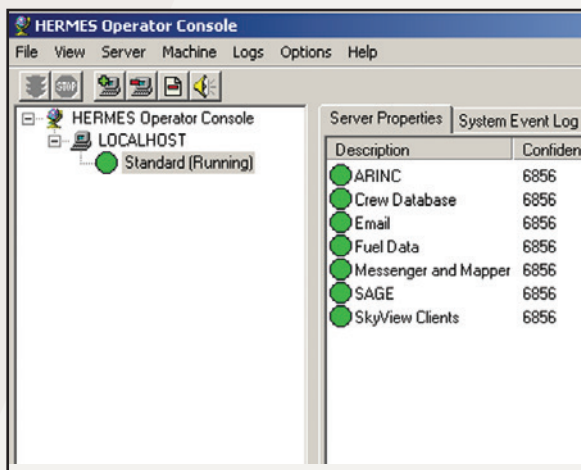
Building trust every day

Global data communication

A data link system that easily fits within your existing infrastructure

Sophisticated data link avionics are readily available, but to obtain the full benefits an aircraft operator also needs a complementary airline system. With multiple communication channels available, it is important to centrally manage data communications across all channels and to integrate with other Airline Operational Control (AOC) systems to achieve maximum advantage. Often, this capability is provided through legacy mainframe systems. However, these solutions are complex, inflexible and expensive to acquire and operate.

Our Hermes system offers a cost effective way to meet these challenges, and is operational today at many leading airlines around the world. Based on advanced technologies, the object-orientated component-based software design enables a wide range of solutions, ranging from stand-alone systems to full integration with service bus architectures and mainframe applications. Hermes will easily fit into your existing IT infrastructure.



The Hermes data link solution

Airborne Communications Addressing and Reporting System (ACARS) is the proven system in use today for global data link communication. The Hermes system provides the aircraft operator with a sophisticated Airline Host ACARS management system enhancing the capabilities of the service provider's ground networks and data link avionics.

The Hermes system is flexible and scalable, and can grow to meet evolving operational and technical requirements. It supports data link avionics from multiple manufacturers across your fleet, and is entirely independent of the communication channel and service provider. As a result, Hermes offers airlines improved operational efficiency and better on time results – all key success factors for today's commercial airlines.

Additional key benefits include:

- **Fuel management** – Many of our existing customers use Hermes for applications such as real-time fuel management and fuel reconciliation, which make a direct and significant impact on the bottom line.
- **Timely aircraft maintenance** – Continuous aircraft performance trend monitoring raises awareness of problems before they develop, thus allowing timely scheduling of maintenance and avoiding disruption of operations.
- **On time performance** – The system enables direct uplinks of flight plans, load sheets, crew and flight schedules, reducing turnaround times. It also enables earlier and more accurate snag reports, allowing timely spares and staff positioning at the destination to avoid delays or cancellations.

The Hermes system allows you to realize the benefits of data link communication – now and in the future. ACARS standards are evolving and development of the Aeronautical Telecommunications Network (ATN) to support CNS/ATM continues. Use of Electronic Flight Bags and IP-based communication channels is becoming prevalent. The Hermes system is designed to support these capabilities and more.

Cost effective integration

Hermes is designed to enable integration of other airline ground systems with data link. Application interfaces allow exchange of information between the Hermes airline host and other applications, such as flight planning and following systems, crew scheduling and payroll systems, and airframe and engine monitoring systems. Data translation and protocol translation are all standard features. Hermes takes into account the differences between aircraft, eliminating the need for changes to other ground applications when the aircraft fleet changes.

Many airline ground applications are already integrated with Hermes. The system supports numerous IT protocol and interface standards today, and we add new ones as they emerge. The Hermes Administrator allows you to easily configure new aircraft, users and interfaces into the system, or we can configure the changes for you.

Automation of data transfer

Hermes enables seamless integration of data link with other ground systems. Manual interaction when exchanging data, triggering events and generating reports is significantly reduced. Automation of business processes is supported by several workflow models already built into Hermes.

Local control of advanced message handling

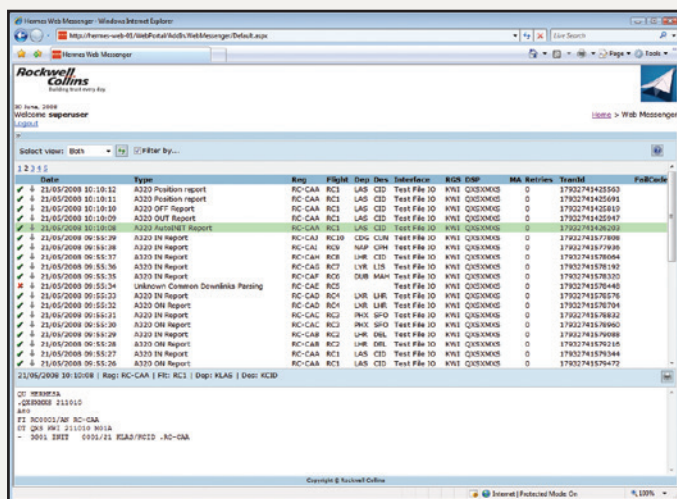
You can configure and control Hermes through the use of the Hermes Administrator, a Windows®-based utility. The Administrator maintains message formats, message routing and processing rules, aircraft fleet and end systems, users and user groups. The advanced message processing logic is user configurable.

High availability and fault detection

The Hermes airline host can be operated in a number of multiserver high availability configurations, and in addition, it performs real-time fault detection on itself and other parts of the data link service. This provides a data link service that can be relied upon.

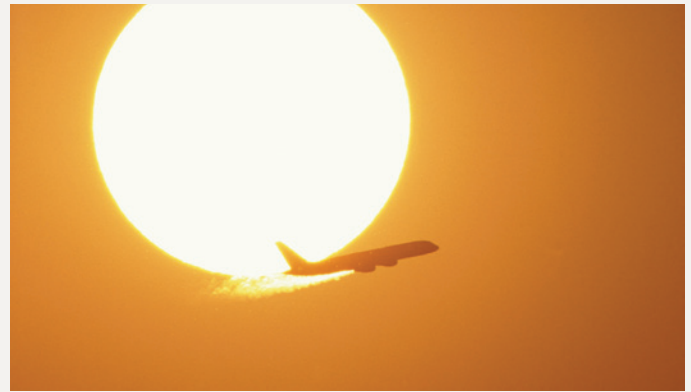
Flexible logging and reporting

The Hermes system logs all message traffic into a database. A flexible report generator allows statistical, management and trend reporting on a routine or ad hoc basis.



The screenshot shows the Hermes Web Messenger interface. It features a table of messages with columns for Date, Type, Rsp, Flight, Dep, Dev, Interface, RSN, DMP, MA, Retries, Transid, and PolCode. Below the table, there is a detailed view of a specific message, showing its structure and content.

Date	Type	Rsp	Flight	Dep	Dev	Interface	RSN	DMP	MA	Retries	Transid	PolCode
21/05/2008 10:10:12	A220 Position report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425563	
21/05/2008 10:10:11	A220 Position report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425561	
21/05/2008 10:10:10	A220 OFF Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425510	
21/05/2008 10:10:09	A220 OFF Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425507	
21/05/2008 10:10:08	A220 Position Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425502	
21/05/2008 09:54:29	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425500	
21/05/2008 09:54:28	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425499	
21/05/2008 09:54:27	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425498	
21/05/2008 09:54:26	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425497	
21/05/2008 09:54:25	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425496	
21/05/2008 09:54:24	Unknown: Costumed Downlinka Parsing	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425495	
21/05/2008 09:54:23	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425494	
21/05/2008 09:54:22	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425493	
21/05/2008 09:54:21	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425492	
21/05/2008 09:54:20	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425491	
21/05/2008 09:54:19	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425490	
21/05/2008 09:54:18	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425489	
21/05/2008 09:54:17	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425488	
21/05/2008 09:54:16	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425487	
21/05/2008 09:54:15	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425486	
21/05/2008 09:54:14	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425485	
21/05/2008 09:54:13	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425484	
21/05/2008 09:54:12	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425483	
21/05/2008 09:54:11	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425482	
21/05/2008 09:54:10	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425481	
21/05/2008 09:54:09	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425480	
21/05/2008 09:54:08	A220 IN Report	RC-CAA	RC1	LAS	CD	Test File 10	KV1	Q23XNMG	0		17922743425479	



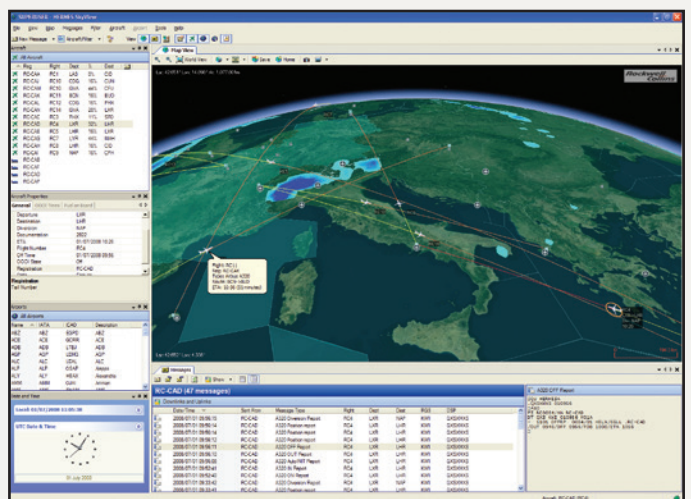
Intuitive and capable user interfaces

The Hermes system provides a wide variety of user interfaces.

- The Hermes Messenger is an Email style, user friendly interface to data link. It is an easy-to-use Windows program with extensive on-screen help. A thin client Web Messenger enables easy deployment and support of remote sites.
- The Hermes Operator Console enables the health of the Hermes system servers, and each of its interfaces, to be monitored and controlled.
- The Hermes Administrator allows the privileged specialist user to control and configure the behaviour of the Hermes system.

Collaborative fleet management desktop

At Rockwell Collins, we've also developed SkyView™ 2100 – an optional add-on tool to Hermes that delivers the fully integrated fleet management desktop, merging multiple data sources into one operations workstation. SkyView provides the user with an exceptionally clear and complete view of the current situation of each aircraft and of the fleet, tailored to the job that they are doing. Any compatible data can be layered on the 3D world map, and the information panels can be configured to display not only flight related data such as position and ETA but also any data held in a connected AOC or related system.



Service wherever, whenever

Total service solutions you can count on. From requirements capture, engineering consulting, installation and throughout your system's life cycle, we are here with comprehensive service and support solutions.

Rockwell Collins delivers reliable solutions, anywhere, anytime – every time.

Building trust every day.

Rockwell Collins delivers smart communication and aviation electronic solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

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