



Raster Data Centre

Technical Specification

AT A GLANCE

Hardware requirements

Pentium III PC or
Sun Workstation
256 Mb memory

System requirements

Solaris
Free BSD
Linux

Projection data

Mercator
UTM range
AMG
NZMG
Others upon application

Specially developed for the Australia Hydrographic Office of the Royal Australian Navy (AHO), this system was originally developed by HSA to meet the paper and raster charting requirements of the Australian Hydrographic Office (AHO). HSA now also operates the RDC system at its office and is fully responsible for the capture, maintenance and generation of the digital, Australian chart-series products on behalf of the AHO. The RDC is also used by HSA in the production of paper and digital charts for other clients including the New Zealand hydrographic authority, Land Information New Zealand (LINZ).

The RDC is a highly successful system that has been producing high quality chart products for Australia and New Zealand for a number of years. It has provided substantial time and cost benefits for paper and digital chart production. HSA recognises that the system will be of enormous benefit to other hydrographic authorities around the world and is now offering the RDC as a "turn key" product or customised range of products and services.

An RDC system can help you:

- Capture and digitally maintain an entire national chart series
- Improve the efficiency of paper chart production and decrease costs
- Generate a digital chart database in a very short time
- Ensure your database is **always** up to date with NtM corrections
- Produce diverse digital chart products for both Defence and civilian users
- Avoid the high cost and complexity of vector databases that attempt to produce all chart products
- Support rapid response chart printing cycles
- Print paper products on demand

Key Processes of the Raster Solution

- Scan film images (repro mat) at very high resolution and store attribute data
- Continuously update and maintain charts using more efficient digital methods
- Produce multiple products from one digital database.

Examples of digital products

HCRF 2.0 for use in Electronic Chart Systems (ECS) and Raster Chart Display Systems (RCDS)
GEOTIFF 1.0 for use in GIS systems
Postscript (black / white) for reprostat production
Postscript (colour) for print on demand charts
RTL (colour) a compressed file format also used for print on demand charts
TIFF for transfer of raster data to other systems
ASRP (ARCS standard raster product) a DIGEST format for Defence use
HRF (proprietary raster format) for high resolution raster data applications

Product awards

(1998) Mapping Sciences Institute Australia and BHP Engineering, Technology Research and Development Award (Institutional Category) for the Raster Data Centre
(1997) Australian Defence Industry Quality & Achievement Award, Highly Commended in Supplies and Services category for Design and Operation of the Raster Data Centre for the Royal Australian Navy

Capabilities of the Raster Data Centre

- Complete chart management system—more than just a scanning and data editing tool, the RDC provides flexible data control and process management
- The RDC process controller can be configured to meet varied requirements of any user organisation—easy to follow user interface guides production
- Unlimited chart management capacity—can manage a few specialist charts to multiple countries' entire chart series.
- Can import digital information from vector-based systems via TIFF or Postscript.
- Infinitely scalable—multi-user system can easily be scaled up with multiple data servers in a networked environment, new users quickly installed.
- Diversify chart product range—as well as maintaining existing paper chart series the system can be used to construct new chart coverage areas and make special products like images for websites.
- Sophisticated data editing tools which allow you to perform minor maintenance and image restoration directly on raster images (including a customisable symbology editor), import major block corrections and perform cartographic compilation tasks.
- In-built quality control processes including automated data checking, audit trails, enforced process flow
- Data stored as colour separates for efficiency and flexibility.
- Queued and distributed batch processing for 24 hour unattended operations.
- Can integrate with the SevenCs ENC data production systems.

THE RDC IS A COST EFFECTIVE, FIELD PROVEN PRODUCT THAT CAN BE DEPLOYED IMMEDIATELY BY HYDROGRAPHIC ORGANISATIONS WITH ABSOLUTE CONFIDENCE OF SUCCESS

Demonstrations and purchasing

As well as developing the RDC system, HSA also uses it to manage the Australian chart series on behalf of the Australian Hydrographic Office. We welcome visits from interested organisations to our office in Wollongong (NSW), Australia (1.5 hours drive south of Sydney) or at our Head Office in Sydney, Australia for a demonstration.

European organisations can contact our co-operative RDC marketing partner, SevenCs of Hamburg, Germany.

For genuine buyers, HSA can provide demonstration systems and sample data sets to assist in the decision-making process.

Services

HSA can supply a wide range of services to assist in the establishment and use of your Raster Data Centre:

- Software and hardware
- Installation and training services
- Configuration and customisation services
- Data conversion services (assist with initial database creation)
- Raster data bureau services e.g. create special products
- On-going support

Contact sales@hsa.com.au for more information