



High-performance, dependable network computing works for GAD

Customer enterprise details for GAD

GAD is the Data Processing Centre for the Co-operative Banks of Westphalia and Rhineland in Germany. GAD stands for Gesellschaft für automatische Datenverarbeitung eG.

GAD is owned by its 443 Members: 413 Volksbanks, five Agricultural Producers Co-operatives, four Central Co-operative Institutions, two Co-operative Associations, two Dairy Companies, and 17 other Companies/Members.

GAD's network includes 413 bank headquarters and 2,500 branches, equipped with about 60,000 terminals and managing 20 million accounts.

GAD's mission is:

- Economic promotion and support of members
- Application development as required by the member banks and co-operative companies
- Design, implementation, and operation of up-to-date information systems for member banks, trade, and service companies

Currently, GAD has two Data Centres in Koblenz and Muenster, each delivering around-the-clock operational services. GAD's Muenster facility currently runs seven production systems, three development systems, and two test systems. The production systems run OS/390 Release 5 (with VTAM Version 4 Release 4.1), IMS Version 6, DB2 Release 4, and Tivoli NetView for OS/390 Version 1 Release 1. Additionally, GAD has expanded IBM's RODM and NGMF products to manage its Data Centres with very advanced graphical interfaces for its operations staff. GAD production systems ran 74 million transactions per day in 1997.

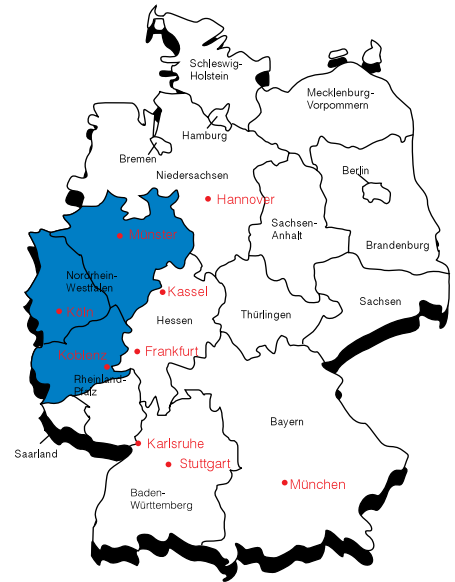
Application	High-speed data-processing network
Software	IBM® OS/390™ IBM VTAM® IBM IMS™ IBM DB2® IBM APPN®/HPR Tivoli® NetView® for OS/390 IBM Parallel Sysplex®
Hardware	CS/390 hosts, CS/2 workstations IBM 4700 Financial Controller
Services	Migration Services for APPN®/HPR



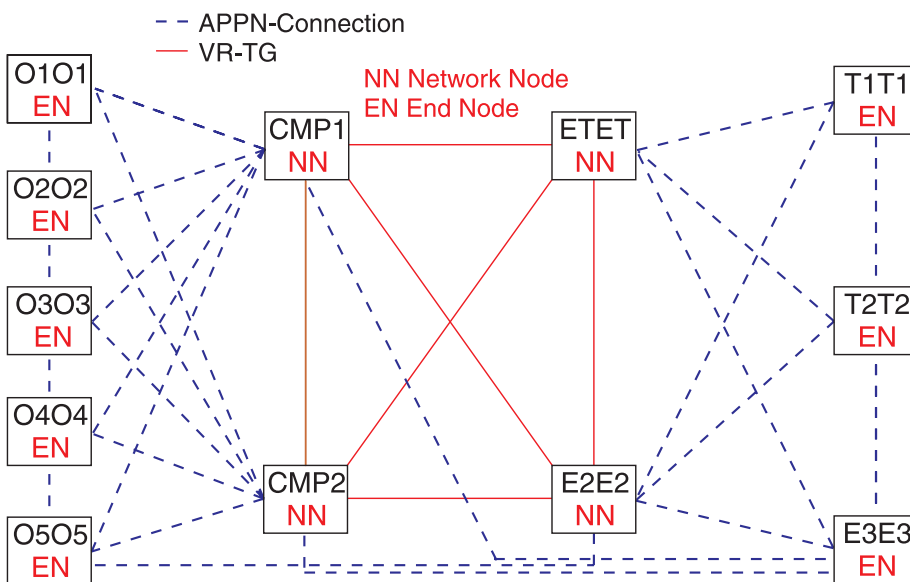
GAD Data Centre, Muenster, Germany

“IBM's HPR technology is very good; there are no problems using it; it works!”

Klaus Martin, GAD Team Leader in charge of Network Architecture and Implementation



A diagram of Germany, highlighting GAD's area of business.



Current 12 x production, development, and test systems at GAD's Muenster Data Centre, showing four Network Nodes (NNs) and eight End Nodes (ENs).

GAD's APPN/HPR migration at Muenster

The GAD Data Centre at Muenster, which currently supports about half of GAD's network, has completed its migration to IBM's High Performance Routing (HPR) protocol, which extends IBM's Advanced Peer-to-Peer Networking® (APPN) architecture. Four of the production systems have been converted to Network Nodes (NNs) and the other eight production, development, and test systems have been converted to End Nodes (ENs).

APPN/HPR benefits experienced by GAD

IBM networking technology has proven instrumental in GAD's evolution into a regional data-processing centre. With millions of transactions processed daily, the IBM HPR protocol has demonstrated unbeatable availability for transmitting mission-critical data.

In addition to the power and reliability of IBM APPN/HPR networking, it is also easily deployed. "We were impressed by the speed of dynamic setup of Rapid Transport Protocol pipes, and by the reliability of RTP Route Switching around failures, from an existing optimal route to a new optimal route," noted Hubert Ashege, GAD Senior Consultant in charge of Network and Systems Management. "These features are critical to GAD's ability to deliver 24 x 7 high-availability online services to our customers."

After deploying the APPN/HPR architecture, GAD has enjoyed tremendous network throughput. "From a capacity point of view, we were very pleased that our new APPN/HPR configuration in Muenster proved successful in absorbing the network traffic generated by the 1997 year-end business volumes," said Hubert Ashege.

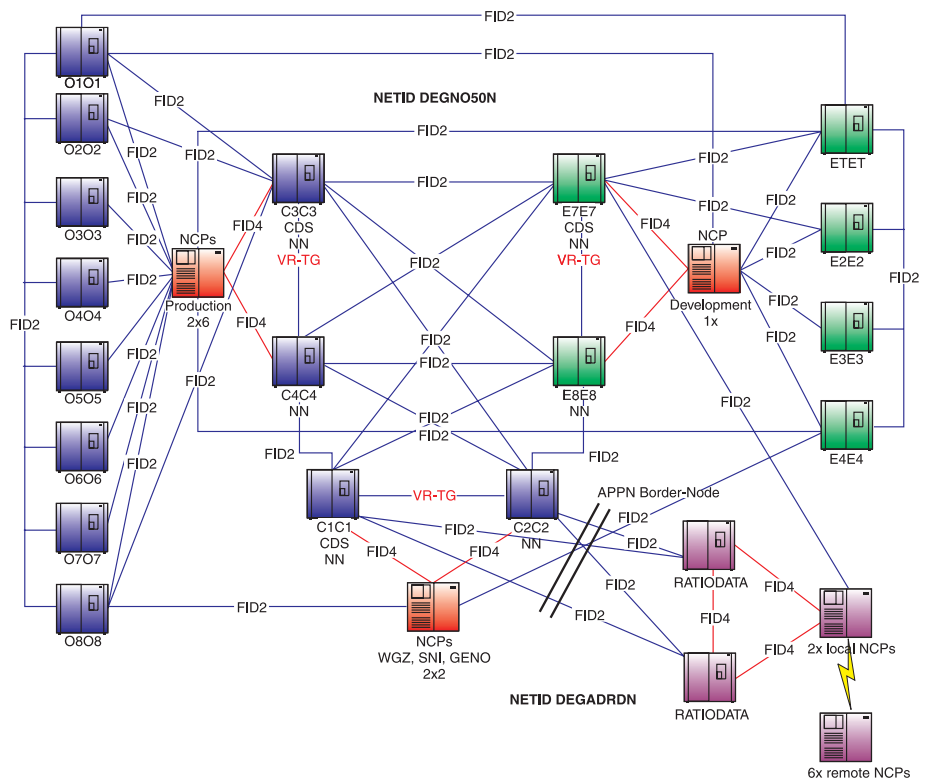
With the system architecture in place, GAD now has much greater flexibility in consolidating their Data Centres. "With APPN/HPR, it is very easy to set up additional End Nodes (ENs) because there is no longer any need to code PATH

statements to define static routes," Klaus Martin said. "This means it has become easy to add new application-owning VTAM systems (as ENs) which, from a business point of view, made it much easier for us to begin to integrate the host production workloads from our Koblenz Data Centre into our Muenster Data Centre."

At the end of this effort, which will take place over the next five months, GAD's resulting configuration will include 20 APPN/HPR CS/390 hosts, supporting GAD's entire network of about 60,000 terminals. "During this planned expansion

of our configuration, we will also implement and exploit the benefits of IBM's Parallel Sysplex, such as Generic Resources (GR) and Multi-Node Persistent Sessions (MNPS), as these features also support our main objective of 24 x 7 high-availability of operational services to the business," said GAD's Klaus Martin.

By the end of 1999, GAD will have about 1,000 network nodes (NNs) in its APPN/HPR network and these will be a combination of CS/390 hosts and CS/2 workstations. Therefore, the Branch Extender function of CS/2 is required and is currently under test at GAD.



GAD's final APPN/HPR configuration—20 CS/390 systems with six Network Nodes (NNs) and fourteen End Nodes (ENs).

About GAD's business relationship with IBM

IBM has worked dutifully with GAD to deploy the right network computing technologies. For its part, GAD "has enjoyed a very active partnership with IBM over many years, including the IBM teams based in Raleigh, North Carolina, who are developing the CS/390 and NetView products, and also with IBM's Installation Support Centre (ISC) at Hursley in the United Kingdom," said Hubert Ashege. "This productive partnership continues, as we work closely with IBM to enhance APPN/HPR usability, particularly in the area of Network Management."

"We are happy with the relationship with IBM, because we see results."

Klaus Martin

GAD's advice to other IBM Customers

GAD advises other IBM customers to begin their Subarea networking migration to APPN/HPR with a Migration Design project. IBM's new Migration Services for APPN/HPR could be helpful to such a migration project.

GAD also advises other IBM customers not to underestimate the effort involved with migrating to APPN/HPR, particularly during the transition phase when subarea protocols are mixed with APPN/HPR protocols. GAD would strongly recommend that a full-time project be considered for such a migration.

For more information

Visit GAD's homepage on the Internet at <http://www.gadeg.de>



© International Business Machines Corporation 1998

IBM Corporation
P.O. Box 12195
Research Triangle Park, NC 27709
USA

4-98
All Rights Reserved

IBM, OS/390, VTAM, IMS, DB2, NetView, Advanced Peer-to-Peer Networking, APPN, and Parallel Sysplex are trademarks of International Business Machines Corporation.

Tivoli, TME, and TME 10 are trademarks of Tivoli Systems Inc. in the United States and/or other countries.

Other company, product, and service names may be trademarks or service marks of others.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.



Printed in the United States of America on recycled paper containing 10% recovered post-consumer fiber



G325-3808-00