NetView Technical Research

SofTech, Inc.

December 1992

Cooperative Agreement NCC 9-16
Activity No. SR.05

NASA Johnson Space Center
Information Systems Directorate
Technology Development Division

Research Institute for Computing and Information Systems
University of Houston-Clear Lake

SUMMARY REPORT
The RICIS Concept

The University of Houston-Clear Lake established the Research Institute for Computing and Information Systems (RICIS) in 1986 to encourage the NASA Johnson Space Center (JSC) and local industry to actively support research in the computing and information sciences. As part of this endeavor, UHCL proposed a partnership with JSC to jointly define and manage an integrated program of research in advanced data processing technology needed for JSC's main missions, including administrative, engineering and science responsibilities. JSC agreed and entered into a continuing cooperative agreement with UHCL beginning in May 1986, to jointly plan and execute such research through RICIS. Additionally, under Cooperative Agreement NCC 9-16, computing and educational facilities are shared by the two institutions to conduct the research.

The UHCL/RICIS mission is to conduct, coordinate, and disseminate research and professional level education in computing and information systems to serve the needs of the government, industry, community and academia. RICIS combines resources of UHCL and its gateway affiliates to research and develop materials, prototypes and publications on topics of mutual interest to its sponsors and researchers. Within UHCL, the mission is being implemented through interdisciplinary involvement of faculty and students from each of the four schools: Business and Public Administration, Education, Human Sciences and Humanities, and Natural and Applied Sciences. RICIS also collaborates with industry in a companion program. This program is focused on serving the research and advanced development needs of industry.

Moreover, UHCL established relationships with other universities and research organizations, having common research interests, to provide additional sources of expertise to conduct needed research. For example, UHCL has entered into a special partnership with Texas A&M University to help oversee RICIS research and education programs, while other research organizations are involved via the "gateway" concept.

A major role of RICIS then is to find the best match of sponsors, researchers and research objectives to advance knowledge in the computing and information sciences. RICIS, working jointly with its sponsors, advises on research needs, recommends principals for conducting the research, provides technical and administrative support to coordinate the research and integrates technical results into the goals of UHCL, NASA/JSC and industry.
RICIS Preface

This activity was conducted under auspices of the Research Institute for Computing and Information Systems by SofTech, Inc. Dr. A. Glen Houston served as the RICIS research coordinator.

The effort was sponsored by the Information Systems Directorate, NASA/JSC with funding provided by the United States Air Force through Cooperative Agreement NCC 9-16 between the NASA Johnson Space Center and the University of Houston-Clear Lake. The NASA research coordinator for this activity was Robert B. MacDonald of the Technology Development Division, Information Systems Directorate, NASA/JSC.

The views and conclusions contained in this report are those of the author and should not be interpreted as representative of the official policies, either express or implied, of UHCL, RICIS, NASA the USAF or the United States Government.
1.0 INTRODUCTION

This is the Final Technical Report for the NetView Technical Research task. This report is prepared in accordance with Contract Data Requirements List (CDRL) item A002.

2.0 ACTIVITIES

NetView assistance was provided as detailed in the following paragraphs.

2.1 NetView Management System (NMS) Project Tasks

a. Coordinated the trip to Ogden Air Logistics Center (OO-ALC). Worked with all the Network Control Center (NCC)/Help Desk operators and the Master Console operators on each shift at OO-ALC.

b. Researched an error found in the shutdown parameters of CICSP on the IBM 9000 at OO-ALC. Discovered a typographical error that prevented the system from automatically shutting down.

c. Developed, created, tested, and implemented various command lists (clists) for the Customer Service Center at OO-ALC. Four of the clists were designed to lessen the chance for human error while working with the VPS printer addresses. The fifth clist was a modification of an existing IBM-provided clist which forces terminals into an inactive status and then automatically reactivates them. The IBM clist was copied to a different name and then modified.

d. Reviewed the specifications for the purchase of NetView terminals for each Air Logistics Center (ALC) and HQ Air Force Materiel Command (AFMC).

e. Reviewed the requirements for the NetView Terminals at each computer center with Mr. Glenn Haughey.

f. Attended a meeting to determine the specification for the NetView terminals. Further review of the access method availability for each processor is needed. After this review, the communications specifications will be finalized.

g. Traveled to Warner Robins ALC (WR-ALC) to review operations procedures with the operations staff and met with all the operators on all shifts. The NetView terminals in use at WR-ALC are only single-session terminals. For ease of use, multi-session access is preferred. Regeneration of the Memorex 3274 controllers will allow this.
h. Furnished MSC/SNES with the current status of NetView Maintenance, supplied them with ASCII files for each of the Baseline Change Requests (BCRs) processed, and stipulated the BCRs that are still under review. NetView status was reviewed twice, and training was provided for the Government personnel.

i. Assisted the MSC/SNEP PNMS office with the installation of Peregrine's Network Automated Problem Applications (NAPA) system on the WPAFB Amdahl 5890-400E processor. SofTech has previously installed and tested NAPA on the WPAFB IBM 3084. This will permit the testing of the Automated Problem Router (APR) NAPA application between the central host processor (IBM 3084) and the distributed host (Amdahl 5890-400E). The data sets were created, and installation of the APR module was completed on 18 December.

2.2 WPAFB IBM 3090

a. The following subsystems were scheduled to be recycled (stopped and then restarted) at 00:00:02 each day:

<table>
<thead>
<tr>
<th>ISTMUFUP</th>
<th>CICSISTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CICSIST1</td>
<td>CICSIST2</td>
</tr>
<tr>
<td>CICSIST3</td>
<td>CICSIST4</td>
</tr>
<tr>
<td>CICSIST5</td>
<td>CICSIST</td>
</tr>
</tbody>
</table>

Timers were created to accomplish this requirement.

b. Reviewed a question from computer operations about WTOs and WTORs generated from a programmer's program. It appears these are not being sent to NetView.

c. BCR 921015-1: The parameter Parent=CAS9 for VTAM was changed to Parent=TLMS.

2.3 WPAFB AMDAHL

a. Added the following subsystems:

<table>
<thead>
<tr>
<th>MUFDEV2B</th>
<th>CICDEV2B</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUFTST2C</td>
<td>CICTST2C</td>
</tr>
<tr>
<td>MUFTST2D</td>
<td>CICTST2D</td>
</tr>
</tbody>
</table>

MUFTST2D with CICTST2D were set up with timers to run Monday through Friday only.

b. The NLDM statistics file was corrupted. We notified systems programming to delete and redefine the clusters.

c. BCR920818-2: Set up timer (/OQ,Q=R,CANCEL,A=01).
2.4 WPAFB IBM 3084

a. Discovered that the NLDM statistics file was corrupted. We notified system programming to delete and redefine the clusters.

b. Made changes to put MUFDEV3E under full automation.

c. Spent 4 hours researching the SMF logging option for NetView. This option was not implemented when NetView was installed. We referred the requestor to MSC/SNES.

d. BCR920818-2: Set up timer (/OQ,Q=R,CANCEL,A=01).

e. BCR 921105-1: The iploptions=start parameter was activated for MUFDEV3E and CICDEV3E. Timers set for MUFDEV3E run only Monday through Friday from 0630 to 1800.

f. BCR 921118-1: Shutdown timers for M204TSP and M204TST were changed from 20:00:00 to 00:01:00.

g. BCR 921209-1: CA-DISPATCH shutdown procedures have been changed. Replies to the MVS outstanding reply message for CA-DISPATCH will sign on and then issue the shutdown command.

2.5 Hill AFB

a. BCR 921105-4: CAMGR and OPERB were removed from the ES/9000.

b. BCR 921105-2: The message response to ARCO310A was removed from both the ES/9000 and the AMDAHL.

2.6 McClellan AFB AMDAHL

a. Added started tasks to REHTCOM, referring to the MUF spill jobs. This follows the WPAFB directive of using started tasks rather than internal readers to start MUF spill jobs.

b. BCR 921125-1: DFHSM will reply to message ARC909I; the log file is 80 percent full.

c. BCR 921125-2: This BCR has been cancelled.

d. BCR 921125-3: This BCR concerns the REHPCOM message process for DB00301I, DB00302A, and DB00202I.

e. BCR 921125-4: DFHSM will reply to message ARC07211, Automatic Backup Ending.
2.7 McClellan AFB IBM 3090

a. Errors were discovered by SM with the adding of the ENF subsystem. These errors precluded ENF from stopping during a shutdown process for an inertial program load (IPL). The error was corrected.

b. BCR 921001-1 was incorrectly defined. Changes were made to Rehtcom to remove the name qualifiers from the execute parameters. Messages DBO03011 and DBO0302A were changed.

c. The changes of BCR 921023-1 were implemented. These changes were to notify CA7 when the subsystems (PRDMUF, CICSAIN, CICSPRD, CICSPRA1, CICSPRA2, CICSPRA3, CICSPRA4, CICSPRA5) are up and processing.

d. BCR 921023-1: Notify messages for CA7 from DFHSM and PRDMUFUP were coded incorrectly and caused an extra error message to be written to the NetView log. These errors were corrected by placing MVS in the front of the message commands.

2.8 Warner-Robins AFB

a. Traveled to WR-ALC from 11 November through 15 November. This trip is for ongoing training and education for AOC/MVS.

b. Worked with the following personnel during the trip to Warner-Robins AFB:

Day Shift: Cheryl Bryant and Monica Debiase
Operators: Elizabeth Hughes and Bob Brown.

Swing Shift: Faye Dunston
Operator: Tony Gainous

Owl Shift: Robbie Bass
Operators: Sharon Wyatt and Tina Hilliard