

This document refers to a box of technical reports in the Computer History Museum's collection, described under catalog number 102748587.

The following technical reports in this box have accompanying descriptions:

What we're doing about networks... and why

"This is intended to introduce Digital management and technical people to the networks being designed and built."

Serial bus simulator

"This report is the documentation for the serial bus simulator, a FORTRAN (4p) program running under IAS. The primary purpose is for studying the throughput/delay characteristics of serial bus arbitration protocols, especially schemes using contention."

Contention arbitration of serial busses

"A particular arbitration method based on carrier sense is recommended for multi-drop serial busses. The method is investigated in detail and new formulas for arbitration efficiency are derived."

Exception handling in PL/I

"The PL/I language's facilities for handling exceptional conditions are described and analyzed, with the description based on the new PL/I standard."

Report on a data transaction processing experiment on the PDP-11/70

"This is the report of an experiment which was to provide a metric by which the SYSTEM [NOTE: author's capitalization] capabilities of the 11/70 could be expressed."

Use of the LRU stack depth distribution for simulation of paging behavior

"Two families of probability distributions were needed for use by a virtual memory simulation model. It is shown that all members of both families can be derived from the single LRU stack depth distribution."

Queuing analysis of SPR service

"This paper presents an elementary analysis of SPR services in terms of queuing theory to show how the average turnaround time and backlog size depend on the arrival rate and service capacity."

Performance of minimal KA10 configurations

"This report gives the results of performance tests done on June 1, 1972, run on System 2, using SCRIPT to simulate various numbers of timesharing jobs."

PROBE a performance monitoring program for the DECsystem-10

"PROBE is a program which picks up data relating to system performance from various places within the monitor."

Three papers on time efficient digital signal processing software

“Three articles from the 1977 IEEE International Conference on Acoustics, Speech and Signal Processing, done in cooperation with Digital and Carleton University. Also available in microfiche.”

Resource requirements for terminal output

“Resource requirements are studied for two alternative methods of handling output to terminal-like devices on the 11/70.”

Investigation of several mathematical models of queuing systems

“A number of simple mathematical models were used to predict average response time of a time-sharing system.”

Materials supervisors introduction to performance development planning

“The purpose is to provide new insights about helping people develop, plus give a basic understanding of a new procedure called Performance Development Planning.”

Microprocessor technology and market trends

“This report is a documentation of a presentation given to the CSD staff. The purpose was to review DEC microprocessor strategies in relation to technology and market trends; then raise key questions as to future directions.”

LLPARS users manual

“This report describes a facility called LLPARS for the generation of syntax-directed parsers. The report includes an overview, a syntax defined language reference manual, and installation and operating procedures for the compiler and driver.”

SPECTRA speech recognition project

“SPECTRA is a project investigating speech recognition and related technology by the implementation of a demonstration speech recognition system.”

CINEMA program users manual

“CINEMA is an experimental text formatting program which uses the DSR (Digital Standard RUNOFF) command language as its basis, supplemented to allow the program to take advantage of the experimental GIGI terminals.”

DECX measurement project report

“The DECX measurement project was undertaken to validate the claim that DECX can place a higher load on a system's busses than can a user running a regular DEC operating system.”

Files-11 on-disk structure specification

“This document is a specification of the on-media structure used by Files-11, a general purpose file structure intended to be the standard file structure for all medium to large PDP-11 systems.”

### Fundamentals of the remote graphics instruction set REGIS

“This document summarizes a collection of ideas concerning an instruction set for the communication of the definition of a graphic image between a computer and a peripheral graphic device.”

### Art of undersampling

“This document describes a tool for fabricating discrete-space type fonts that are (1) binary and (2) low resolution.”