



Software Product Description

PRODUCT NAME: GALAXY-10, Version 2, Multistream Batch and Spooling System

SPD 7.32.3

DESCRIPTION:

The GALAXY-10 Multistream Batch System enables the DECsystem-10 to execute multiple batch jobs concurrently with timesharing jobs. The key functional components of the batch system are:

- batch control program to control execution of scheduled batch jobs
- centralized queue manager and job scheduler
- card-oriented input spooler
- output spoolers for line printers, paper tape punch, plotter, and card punch

These together constitute GALAXY-10.

The key features provided by the GALAXY-10 batch system are:

- the same command language used in timesharing
- multistream operation with operator control of the number of active streams
- automatic line printer, card reader, and card punch spooling with job accounting and control, including special forms scheduling
- job priority scheduling
- job dependency scheduling allowing creation of multi-job batch applications
- job limits parameters to define a batch job's resource bounds
- job control language error recovery facilities that allow command level recovery from expected or unexpected runtime errors
- capability to request automatic job restart in the event of a system failure during job execution

All TOPS-10 system facilities are available both interactively and through the batch system. The interactive user has a simple interface to the batch system on the timesharing terminal. A batch job can be submitted using a simple terminal command. Similarly, spooled output can be submitted automatically or explicitly by a terminal command.

The GALAXY-10 generation procedure allows a large number of parameters to be specified. Most parameters have standard defaults supplied to simplify this procedure.

MINIMUM HARDWARE REQUIRED:

DECsystem-10 with K110 or KL10 processor and:

- 128K words of memory

- Disk controller with one disk drive
- Communications Subsystem
- Magnetic tape controller and one magnetic tape drive 7- or 9-track

OPTIONAL HARDWARE:

Works in conjunction with any hardware supported by TOPS-10.

PREREQUISITE SOFTWARE:

TOPS-10 Operating System, Version 6.03 or later. TOPS-10 must be configured for the Inter-Process Communication Facility. VM SER, Version 6.03 option and Software Interrupt System

OPTIONAL SOFTWARE:

None

TRAINING CREDITS:

None

SUPPORT CATEGORY:

B — Software Support will be provided as stated in the Software Support Categories Addendum to this SPD.

UPDATE POLICY:

Software Updates, if any, released by DIGITAL during the one (1) year period following installation, will be provided to the customer without additional charge (includes no installation). After the first year, updates, if any, will be made available according to then prevailing DIGITAL policies.

ORDERING INFORMATION:

All binary licensed software, including any subsequent updates, is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions of Sale, which provide in part that the software and any part thereof may be used on only the single CPU on which the software is first installed, and may be copied, in whole or in part (with the proper inclusion of the DIGITAL copyright notice and any DIGITAL proprietary notices on the software) only for use on such CPU. All source licensed software is furnished only under the terms and conditions of a separate Software Program Sources Agreement between Pur-

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chaser and DIGITAL.

The following key (F, M, P) represents the distribution media for the product and must be specified at the end of the order number, e.g., QH615-XF = sources on 7-track magnetic tape.

F = 7-track Magnetic Tape
M = 1600 bpi 9-track Magnetic Tape
P = 800 bpi 9-track Magnetic Tape

Standard Options

QH615 -X— Single-use license, source license, sources, documentation, support services (media: F, M, P)

QH615 -U— Armed services procurement regulation license, sources, documentation, support services (media: F, M, P)

ADDITIONAL SERVICES:

The following additional services include software support services:

QHK02 -K— Maintenance Service (media: F, M, P)
QHK02 -Z— Armed services procurement regulation maintenance service (media: F, M, P)

The following additional services do not include software support service:

QHK01 -K— Maintenance Service (media: F, M, P)
QHK01 -Z— Armed services procurement regulation maintenance service (media: F, M, P)

ADDENDUM SOFTWARE SUPPORT CATEGORIES

Each software product (hereinafter 'SOFTWARE') with a designated Support Category A or B in the applicable Software Product Description (SPD) existing at the time of order will be the current release at the time of delivery and will conform to the SPD. DIGITAL's sole obligation shall be to correct defects (nonconformance of the SOFTWARE to the SPD) as described below. Any SOFTWARE with a designated Support Category C will be furnished on an 'as is' basis.

For SOFTWARE with a designated Support Category A or B, DIGITAL will provide the services set forth below without additional charge.

CATEGORY A

1. Upon notification by customer to the nearest DIGITAL office that the computer system, including all required prerequisite hardware and software, is ready for the installation of the SOFTWARE, DIGITAL will install such SOFTWARE in any location within the contiguous forty-eight (48) United States, the District of Columbia, or a country in which DIGITAL or a subsidiary of DIGITAL has a software service facility. The notification must be received by DIGITAL and the system must be ready for installation within thirty (30) days after the delivery of the SOFTWARE to customer or DIGITAL will have no obligation to install. Installation will consist of: (1) verification that all components of the SOFTWARE have been received by customer, (2) loading the SOFTWARE, and (3) executing a DIGITAL sample procedure.
2. During the ninety (90) day period after installation, if the customer encounters a problem with the current unaltered release of the SOFTWARE which DIGITAL determines to be a defect in the SOFTWARE, DIGITAL will provide the following remedial service (on site where necessary): (1) if the SOFTWARE is inoperable, apply a temporary correction (TC) or make a reasonable attempt to develop an emergency by-pass, and (2) assist the customer to prepare a Software Performance Report (SPR) and submit it to DIGITAL.
3. During the one (1) year period following installation, if the customer encounters a problem with the SOFTWARE which his diagnosis indicates is caused by a SOFTWARE defect, the customer may submit an SPR to DIGITAL. DIGITAL will respond to problems reported in SPRs which are caused by defects in the current unaltered release of the SOFTWARE via the Maintenance Periodical for the SOFTWARE, which reports SPRs received, code corrections, temporary corrections, generally useful emergency by-passes and/or notice of the availability of corrected code. Software Updates, if any, released by DIGITAL during the one (1) year period, will be provided to the customer on DIGITAL's standard distribution media as specified in the applicable SPD. The customer will be charged only for the media on which such updates are provided, unless otherwise stated in the applicable SPD, at DIGITAL's then current media prices.

CATEGORY B

During the one (1) year period following delivery, the services provided to the customer will be the same as set forth in 3 above.

CATEGORY C

SOFTWARE is provided on an 'as is' basis. Any software services, if available, will be provided at the then current charges.

DIGITAL shall have the right to make additional charges for any additional effort required to provide services resulting from customer use of other than current unaltered release of the SOFTWARE operated in accordance with the SPD.