

BB Standards and Conventions

BB.2. System Module Interfaces (PL/I Subset for System Programming)

R. Montrose Graham

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J.C. Noll
R.C. Daley
J.H. Saltzer
N.I. Morris

BB.3.02 Multics standard card punch codes and Relation between ASCII and EBCDIC

J.H. Saltzer

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BB.5. Multics Name Registry

R.M. Graham

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R.M. Graham

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R.M. Graham

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R.M. Graham

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R.M. Graham
R.L. Rappaport

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R.M. Graham

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M.A. Padlipsky

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R.M. Graham

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R.M. Graham

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R.M. Graham

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N.I. Morris

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J.H. Saltzer

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F.J. Corbató
R. Morris
J.H. Saltzer

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J.H. Saltzer
C. Strachey

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J.H. Saltzer
C. Strachey

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F.J. Corbató
R. Morris
J.H. Saltzer

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J.H. Saltzer

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J.H. Saltzer
 A. Evans

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R.M. Graham
 R.M. Graham
 R. Montrose Graham
 R.M. Graham

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M. Thompson
 M. Thompson
 M. Thompson
 S.H. Webber
 S.H. Webber

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R.M. Graham
 M.A. Padlipsky
 R.M. Graham
 M.A. Padlipsky
 R.M. Graham
 M.A. Padlipsky
 M.C. Turnquist

BG The Basic File System

- BG.0. Overview of the Basic File System

R.C. Daley
 P.G. Neumann
 D.M. Ritchie

The Known Segment Table

- BG.1. The Known Segment Table (KST)

R.C. Daley
 D.M. Ritchie

Segment Control

- BG.3.00 Introduction to Segment Control
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R.C. Daley
 M.R. Thompson
 R.C. Daley
 M.R. Thompson
 D.M. Ritchie
 R.C. Daley
 M.R. Thompson
 R.C. Daley
 D.M. Ritchie

The Directory Data Base

BG.7.00 Directory Data Base C.A. Cushing

Directory Control

BG.8.00 Directory Control C.A. Cushing
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 M.C. Turnquist
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BG.10.04 Free Storage S.D. Duntun
 BG.10.05 S.D. Duntun
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The Drum Control Module

BG.11.01 drum_control S.D. Duntun
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Interim Disc Control and Disc

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 M.R. Thompson
 BG.15.01 The Process Wait and Notify Module M.R. Thompson
 P. Schicker

Segment Management

BG.18.01 Segment Management Primitives John W. Gintell
 BG.18.02 Summary of Calls to the SMM "write-around" John W. Gintell

BJ The Traffic Controller

BJ.0.02 List of Traffic Controller Entry Points

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Michael J. SpierBK Processor ManagementInterrupts

BK.2.03 Drum Interrupt Handler

L.J. Lambert

BK.2.04 GIOC Interrupt Handlers

D.R. Widrig
D.L. Stone

BK.2.05 Calendar Clock Interrupt Handler

L.J. Lambert
J.H. Saltzer

BK.2.06 Process Interrupt Handler

H. Frick

Master Mode Hardware Control Routines

BK.5.03 Set Alarm Procedure

Harlow Frick

BK.5.04 Set Cell Procedure

Harlow Frick

BK.5.05 Connect Generator Procedure

Harlow Frick

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BL.3.02 Initialization of the System Communication Segment

P. Schicker

Multics Initializer

BL.5.06 Fault-Interrupt Utility for Initialization

D.R. Widrig

BL.5.07 Printer I/O During Initialization

N.I. Morris
M.A. PadlipskyBQ System ControlInterprocess Communication

BQ.6.03 Events and Event Channels

Michael J. Spier

BQ.6.04 Event Channel Manager

Michael J. Spier

BQ.6.05 Interprocess Group Event Channel Manager

Michael J. Spier

BQ.6.06 Wait Coordinator

Michael J. Spier

BQ.6.07 Device Signal Table Manager

J.H. Saltzer
Michael J. Spier

BQ.6.08 The give-call facility

Michael J. Spier

BQ.6.09 Event Channel Manager Primitives and Channel
Access Techniques

Michael D. Schroeder

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R.C. Daley
M.A. Padlipsky

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J. Gintell

Language Processor Commands

BS.2.01 the epl_daemon

V.L. Voydock

I/O

BS.5.00 Generic I/O Arguments

R.C. Daley
M.A. Padlipsky

BS.5.01 I/O Outer Calls

P.G. Neumann
M.A. Padlipsky

BS.5.02 tape_d

D.L. Stone

BS.5.03 mini-gim

N.I. Morris

File System: User Interface

BS.12.01 chname

M.A. Padlipsky

Backup

BS.17.01 idump

R.C. Daley
R.H. Campbell

BS.17.02 iload

R.C. Daley
R.H. Campbell

BS.17.03 bk_input

R.C. Daley
R.H. Campbell

BS.17.04 bk_output

R.C. Daley
R.H. Campbell

BT Dedicated Resource Management

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BT.3.02 The Interim Reserver

S.I. Feldman

BV Maintenance Tools and Information

BV.3. Procedure to Produce Printable Information from the SLT

S. Ohayon

System Certification

BV.7.01 Certifier

D.L. Stone

BV.7.02 Interpreter

W.H. Southworth

Multics Segment List (MSL)

| | | |
|----------|--|---------------------|
| BV.10.01 | Multics Segment Library On-Line Information Base | Edwin W. Meyer, Jr. |
| BV.10.02 | Entry Type Codes | Edwin W. Meyer, Jr. |
| BV.10.04 | Utility Procedure | Edwin W. Meyer, Jr. |
| BV.10.05 | Global Ascii Formatting Command | Edwin W. Meyer, Jr. |
| BV.10.06 | Data Insertion Command | Edwin W. Meyer, Jr. |
| BV.10.07 | Selective Ascii Formatting Command | Edwin W. Meyer, Jr. |
| BV.10.08 | Production formatter of information | J.H. Cecil |
| BV.10.09 | Update program | J.H. Cecil |
| BV.10.10 | msl_transmog | Edwin W. Meyer, Jr. |

BX CommandsMultics Command Language

| | | |
|---------|--------------------------|--|
| BX.1.00 | Multics Command Language | W.H. Southworth G. Schroeder R. Sobecki D. Eastwood |
|---------|--------------------------|--|

User Process Control

| | | |
|---------|------------------|-----------------------------|
| BX.3.04 | Logout Command | K.J. Martin |
| BX.3.10 | Continue Command | R.J. Sobecki K.J. Martin |
| BX.3.11 | Cancel Command | K.J. Martin |

I/O Commands

| | | |
|---------|---|---------------|
| BX.5.01 | Locall- i/o system interface command | Ken Thompson |
| BX.5.02 | Input from segments | R.J. Feiertag |
| BX.5.03 | dprint, dpunch; Commands to Queue Segments for Delayed Printing or Punching by the Output Driver Daemon | J.F. Ossanna |

Programming Languages

| | | |
|---------|--------------------|----------------|
| BX.7.03 | The eplbsa command | N. Adleman |
| BX.7.04 | The epl command | N. Adleman |
| BX.7.05 | expand | S.L. Rosenbaum |
| BX.7.06 | The BCPL command | D.M. Ritchie |
| BX.7.07 | The pll command | James D. Mills |

File System Commands

| | | |
|---------|--|--|
| BX.8.01 | List, files, status | W.H. Southworth |
| BX.8.02 | Modify the access control information for a file | E. Bjorkman P. Smith C. Marceau K. Martin |

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|----------------------------------|-----------------------------------|---|
| BX.8.03 | listacl | C.A. Cushing C. Marceau K. Martin |
| BX.8.04 | link | R.J. Feiertag S. Rosenbaum W.H. Southworth P. Smith E. Bjorkman |
| BX.8.05 | unlink | R.J. Feiertag S. Rosenbaum |
| BX.8.06 | branch | R.J. Feiertag S. Rosenbaum |
| BX.8.07 | remove | R.J. Feiertag S. Rosenbaum P. Smith E. Bjorkman |
| BX.8.08 | rename | R.J. Feiertag S. Rosenbaum P. Smith |
| BX.8.09 | addname | R.J. Feiertag S. Rosenbaum |
| BX.8.10 | delname | R.J. Feiertag S. Rosenbaum |
| BX.8.11 | copy | W.H. Southworth R.J. Feiertag |
| BX.8.12 | movebranch | R.J. Feiertag S. Rosenbaum |
| BX.8.13 | chasepath | R.J. Feiertag W. Rosenbaum |
| BX.8.14 | Working Directory Table Commands | E.Q. Bjorkman |
| BX.8.14A | Interim change_wdir | K.J. Martin |
| <u>File Printing and Editing</u> | | |
| BX.9.02 | Print a Segment in ASCII | C. Garman K. Martin |
| BX.9.04 | Archive Command | S. Ohayon |
| BX.9.04A | Erratum to BX.9.04 | J.H. Cecil |
| BX.9.05 | Print segment linkage information | J.H. Grochow |
| BX.9.05A | Corrigendum to BX.9.05 | J.M. Grochow |
| BX.9.06 | QED text editor | Ken Thompson |

Miscellaneous Commands

| | | |
|----------|---------|-------------|
| BX.20.01 | echo | K.J. Martin |
| BX.20.02 | time | K.J. Martin |
| BX.20.03 | flush | K.J. Martin |
| BX.20.04 | nothing | K.J. Martin |

Interim Facilities

| | | |
|----------|---|---------------------------|
| BX.99.01 | Interim Facility to Write a Tape | J.H. Cecil K.J. Martin |
| BX.99.02 | Interim Facility to Read a Tape | K.J. Martin |
| BX.99.03 | op | W. Southworth |
| BX.99.04 | ctss_aarchv | D.L. Stone |
| BX.99.05 | MSPEEK | D.L. Stone |
| BX.99.06 | DUMP | D.L. Stone |
| BX.99.07 | DLS_AN | D.L. Stone |
| BX.99.09 | read7: An Interim Command to Read 7-punch decks into Segments | J.F. Ossanna |
| BX.99.10 | dump7: An interim Command to Punch Segments in 7-punch Format | J.F. Ossanna |
| BX.99.11 | qdump7: A Command to Punch Segments in 7-punch Format | J.F. Ossanna |
| BX.99.12 | Extraction of segments into Multics from CTSS archive files | J.H. Cecil |

BY LibraryFile System Routines

| | | |
|---------|---|--|
| BY.2.00 | Overview of File System Library Procedures | R.J. Feiertag |
| BY.2.01 | Command, file system interface | R.J. Feiertag |
| BY.2.02 | Decode basdi file system error codes | E.Q. Bjorkman |
| BY.2.03 | command_error | W.H. Southworth |
| BY.2.04 | Preparation of Path Names and Entry Names Acceptable to the File System | E.Q. Bjorkman P.E. Smith S. Rosenbaum R.J. Feiertag |
| BY.2.05 | Read or set access attributes | E.Q. Bjorkman K.J. Martin |
| BY.2.06 | The equals convention | R.J. Feiertag C. Garman |
| BY.2.07 | Obtain, modify bit-counts in segment branch | Charles Garman |
| BY.2.08 | Star Convention Handlers | W.H. Southworth |

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|-----------|--|-----------------------------------|
| BY.2.09 | Obtain pointer to initialized "scratch" area | Charles Garman |
| BY.2.10 | Obtain information about entry in File System hierarchy | Charles Garman |
| BY.2.11 | working_segs | E.W. Meyer, Jr. S.L. Rosenbaum |
| BY.2.12 | Delete a subtree of the file system hierarchy | E.Q. Bjorkman |
| | <u>Segment I/O Routines</u> | |
| BY.3.01 | Character String I/O for Segments | Charles Garman |
| | <u>Console I/O Routines</u> | |
| BY.4.02 | User I/O Procedures to Read and Write | K.J. Martin |
| BY.4.03 | A procedure which provides a description of I/O status | W.R. Strickler |
| BY.4.04 | Resetting Asynchronous User Ionames | W.R. Strickler |
| | <u>User Control Library Procedures</u> | |
| BY.5.01 | Routines to create and destroy working processes | P. Belmont |
| | <u>Extensions to PL/I</u> | |
| BY.10.01 | "Entry variables" in PL/I | D.B. Wagner |
| BY.10.02 | Length function for PL/I strings | Charles Garman |
| BY.10.03 | Virtual strings; in-line string manipulation and decomposition | C. Garman |
| BY.10.04 | Calling a Procedure Whose Name is Not Explicitly Known | W.R. Strickler |
| BY.10.05 | Reverse_index | J.H. Cecil |
| BY.10.06 | Command_arg | C. Marceau |
| | <u>Supervisor Service Procedures</u> | |
| BY.12.01 | Who_called | R.J. Sobekci |
| BY.12.02 | Validation-level utility routines | M.A. Padlipsky |
| BY.12.03 | Indicate the occurrence of a condition signal | M.A. Padlipsky |
| BY.12.04 | Establish a handler for a condition | M.A. Padlipsky |
| BY.12.04A | Addendum, BY.12.04 | M.A. Padlipsky |
| BY.12.05 | Remove a condition handler | M.A. Padlipsky |
| BY.12.06 | Perform an abnormal return | M.A. Padlipsky |
| BY.12.07 | Current Ring Number Routine: get_ring_no | M.A. Padlipsky |
| BY.12.09 | Inward-call argument_checking | M.A. Padlipsky |

Linkage Segment Maintenance Procedures

| | | |
|----------|--|---------------------------|
| BY.13.00 | Overview of linkage maintenance | D.L. Boyd |
| BY.13.01 | Forcing a link | D.L. Boyd D.H. Johnson |
| BY.13.02 | Generate_ptr | D.L. Boyd |
| BY.13.03 | link_change | D.L. Boyd D.H. Johnson |
| BY.13.05 | Search linkage definitions for external symbol | Charles Garman |

Relative Pointer Manipulation Procedures

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|--------|--|-------------|
| BY.14. | Relative Pointer Manipulation Procedures (PTR) | N.I. Morris |
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System Utility Procedures

| | | |
|----------|-------------------------------|---------------|
| BY.15.01 | Generating Unique Identifiers | L.B. Ratcliff |
| BY.15.04 | Standard Checksum Procedure | R.K. Rathbun |

Storage Management Procedures

| | | |
|----------|---------|-----------|
| BY.16.02 | BLK_EQL | B. Wolman |
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Procedures to Return Directory

| | | |
|----------|---|----------------|
| BY.17.01 | Return the path name of a users working directory | E.Q. Bjorkman |
| BY.17.02 | Return Process Directory Path Name | K.J. Martin |
| BY.17.03 | Return Process-Group Directory Path Name | K.J. Martin |
| BY.17.04 | Return Library Directory Path Name | S.L. Rosenbaum |
| BY.17.05 | Return Calling Directory Path Name | S.L. Rosenbaum |

Procedures to Return System Information

| | | |
|----------|-------------------------|-------------|
| BY.18.01 | Return Process Id | K.J. Martin |
| BY.18.02 | Return Process-Group Id | K.J. Martin |
| BY.18.03 | usage_values | K.J. Martin |

Programming Language-Related Procedures

| | | |
|----------|------------|----------------|
| BY.21.01 | expand_seg | S.L. Rosenbaum |
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Procedures for Interim Facilities

| | | |
|----------|---|-------------|
| BY.99.01 | Conversion of CTSS user name to Multics user name | J.H. Cecil |
| BY.99.02 | Conversion of Multics user name to CTSS user name | J.H. Cecil |
| BY.99.03 | print_dbrs | J. Gintell |
| BY.99.04 | get_dbrs | J. Gintell |
| BY.99.05 | RING_O_PEEK | D.L. Stone |
| BY.99.06 | MDUMP | D.L. Stone |
| BY.00.07 | rsw_ | N.I. Morris |

BZ LanguagesEPLBSA

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|---------|---------------------------|----------------|
| BZ.2.03 | EPLBSA Machine Operations | James D. Mills |
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