



BatchPipes for OS/390 Version 2 Release 1 Shortens Batch Business Cycles

Overview

Batchpipes for OS/390® is a separately orderable software product that can dramatically shorten business-critical batch processing. The BatchPipePlex uses the coupling facility to pipe data between jobs running on different systems in a Parallel Sysplex® environment. The BatchPipeWorks component provides over 100 functions that can be used to operate on data as it passes through a pipe.

The BatchPipes® for OS/390 solution addresses the shrinking of the daily batch window due to the demand for longer online availability.

BatchPipes uses advanced data-in-memory techniques to pass data through processor storage buffers (pipes) directly to other jobs in the cycle. Elapsed time can be significantly reduced by passing data in memory between the jobs and through the parallelization of job execution.

Communication companies have implemented the BatchPipes product to reduce billing cycles. Retail companies have achieved elapsed time benefits in their inventory cycles. Credit bureaus, credit card companies, financial institutions and utility companies have improved the run times of business critical batch workloads by implementing BatchPipes.

Key Prerequisites

Using BatchPipes across images in a parallel sysplex requires OS/390 or MVS/ESA™ V5.

The BatchPipePlex function needs a Parallel Sysplex configuration with a Coupling Facility Structure defined for BatchPipes to use.

Planned Availability Date

May 26, 2000

At a Glance

- Shorten business cycles that rely on batch applications
- Alleviate nightly batch window overruns
- Improve resource utilization in a Parallel Sysplex environment
- Reduce I/S expense by reducing tape and DASD usage
- Decrease batch job elapsed time by using data-in-memory techniques

For ordering, contact:

Your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at

800-IBM-CALL

Reference: LE001

Description

The BatchPipes for OS/390 solution can reduce the elapsed time requirements of batch jobstreams.

Batchpipes for OS/390 uses a data-in-memory service to allow replacement of intermediate basic sequential access method (BSAM) and queued sequential access method (QSAM) data sets in batch job streams with data-in-memory buffers or "pipe" between jobs. Significant elapsed-time reductions are possible for sets of jobs that execute serially and can use BatchchPipes for OS/390 to execute in parallel on the same system, or in a parallel sysplex environment. By using the coupling facility, BatchPipes for OS/390 will enable parallelism across multiple systems. This provides more options to distribute the batch workload and improve resource utilization.

BatchPipePlex provides flexible scheduling and increased resource utilization by piping data across several systems to relieve the constraints on a single system.

BatchPipeWorks functions can result in reduced processor cycles, virtual storage constraints and elapsed time.

Year 2000

This product does not have date dependencies and is Year 2000 ready.

Euro Currency

This program is not impacted by euro currency.

Product Positioning

BatchPipes for OS/390 is one of several software and hardware functions that IBM offers to improve the elapsed time of batch jobs that run on OS/390 and MVS/ESA. Others include:

- VIO to expanded storage
- Hiperbatch™
- Sequential Data Striping
- Hiperbatch:

Hiperbatch targets a different type of batch application from the BatchPipes product. With Hiperbatch, the target application has many readers simultaneously accessing data from an already existing dataset. The shared data all resides in processor storage and on DASD; the data persists after being read. In contrast, for BatchPipes, the target application has one writer passing data to one reader. BatchPipes holds very little of the data in processor storage at one time, and the output from the writer job does not reside on tape or DASD.

With Hiperbatch, readers run simultaneously with each other, but not with the writer; with BatchPipes for OS/390, writer and reader jobs run simultaneously.

- Sequential Data Striping:

Both Sequential Data Striping and BatchPipes for OS/390 can improve the processing of batch jobs that spend much of their elapsed time sequentially reading or writing large DASD files.

Sequential Data Striping can substantially improve I/O access times to DASD. For sequential data sets, BatchPipes for OS/390 can eliminate I/O and enable concurrent processing.

Hardware and Software Support Services

SmoothStart™ /Installation Services

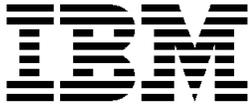
IBM SmoothStart and Installation Services are not provided.

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IBM US Announcement Supplemental Information

April 18, 2000

Technical Information

Specified Operating Environment

Hardware Requirements: BatchPipes® for OS/390® supports all hardware supported by OS/390 and MVS/ESA™.

A Parallel Sysplex® configuration with a Coupling Facility Structure defined for BatchPipes is required for piping across images.

- Central processor complex (CPCs) that can attach to the coupling facility
- At least one coupling facility and the appropriate channels and channel cards
- At least one Sysplex Timer®
- Connection to shared DASD

For more information about specific hardware requirements, refer to the *System/390® Parallel Enterprise Server and OS/390 Reference Guide* (G326-3070).

Software Requirements: BatchPipes for OS/390 supports the following versions/releases of OS/390 and MVS/ESA:

- OS/390 Version 2 (5647-A01)
- OS/390 Version 1 (5645-001)
- MVS/ESA SP™ Version 5 Release 1 and subsequent releases (5655-068 or 5655-069)

Using BatchPipes across images in a parallel sysplex requires OS/390 or MVS/ESA V5.

Compatibility: BatchPipes for OS/390 Version 2.1 is compatible with the BatchPipes component of SmartBatch for OS/390 Version 1.2

Performance Considerations: Significant elapsed time reductions are possible for sets of jobs that execute serially by using BatchPipes for OS/390 to execute these jobs in parallel on the same OS/390 system or Parallel Sysplex environment. Consideration must be given to the combined requirements for: initiators, tape drives, DASD, processor storage and processor usage.

Planning Information

Customer Responsibilities: No special planning is required for BatchPipes for OS/390. However all customers should refer to the *BatchPipes for OS/390 Users Guide and Reference* (SA22-7458).

Packaging: BatchPipes for OS/390 will be shipped on a single SMP/E-installable tape or cartridge.

System Integrity

IBM will accept APARs where the installation of BatchPipes for OS/390 introduces an exposure to the system integrity of the operating system.

Security, Auditability, and Control

BatchPipes for OS/390 relies on the security and auditability features of the operating system software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Customer Financing

IBM Global Financing offers attractive financing to credit-qualified commercial and government customers and Business Partners in more than 40 countries around the world. IBM Global Financing is provided by the IBM Credit Corporation in the United States. Offerings, rates, terms and availability may vary by country. Contact your local IBM Global Financing organization. Country organizations are listed on the Web at:

<http://www.financing.ibm.com>

Ordering Information

New Licensees

Shipment will not occur before availability date.

New users of BatchPipes for OS/390 should specify:

Type	Model
5655	D45

Basic License: To order a basic license, specify the program number and feature number 9001 for asset registration.

Entry Support License (ESL): To order an ESL license, specify the program number, feature number 9001 for asset registration, and the applicable ESL One-Time Charge (OTC) feature number. Also specify the feature number of the desired distribution medium.

Program Number/ Description	ESL OTC Feature Number
5655-D45 BatchPipes for OS/390	0018

ESL machines can be determined by referring to the IBM Entry End User/390 Attachment (Z125-4379).

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: <http://www.ibm.com>.

Parallel Sysplex License Charge (PSLC) Basic License

To order a basic license, specify the program number and feature number 9001 for asset registration. Specify the PSLC Base feature. If applicable, specify the PSLC Level A and PSLC Level B, and PSLC Level C, PSLC Level D features and quantity.

If there is more than one program copy in a Parallel Sysplex, the charge for all copies is associated to one license by specifying the applicable PSLC feature numbers and quantity represented by the sum of the Service Units in Millions (MSUs) in your Parallel Sysplex. For all other program copies, specify the PSLC No-Charge (NC) Identifier feature on the licenses.

Also, specify the feature number of the desired distribution medium.

Machine MSU Capacity	PSLC Feature Number	PSLC Basic License MLC Feature Description
1	0001	PSLC Base, 1 MSU
2	0002	PSLC Base, 2 MSUs
3	0003	PSLC Base, 3 MSUs
4 — 45	0004 0005	PSLC Level A, 1 MSU PSLC Level A, 42 MSUs
46 — 175	0006 0007 0008	PSLC Level B, 1 MSU PSLC Level B, 10 MSUs PSLC Level B, 50 MSUs
176 — 315	0009 0010 0011	PSLC Level C, 1 MSU PSLC Level C, 10 MSUs PSLC Level C, 50 MSUs
316 or more	0012 0013	PSLC Level D, 1 MSU PSLC Level D, 50 MSUs
NA	0014	PSLC NC IDENTIFIER

Example 1:

For a single machine with 11 MSUs, the PSLC features would be:

- 0003 — quantity 1
- 0004 — quantity 8

Example 2:

For two machines in a Parallel Sysplex, which have an aggregation of 60 MSUs, the PSLC features would be:

- PSLC chargeable license #1:
 - 0003 — quantity 1
 - 0005 — quantity 1
 - 0006 — quantity 5
 - 0007 — quantity 1
- PSLC no-charge license #2:
 - 0014 — quantity 1

Single Version Charging: To elect single version charging, the customer must notify and identify to IBM the prior program and replacement program and the designated machine the programs are operating on.

Growth Opportunity License Charge (GOLC): To order a GOLC software, specify the program number, feature number 9001 for asset registration, and the GOLC monthly charge feature number from the table below.

Also, specify the feature number for the desired distribution medium.

GOLC Category	GOLC Feature Number
H30	0015
H50	0016
H70	0017

Basic Machine-Readable Material

Environment	Feature Number	Distribution Medium
OS/390 MVS/ESA	5802	3480 tape cartridge
OS/390 MVS/ESA	6085	4-mm DAT cartridge

Customization Options: Select the appropriate feature numbers to customize your order to specify the delivery options desired. These features can be specified on the initial or MES orders.

Example: If publications are not desired for the initial order, specify feature number 3470 to ship media only. For future updates, specify feature number 3480 to ship media updates only. If, in the future, publication updates are required, order an MES to remove feature number 3480; then, the publications will ship with the next release of the program.

Description	Feature Number
Initial Shipments	
Serial Number Only (suppresses shipment of media and documentation)	3444
Ship Media Only (suppresses initial shipment of documentation)	3470
Ship Documentation Only (suppresses initial shipment of media)	3471
Satellite Electronic Delivery	3450
Update Shipments	
Ship Media Updates Only (suppresses update shipment of documentation)	3480
Ship Documentation Only (suppresses update shipment of media)	3481
Suppress Updates (suppresses update shipment of media and documentation)	3482
Expedite Shipments	
Local IBM Office Expedite (for IBM use only)	3445
Customer Expedite Process Charge (\$30 charge for each product)	3446

Expedite shipments will be processed to receive 72-hour delivery from the time IBM Software Delivery and Fulfillment (SDF) receives the order. SDF will then ship the order via overnight air transportation.

Unlicensed Documentation: The following publications are available softcopy only.

Title	Number
BatchPipes for OS/390 V2 R1 BatchPipeWorks Reference	SA22-7456
BatchPipes for OS/390 V2 R1 BatchPipeWorks User Guide	SA22-7457
BatchPipes for OS/390 V2 R1 Users Guide and Reference	SA22-7458
BatchPipes for OS/390 V2 R1 Introduction	GA22-7459

Displayable Softcopy Publications: BatchPipes for OS/390 publications are offered in displayable softcopy form. The displayable manuals are optional machine-readable material. The files are shipped on CD-ROM. To order use form number SK2T-6700-16.

Subsequent updates (technical newsletters or revisions between releases) to the publications shipped with the product will be distributed to the user of record for as long as a license for this software remains in effect. A separate publication order or subscription is not needed.

Terms and Conditions

This licensed program is subject to the Terms and Conditions for IBM licensed programs.

Agreement: IBM Customer Agreement

Designated Machine: Required

Indexed Monthly License Charge (IMLC) Applies: No

Location License Applies: No

Use Limitation Applies: No

Educational Allowance: Yes, 15% education allowance applies to qualified education institution customers.

Volume Orders: Not applicable

Products eligible for Single Version Charging

Replaced Program(s)		Replacement Program(s)	
Program Number	Program Name	Program Number	Program Name
5655A17	IBM SmartBatch for OS/390	5655D45	IBM BatchPipes for OS/390

Warranty Applies: Yes

Licensed Program Materials Availability

Restricted Materials of IBM: None
Non-Restricted Source Materials: All
Object Code Only (OCO): None

Testing Period: Two months

Program Services: Central service for suspected defects in the BatchPipes code is provided by the IBM Support Center within the customer's geography.

Service Policy: It is IBM's current intention to provide service support for each release of BatchPipes for OS/390. If a release is not in the list to be withdrawn, it will continue to be serviced until further announced. The current practice of providing at least twelve months' written notice prior to the withdrawal of service for a version or release will continue.

All statements regarding IBM's future direction and intent as well as withdrawal without notice are subject to change and represent goals and objectives only.

Support Line: Yes

Charges

Contact your IBM representative for charges information for this announcement.

Order Now

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Note: Shipments will begin after the planned availability date.

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Year 2000 Readiness Disclosure

Statements made in this announcement regarding Year 2000 are “Year 2000 Readiness Disclosures” under the Year 2000 Information and Readiness Disclosure Act of 1998, a U.S. statute enacted on October 19, 1998.