

SEA

plus⁺Pack

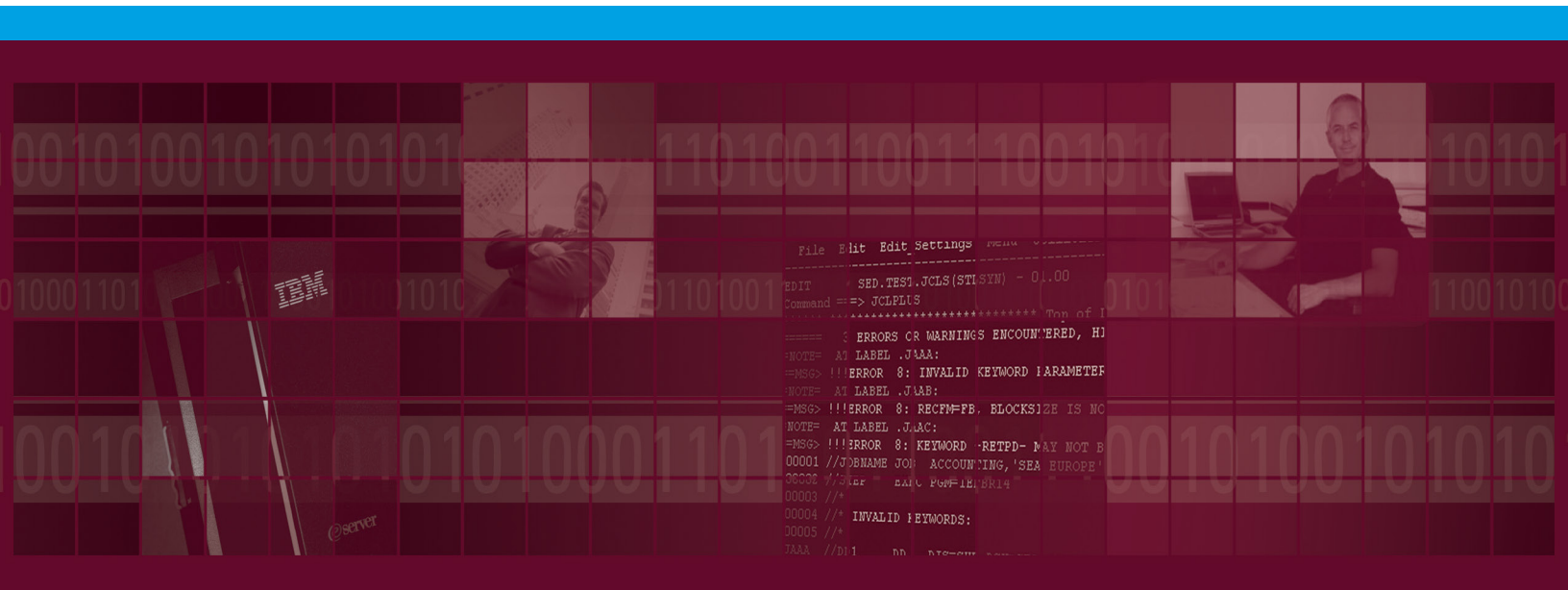
JCL Management

JCLplus⁺

JCLplus⁺Remote

XREFplus⁺DBr

XREFplus⁺



User Driven Software Solutions Since 1982

SOFTWARE ENGINEERING OF AMERICA®

plus⁺Pack

ENTERPRISE JCL MANAGEMENT

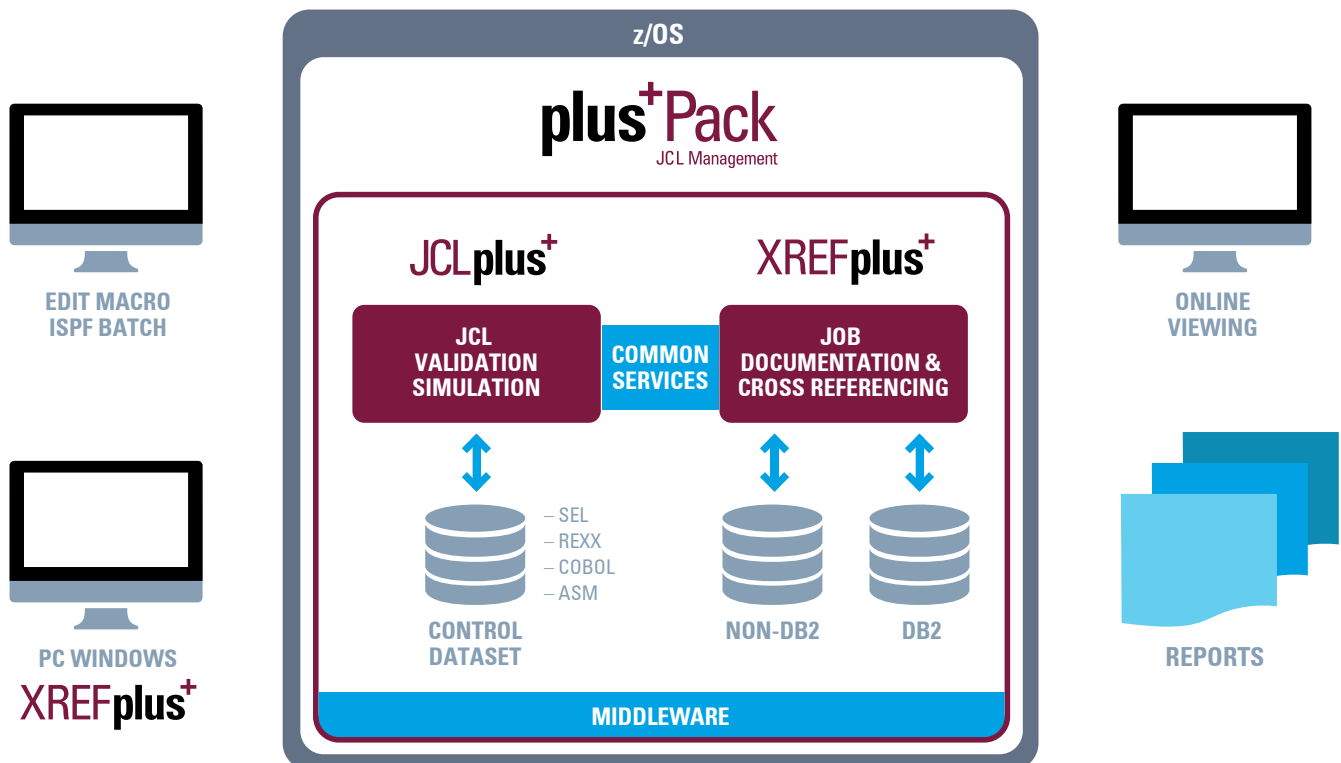
Without your JCL, your business does not operate. Ensuring your JCL assets are effectively enabling IT Service Delivery is the goal of JCL management. Making sure that your JCL is error free, conforms to in-house standards, and allows for easy maintenance is an ongoing process. In today's globalized economy, with shrinking production windows and multi-platform IT Services there's little, if any, room for error in production batch cycles or for unnecessary time lost in Agile Development disciplines.

INCREASED RELIABILITY THROUGH COMPREHENSIVE JCL MANAGEMENT

Plus⁺Pack equips you with the tools, documentation and support you need for total JCL management.

- JCL Syntax Checking and Validation
- JCL Syntax Checking and Validation on Remote Machines
- JCL Reformatting
- JCL Intelligent Editing
- Comprehensive JCL Reporting and Documentation
- Support for Leading Job Schedulers and other widely-used System Components and utilities
- Integrates with Change Management Products
- Flexible Modes of Operation, including ISPF, Batch, RDz (LEPEX editor), and other IDE's capable of working with an Eclipse plug-In

plus⁺Pack architecture



Plus⁺Pack COMPONENTS

JCLplus⁺

JCL SYNTAX CHECKING & RUNTIME VALIDATION

Detecting JCL Syntax and runtime errors before they occur is your first key to successful JCL management. A one-character syntax error, a missing dataset, or an unexpected security violation can cost hours of lost production time. Plus⁺Pack prevents these errors by providing the most comprehensive runtime simulation available.

JCL STANDARDS ENFORCEMENT

Tightly enforced standards in JCL coding practices, naming conventions, and resource utilization increase productivity by improving reliability, reducing outages and protecting investments made in JCL optimization projects.

Plus⁺Pack facilitates defining and enforcing JCL standards with its intuitive rules language. Standards enforcement rules can also be written in REXX, Cobol, or Assembler.

Violations of in-house standards can virtually be eliminated.

JCL CHANGES AND REFURBISHMENT

In the dynamic environment of an enterprise data center, being able to respond quickly and effectively to change is critical. New operating systems, additional devices, software updates and merged environments due to corporate acquisitions are just some of the factors that necessitate JCL modifications. Plus⁺Pack facilitates making these updates to your JCL across the entire enterprise. It not only ensures that changes and mods are applied correctly, it also optionally validates the accuracy of these updates all in a single operation.

JCL FORMATTING

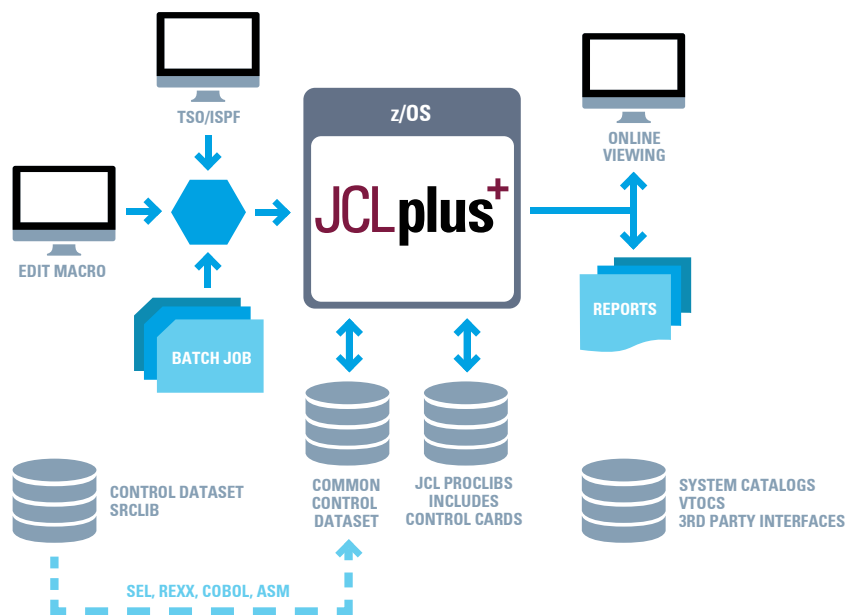
Clearly and consistently formatted JCL is critical to being able to spot errors and omissions that, if left undetected, could be costly. Well-formatted JCL also allows you to understand your JOBS and PROCs at a glance for increased productivity.

Plus⁺Pack automatically reformats your JCL to your own specifications. An entire library of JCL can be quickly and easily reformatted eliminating numerous hours of error-prone hand coding.

JOB SCHEDULING

To meet critical batch-window requirements, modern data centers employ job schedulers that often add yet another level of complexity to JCL management. Systems like TWS/z, Control-M, ESP, Zeke, CA-7 and others allow your JCL to contain intricate strings of proprietary or non-standard variables and directives that are typically resolved at job submission time. JCLplus⁺ supports a wide range of these systems. By resolving job scheduler symbolics and directives before syntax checking and validation, JCLplus⁺ not only detects improperly specified variables and directives, it also ensures that the JCL is error-free and meets your requirements.

JCLplus⁺ architecture



CHANGE MANAGEMENT, TMS, DASD & SECURITY

The infrastructure of an enterprise data center embodies an intricate network of system components such as tape, security, DASD, and change management systems. Plus⁺Pack is engineered to support and interface with all widely used packages that may in any way impact your batch environment.

IDE-READY

An Integrated Development Environment (IDE) such as the IBM Rational Development for System z[®] (RDz) provides comprehensive facilities for developers to create, test and maintain z/OS applications in a GUI desktop environment. Developers working within the IDE need to have seamless access to the same JCL tools provided on the z/OS platform. JCLplus⁺ supports this approach by providing a plug-in that integrates JCLplus⁺ access into the IDE application.

TECHNICAL SUMMARY

Engineered for high-speed, accurate syntax checking, and cross platform needs, the JCLplus+ product is an ideal component of your total JCL management solution.

THE MOST THOROUGH JCL SYNTAX CHECKING AND RUNTIME VALIDATION AVAILABLE

It's the most subtle errors that are the most costly!

- Supports all z/OS keywords
- Resolves all symbolics
- Expands PROCS and INCLUDE groups
- Finds common allocation errors
- Supports user-defined rules for standards enforcement
- Interfaces with all widely used data center software utilities
- Leading edge integration / emulation of scheduling symbolics / directives
- Comprehensive validation of Sort parameters

JCL MAINTENANCE

- Reformats and reorders JCL to user specifications
- Intelligent update utility for global changes
- Compare utility for JCL and source files displays differences side by side and in context
- Simple yet robust rules language automates conversion to/from Test / Prod standard

FLEXIBLE MODES OF OPERATION

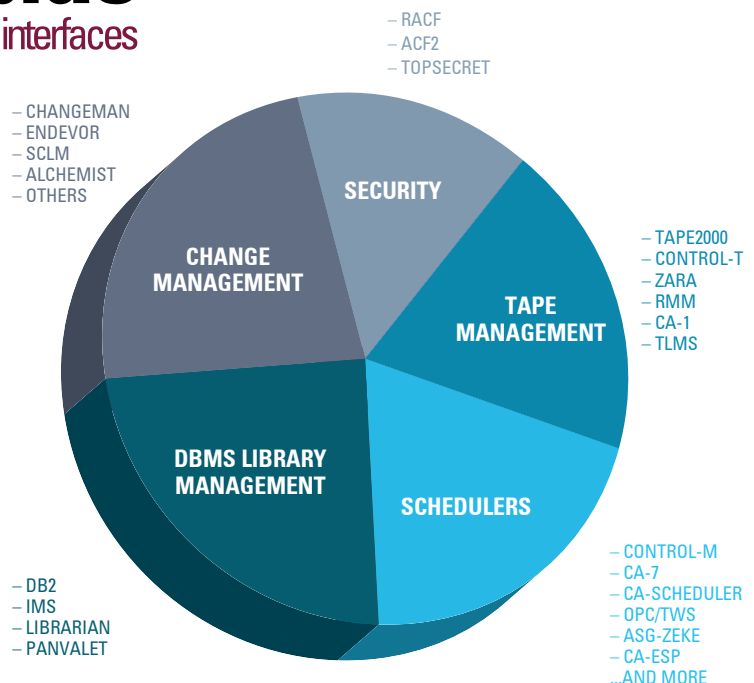
- Runs as an ISPF Edit macro, as well as batch
- Intuitive TSO/ISPF panels
- Multiple exit points for maximum flexibility
- Easily interfaced to SCM processes to improve process automation
- IDE-ready with Eclipse plug-In

REPORTING AND METRICS

All of the well-known Best Practices Frameworks including ITIL, CMMI, Six Sigma and ITIL stress the importance of reporting and metrics in managing process maturity.

JCLplus⁺

interfaces



JCLplus⁺ embraces this requirement by providing automated creation, collection and reporting of JCL metrics to manage process maturity and validate investments made in your JCL products and Best Practices:

- Are the same problems reoccurring?
- Are your Developers taking advantage of the tools and processors you offer?
- What are the metrics (ROI) on problems avoided and time saved because of your adopted Best Practices?
- How are you trending and what proactive actions can be taken?

INCREASED PRODUCTIVITY

The SEA combination of JCLplus+ with the best vendor JCL expertise available offers the highest level of automation possible and focuses on addressing Batch and JCL-related issues most important to you.

JCLplus⁺Remote

JCLplus⁺Remote - MANAGING JCL IN COMPLEX ENVIRONMENTS

Today's data center is an increasingly complex environment. Most sites run multiple z/OS images: one image for development, another for testing new software, and one or more production images.

In many cases, production JCL that can run on any number of images is kept in a central repository on a single image. While it is no longer sufficient to validate JCL solely on the machine on which the JCL resides, it can be complicated and costly to manually validate JCL in all the environments it will run.

CHECKING JCL ON REMOTE MACHINES

JCLplus⁺Remote simplifies managing JCL in complex environments. It allows JCL that resides on one machine to be validated on one or more remote machines.

For example, the JCL for a JOB and several associated PROCs might be on a Development image where changes are made to the PROCs and the JOBs. The changes all work in the development environment, but there is no way to be sure they will not cause JCL errors in the production environment.

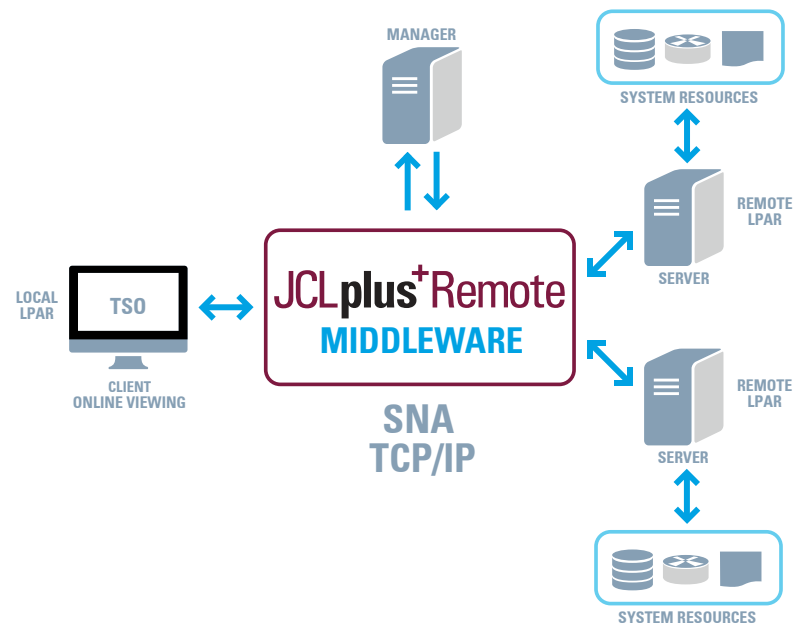
With JCLplus⁺Remote you can easily validate the JOBs and PROCs in the production environment from the development environment. JCLplus⁺Remote can streamline JCL processing, save time and resources, reduce JCL errors in complex environments, and simplify JCL management.

FLEXIBLE OPERATION

JCLplus⁺Remote allows great flexibility in validating components on remote systems. You can remotely check and validate:

- A single JOB
- Multiple JOBs
- One or more JOBs and include local PROCs and control card members used by the JOBs
- Individual PROCs
- Multiple PROCs
- One or more PROCs using one or more JOBs that already exist on the remote system.

JCLplus⁺Remote architecture



INTEGRATION WITH CHANGE MANAGEMENT

JCLplus⁺Remote integrates easily with change management procedures to ensure that JCL and PROCs being returned to a production environment will work properly in the production environment.

SECURE OPERATION

Access to all JCLplus⁺Remote features and operations can be controlled and restricted at the user level. All inter-component communications can be encrypted. Nine levels of encryption are supported. In addition, all data transfers can be compressed to conserve bandwidth.

MULTIPLE PROTOCOLS

JCLplus⁺Remote supports both TCP/IP and VTAM APPC protocols for inter-component communications.

PRODUCT INTEGRATION

JCLplus⁺Remote integrates seamlessly with all other Plus⁺Pack components to provide maximum flexibility and control over your JCL management environment.

XREFplus⁺DBr

JCL CROSS REFERENCE

Preventing problems before they occur is as important as resolving them quickly when they crop up. Quickly and accurately understanding the relationships between components of your JCL environment can mean the difference between a smoothly running batch cycle and an expensive production outage.

XREFplus⁺DBr is a powerful tool that enables you to comprehensively determine how your installation's batch Jobs are using dynamically created datasets, Jobs, Procs, programs, DB2 info and scheduling components.

It not only gives you a complete picture of the interrelationships of your JCL, programs, and datasets, but the open database architecture allows you to easily integrate other data with the data collected by XREFplus⁺DBr.

COMPREHENSIVE DOCUMENTATION

XREFplus⁺DBr creates a DB2 database of the most important components of your batch job processes, including Jobs, Procs, programs, dynamically allocated datasets, DB2 Catalog Info, SMF History, and scheduling components. The database can be accessed through either ISPF, Windows or Browser.

Retrieving the information you need is accomplished quickly and with considerable flexibility. The XREFplus⁺DBr GUI allows you to easily formulate queries to retrieve the data you require.

From the main screen, you can choose and customize each view using:

- Datasets
- JOBs
- Procs
- Programs
- DB2 Catalog Info
- Scheduling Components
- SMF History

SECURE, CUSTOMIZABLE ACCESS

Access to the features and functionality of the XREFplus⁺DBr interface can be easily controlled and restricted. Each user can have an individualized view of the product and its functionality.

APPLICATION RESEARCH, CHANGE IMPACT ANALYSIS & PROBLEM CORRECTION

Locating the information you need is often only the first step. Frequently, further analysis is required. With XREFplus⁺DBr, you can browse or edit the components referenced in the database to quickly zero in on the data you need.

COMPLEX ENVIRONMENTS

Today's data centers are complicated places. Companies may have several physical machines and multiple z/OS images running in different locations. Batch processes may be balanced across a SYSPLEX environment. This can make it extremely time consuming and difficult to get a clear understanding of the interaction among batch Jobs and Applications, especially at places where the original developers are not available.

XREFplus⁺DBr lets you combine information from any number of z/OS images into one database, simplifying the task of understanding how your applications interrelate and impact one another. The graphical presentation makes it easy to see exactly which data flows from Job to Job and Application to Application.

EXTENDABLE, CUSTOMIZABLE INTERFACE

The XREFplus⁺DBr GUI or WEB interface can be easily extended and customized to incorporate data related to your unique environment. The XREFplus⁺DBr DB2 Table definitions are fully documented, and the unique Report Definition facility allows you to add custom presentation formats to meet your needs.

DATA COLLECTION AND DB2 DATABASE LOAD

The collection and loading of data for the XREFplus⁺DBr repository is extremely efficient. The Data collections for JCL, DB2 Catalog Info, SMF History, etc., are run asynchronously, and can be run in parallel.

The DB2 database load process uses standard DB2 utilities to load the data from the collection step(s).

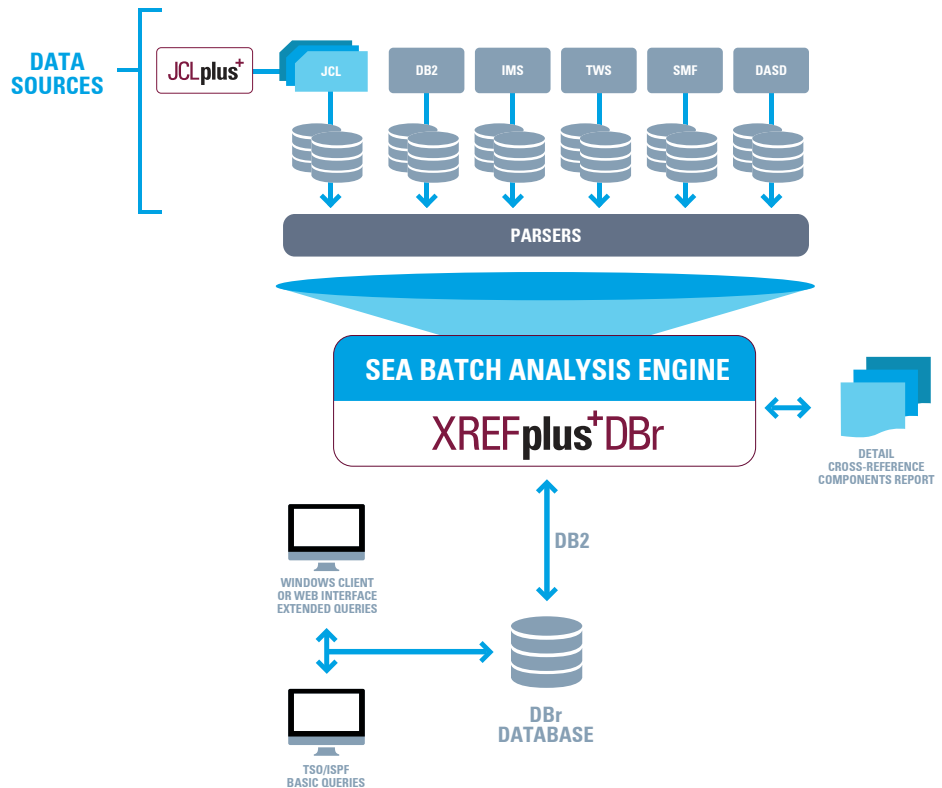
DYNAMIC ENVIRONMENTS & CHANGE MANAGEMENT INTEGRATION

Change is a constant in the data center. Changes to JOBS and PROCs occur constantly. Your view of that data must be current to be trusted as accurate.

XREFplus⁺DBr supports incremental updates. The update process can easily be integrated into your JCL promotion process to ensure that the database is up-to-date.

In addition, all information is not necessarily reflected in the JCL. As Jobs execute, they may, for example, dynamically allocate datasets or dynamically load programs. XREFplus⁺DBr captures SMF Job History and automatically relates the data to the static JCL database, ensuring that you always have a complete view of your batch processes.

XREFplus⁺DBr architecture



TECHNICAL SUMMARY

Engineered for easy and efficient access to critical system information, XREFplus+DBr is an ideal component of your total JCL management solution. Used in combination with JCLplus+ our customers achieve a level of batch process maturity that extends beyond the utility of each product used individually

FLEXIBLE MODES OF OPERATION

- ISPF ,Windows GUI or Browser Access
- Batch Reporting Capability
- Customizable Panels
- Push-button Conversion of Query Results to PDF Format

POWERFUL RESEARCH TOOL

- Text and Graphical Data Presentation
- Ability to Trace Data Flow
- Robust Drill-Down Capabilities
- Integrates Dynamic File and Program Info

For less complex environments the XREFplus⁺ and XREFplus⁺DB modules of JCLplus⁺ provide the best solution for automated JCL documentation and cross-referencing requirements. XREFplus⁺ provides over 40 different reports to help monitor and manage a JCL environment, while XREFplus⁺ DB makes it easy to identify both the users and uses of datasets, Jobs, Procs and other JCL components.

FOR 31 YEARS SEA HAS MAINTAINED A CONSISTENT FOCUS ON HELPING OUR CUSTOMERS ACHIEVE AN OPTIMIZED AND COST EFFECTIVE JCL ENVIRONMENT.

INSTALLATION

- Quick install utility allows the product to be installed in minutes and requires no IPLs, SVCs, hooks, or operating system changes.
- Runs in any z/OS environment
- Supports industry-standard JCL libraries
- GUI Desktop Runs on Windows 7 XP or Web Browser

24/7 CUSTOMER SUPPORT

- An experienced technical support team is available 24 hours a day, 7 days a week
- Direct contact between users and product development staff is readily available

SUPPORT FOR CUSTOM APPLICATIONS & ENHANCEMENTS

Conversion, Implementation and Training Assistance SEA offers the best vendor JCL expertise available to ensure incremental, measurable and sustainable improvements in the JCL and Batch Environments of our customers.

SEA - SOFTWARE ENGINEERING OF AMERICA

Established in 1982, Software Engineering of America (SEA) has built a worldwide reputation as a leading provider of IBM Mainframe and IBM i optimization, automation and security solutions with products licensed at thousands of enterprises worldwide, including 9 of the Fortune 10 and over 85% of the Fortune 500. SEA provides a full line of mainframe solutions covering all aspects of automation and optimization including Batch Performance & Optimization, JCL Management, Report & Output Management, RACF Security Management, Console Automation and a full line of IBM i Security and System Monitoring solutions.