

“How to Improve Your ISPF Productivity”

IBM’s Interactive System Productivity Facility (ISPF) is a software library management tool for editing, versioning, auditing, and promoting source code. ISPF is used by Mainframe programmers at any serious Mainframe shop. Whether programmers are developing, testing, and writing complex programs or creating reports and auditing operations, ISPF is the only game in town in the world of Mainframes.

Yet for all the widespread use of ISPF, there is no widespread consensus about ISPF’s *ease of use*. Indeed, ISPF is widely regarded as cumbersome to use,

especially if programmers are switching tasks throughout the day, trying to call up lines of commonly-used code in Edit or Browse modes, or to automatically invoke built-in, third-party, or installation-written functions and facilities, like sequential data sets, and PDS/PDSE, SEQ and VSAM files. In those cases, ISPF programmer productivity can drop off because ISPF demands a great deal of manual work to retrieve, re-write, or call-up the wide variety of code sequences used when programming.

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Enter SPIFFY

Many ISPF programmers believe that SPIFFY was created by IBM, but SPIFFY was created by Isogon—a well-regarded, New York City-based software shop with strong ties and marketing/reseller alliances with IBM. Isogon has continually enhanced SPIFFY over multiple versions (it's nearing version 6.0), and today SPIFFY has a near "cult following" among ISPF programmers. In fact, SPIFFY is so well integrated into ISPF that programmers who learned ISPF with SPIFFY installed, and then moved to a non-SPIFFY shop have been astonished to find SPIFFY is a third-party add-on to ISPF and that functions they had become used to were not available in "plain vanilla" ISPF. Oddly enough, a leading sales channel for SPIFFY is programmers who move from a "SPIFFY shop" to a "non-SPIFFY shop" and won't write a line of code until SPIFFY has been downloaded and installed. (Lucky for data center managers and development managers, SPIFFY can be downloaded and entirely installed without a consultant in under an hour.) Let's take a look at how SPIFFY works, what it does, and then look at a Case Study to see how one manager uses SPIFFY to enhance the productivity of his programmers at a large corporation.

What is SPIFFY? SPIFFY is called a "third-party add-on to ISPF," but it is better characterized as a seamless layer-in. SPIFFY turns IBM's TSO/ISPF/PDF into a centralized, object-oriented development center by consolidating functions, providing new facilities, enhancing existing facilities, and dramatically improving the performance of ISPF programmers. Moreover, SPIFFY does not require authorized mode and can be enabled for as many users as the installation chooses. How it works. SPIFFY combines a range of ISPF utilities as well as new SPIFFY functions into the standard ISPF Browse, Edit, View, and DSLIST functions. SPIFFY requires no training, and centralizes—with

easy, single-screen accessibility—the major ISPF functions.

Programmers can keep track of their data sets and invoke virtually any function they need from a

“dashboard” panel, without repeatedly calling up different panels for the same library, thereby spending less time recovering from errors.

Programmers save a substantial amount of navigation time and can get

their work done more efficiently. Indeed, *unlike all other programmer productivity products in today’s market*, SPIFFY doesn’t add more options to the ISPF main menu, except, optionally, OLIST (Object List). SPIFFY also adds a number of useful commands and makes existing commands perform more intelligently.

SPIFFY enhances the **Browse**, **Edit**, and the **Member Listing** used to select members for browsing and editing and makes these functions available from every panel, so that programmers can use them without restriction.

Programmers at any company that uses a Mainframe spend most of their day using ISPF. Often the majority of a programmer’s time is consumed *not by actual programming*, but by keeping track of Datasets, Libraries, and Members which they work with on a daily or even hour-by-hour basis. For these highly specific tasks, some commands available on one list are not available on another. SPIFFY centralizes that access, so programmers spend less time navigating through ISPF, and more time actually doing their work.

SPIFFY Highlights

- Introduces an Object List (OLIST) with the familiar look and feel of DSLIST, with multiple object support, additional commands, search capabilities, and automatic saving of multiple OLISTs across sessions. The OLIST becomes a natural launch pad for most ISPF-based activity.
- Integrated Global Find, Change, and Edit functionality from within the Member List.
- Provides drill-down capabilities to navigate and locate volumes and data sets.
- Extends ISPF's capability to access data sets to other objects such as VSAM files, Panvalet libraries, Librarian files, DB2 tables, HFS files, PC files, catalog level, and other objects.
- Automatically and seamlessly invokes installed third party products (such as VSAM editors and DB2 editors) to access appropriate objects.
- Provides extensive search capabilities to locate Volumes, Data Sets, Members, and text. SPIFFY technology provides extremely fast results.
- Provides simple commands for printing Data Sets, Members and other items. Printing can be formatted to highlight source elements and recently changed lines. Printing can be sent directly to the spool.
- Creates data set lists from different sources (GDG datasets, allocated files, migrated data sets, system lists, and others). Provides additional VTOC information with multiple volume support.
- With an enhanced action bar, pop-up windows, new functions, and enhanced point-and-shoot.
- Integrates SCLM functionality into the standard DSLIST and Member Lists, providing new SCLM commands in the standard Member List.
- Improves overall performance of ISPF: reduces CPU usage, EXCP counts, and improves response time. Browsing, editing, copying, displaying lists, and printing are significantly faster.

A Case Study

SPIFFY is used by ISPF programmers at a large, publicly held, U.S. insurance company with nearly 40,000 employees. Because this company works with private financial data and does not publicly endorse vendors, the manager for "languages and productivity tools" agreed to speak about SPIFFY "on background." This manager outlined how the SPIFFY users at his company utilize various SPIFFY features to optimize programmer productivity, while reducing programming errors. By way of introduction, he states that the programmers in his company help support their customers with rapid response and turnaround, and SPIFFY is "highly-regarded in their programming environment as a major time-saver." The manager has found that SPIFFY gives his programmers a number of distinct advantages, outlined below.

"First, there is no set-up required for SPIFFY users. Most log-on procedures automatically call up SPIFFY. Once it is up and running, SPIFFY can process PDS Members from most panels, using many powerful line-commands. Plus, programmers can Edit, Browse, View, Move, Copy, Delete, and Rename from most Member Selection Lists (MSLs). This means that programmers avoid wasting time and CPU Cycles by branching to 3.1, 3.2, 3.3, 3.4, 3.4, etc., for most functions. This also means programmers can Edit a Member from a Browse Member List, and vice versa, saving additional time and resources.

"Programmers don't have to use "S," or "B," or "E," to select a Member. From a Member Selection List, programmers can just move their cursors to a Member and press 'enter.' Programmers can also automatically access Browse, Edit, View from any panel. And they can set up Hot Keys - which are especially handy if programmers have set

up PFKEYs for Browse and Edit. They can simply 'hot-key' into Browse or Edit from any panel, including IOF.

"Programmers can move to automatic Browse / Edit of VSAM files directly from ISPF Edit and execute Global Find / Global Change, from any Member Selection List. Also, programmers can call up 'history datasets' from Edit or Browse, including 'Last DSName Referenced' and 'History List of last datasets used.'

"Up to eight TSO commands can be saved into a permanent history list, which is very handy for long or complex commands. The 'Permanent History List,' allows the user to proactively store up to 8 TSO Commands on the panel, so that he can use them in the future with just a keystroke. This is especially handy because users no longer have to key in long commands with a lot of parameters, such as XMIT or PERMIT. There is also an additional "temporary history list" list on PANEL 6 that automatically saves the last 8 TSO Commands issued by each SPIFFY user, so they can be quickly and easily re-executed with or without modifications.

"Programmers can set an 'initial command' from Edit or Browse, to execute automatically as a default every time they bring up a Member List, and programmers can enter branch instructions from any input field on any panel as well as recover easily from Space Abends. With SPIFFY, when programmers run out of space on a PDS, they don't have to go out of the file, split the screen, compress, etc., or allocate a larger file through Copy, Delete, and Rename, etc. SPIFFY even prompts programmers to Expand/Compress/Recover their PDS, so all they have to do is key in 'Y' and press Enter to instantly repair their file.

"Programmers can issue the Compress Command from within the Edit, View or Browse Member List to dynamically compress PDS, or

the Expand Command to dynamically add Directory Blocks, as well as Submit JCL from Browse. Programmers can also Execute CLISTS and REXX EXECs from Edit or Browse Member Lists. If programmers want a 'sneak preview' of a PDS Member without taking the time and resources to Browse or Edit the Member (e.g. if programmers are looking for a particular member, they can sometimes scan the first 10 or so lines to know whether this is the one you're looking for), they can use the Locate ('L') Command enabled for Preview or the Preview ('W') line-command. And programmers can access a list of all SPIFFY Commands, by simply typing 'A.'

"There are four methods for programmers to automatically build PLISTS—PLIST is the old name for SPIFFY's Object List (OLIST)—and programmers can use many, powerful, cut-and-paste options, using a CC or MM block, or up to 10 clipboards. Paste options show programmers all open ClipBoards.

"Finally, programmers can turn off CUA Action Bars, when they want to free up space on panels, bring up TSO Shell from any panel, and interface other productivity tools, like FILEAID, CHANGEMAN, IOF, and SMART-EDIT.

"Of the various productivity tools we provide for our programmers, SPIFFY is considered one of the most valuable and most popular by our users," said the manager for "languages and productivity tools. "Our programmers like using SPIFFY, and consider it a major time-saver that makes them work faster and smarter in ISPF. One of the best things about SPIFFY—a feature that differentiates it from many other products—is that it is 'intuitive' to its users: Many of the SPIFFY commands pop-up automatically, or are documented directly on the ISPF panels, so that our users do not have

to look them up in a manual in order to use them. This means there is no barrier to usage, which is a common flaw of other products.”

About Isogon

Isogon Corporation is a leading provider of z/OS programming system tools and IT Asset Management solutions in the Global 2000 marketplace. Isogon’s system tools are acknowledged in the industry as successful time and resource savings investments. System resources and programmer time are valuable, Isogon’s tools help conserve both. Isogon is a privately-held company based in New York City, with consulting and sales offices situated globally. Established in 1983, the company has grown steadily over the years. To learn more about Isogon, call +1 800 568 8828 or visit www.isogon.com.